

SG400[†]R, U, W, EX[†]22
○チョップパ、インバータ用

■外形図番号 T-42 (13-45F1A)

■最大定格

| 記号 | SG400R22 | SG400U22 | SG400W22 | SG400EX22 | 単位 |
|---------------|--|----------|----------|-----------|----|
| V_{RRM} | 15 | | | | V |
| V_{DRM} | 1300 | 1600 | 1800 | 2500 | V |
| I_{TQM} | 400 ($V_D = \frac{1}{2} V_{DRM}$, $V_{DM} = \frac{1}{2} V_{DRM}$, $C_s = 1 \mu F$, $R_s = 20 \Omega$, $T_j = 125^\circ C$) | | | | |
| I_{FRMS} | 150 ($T_j = 70^\circ C$) | | | | |
| I_{FSM} | 2600/2860 (50Hz/60Hz, 正弦半波1サイクル) | | | | |
| $I^2 \cdot t$ | A ² S | | | | |
| di/dt | 200 ($I_{GP} = 7 A$, $t_r = 1 \mu s$, $V_D = \frac{1}{2} V_{DRM}$, $I_{TM} = 400 A$, $f = 50 Hz$, $T_j = 125^\circ C$) | | | | |
| I_{GFM} | 20 (パルス幅: max. 20 μs , duty: max. 20%) | | | | |
| P_{GFAV} | 4 W | | | | |
| I_{GRMS} | 20 A | | | | |
| P_{GRM} | 2000 (パルス幅: max. 20 μs , duty: max. 2%) | | | | |
| V_{GRM} | 15 V | | | | |
| T_j | 125 $^\circ C$ | | | | |
| T_{stc} | -40 ~ 125 $^\circ C$ | | | | |

■電気的特性

| 記号 | 測定条件 | Min | Typ | Max | 単位 |
|-----------|---|----------|-----|------|--------------|
| I_{RRM} | $T_j = 125^\circ C$, $V_D = V_{RRM}$ | | | 10 | mA |
| I_{DRM} | $T_j = 125^\circ C$, $V_D = V_{DRM}$, $R_{GK} = 20 \Omega$ | | | 10 | |
| I_{GRM} | $T_j = 125^\circ C$, $V_D = V_{GRM}$ | | | 10 | |
| V_{TM} | $T_c = 25^\circ C$, $I_{TM} = 400 A$ | | | 2.4 | V |
| V_{GT} | $T_c = 25^\circ C$, $V_D = 12 V$ | 0.75 | | 1.0 | |
| I_{GT} | $R_L = 0.5 \Omega$ | | 200 | 500 | mA |
| V_{GD} | | 0.3 | | | |
| I_{GD} | $T_c = 125^\circ C$, $V_D = \frac{1}{2} V_{DRM}$ | 5 | | | mA |
| t_d | $T_c = 25^\circ C$, $V_D = \frac{1}{2} V_{DRM}$ | | | 2.0 | |
| t_{st} | $I_{TM} = 400 A$ $di/dt = 200 A/\mu s$ $I_{GP} = 7 A$, $t_r = 1 \mu s$ | SG400R22 | | 7.6 | |
| | | SG400U22 | | 7.0 | |
| | | SG400W22 | | 6.8 | |
| | SG400EX22 | | 6.0 | | |
| dv/dt | $T_j = 125^\circ C$, $V_D = \frac{1}{2} V_{DRM}$ $V_{GK} = -2 V$ | 600 | | | V/ μs |
| I_H | $T_c = 25^\circ C$, $R_L = 0.5 \Omega$ | | 10 | | A |
| t_r | $T_c = 25^\circ C$, $I_{TM} = 400 A$ | | | 13 | μs |
| t_{ev} | $V_D = \frac{1}{2} V_{DRM}$ $V_{DM} = \frac{1}{2} V_{DRM}$ $C_s = 1 \mu F$ $R_s = 20 \Omega$ | SG400R22 | | 15 | |
| | | SG400U22 | | 62 | |
| | | SG400W22 | | 58 | |
| | SG400EX22 | | 56 | | |
| t_{tot} | $dig/dt = -12 A/\mu s$ | | | 50 | A |
| I_{GR} | | 95 | | 125 | |
| R_{th} | 接合~フィン間, DC | | | 0.12 | $^\circ C/W$ |

SG500[†]FXF, GXH[†]21 (VRRM)
○チョップパ、インバータ用

■外形図番号 T-43 (13-60E3A)

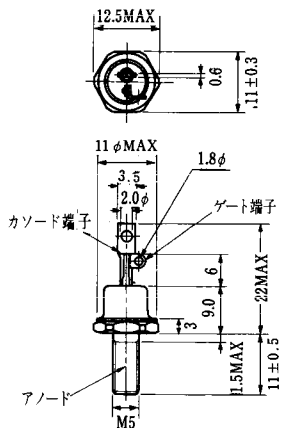
■最大定格

| 記号 | SG500FXF21 (VRRM) | SG500GXH21 (VRRM) | 単位 |
|---------------|--|-------------------|----|
| V_{RRM} | 3000 | 4000 | V |
| V_{DRM} | 3300 | 4500 | |
| I_{TQM} | 500 ($V_D = \frac{1}{2} V_{DRM}$, $V_{DM} = \frac{1}{2} V_{DRM}$, $C_s = 2 \mu F$, $R_s = 20 \Omega$, $T_j = 115^\circ C$) | | |
| I_{FRMS} | 200 ($T_j = 70^\circ C$) | | |
| I_{FSM} | 2500/3000 (50Hz/60Hz, 正弦半波1サイクル) | | |
| $I^2 \cdot t$ | A ² S | | |
| di/dt | 200 ($I_{GP} = 9 A$, $t_r = 1 \mu s$, $V_D = \frac{1}{2} V_{DRM}$, $I_{TM} = 500 A$, $f = 50 Hz$, $T_j = 115^\circ C$) | | |
| I_{GFM} | 30 (パルス幅: max. 20 μs , duty: max. 20%) | | |
| P_{GFAV} | 6 W | | |
| I_{GRMS} | 35 A | | |
| P_{GRM} | 4000 (パルス幅: max. 20 μs , duty: max. 2%) | | |
| V_{GRM} | 15 V | | |
| T_j | 115 $^\circ C$ | | |
| T_{stc} | -40 ~ 115 $^\circ C$ | | |

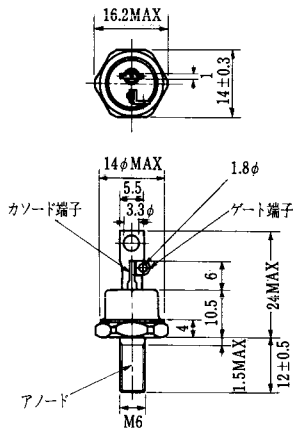
■電気的特性

| 記号 | 測定条件 | Min | Typ | Max | 単位 |
|-----------|---|-----|-----|------|------------|
| I_{RRM} | $T_j = 115^\circ C$, $V_D = V_{RRM}$ | | | 40 | mA |
| I_{DRM} | $T_j = 115^\circ C$, $V_D = V_{DRM}$, $R_{GK} = 20 \Omega$ | | | 40 | |
| V_{TM} | $T_c = 25^\circ C$, $I_{TM} = 500 A$ | | | 4.5 | V |
| V_{GT} | $T_c = 25^\circ C$, $V_D = 24 V$ | | | 1 | |
| I_{GT} | $R_L = 1 \Omega$ | | | 500 | mA |
| V_{GD} | | 0.3 | | | |
| I_{GD} | $T_c = 115^\circ C$, $V_D = \frac{1}{2} V_{DRM}$ | 5 | | | mA |
| t_d | $T_c = 25^\circ C$, $V_D = \frac{1}{2} V_{DRM}$, $I_{GP} = 9 A$ | | | 2 | |
| t_{st} | $I_{TM} = 500 A$, $di/dt = 200 A/\mu s$ | | | 8 | |
| dv/dt | $T_j = 115^\circ C$, $V_D = \frac{1}{2} V_{DRM}$, $V_{GK} = -4 V$ | 900 | | | V/ μs |
| I_H | $T_c = 25^\circ C$, $R_L = 1 \Omega$ | | | 30 | A |
| t_r | $T_c = 110^\circ C$, $I_{TM} = 500 A$ | | | 13 | |
| t_{ev} | $V_D = \frac{1}{2} V_{DRM}$, $V_{DM} = \frac{1}{2} V_{DRM}$ | | | 15 | μs |
| t_{tot} | $C_s = 2 \mu F$, $R_s = 20 \Omega$ | | | 180 | |
| I_{GR} | $dig/dt = -20 A/\mu s$ | | 150 | 180 | A |
| R_{th} | 接合~フィン間, DC | | | 0.06 | |

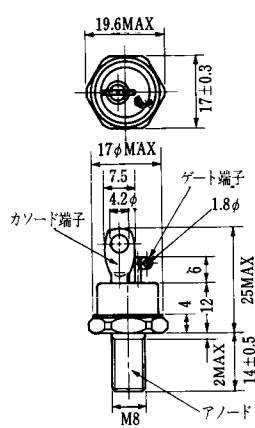
FD-1



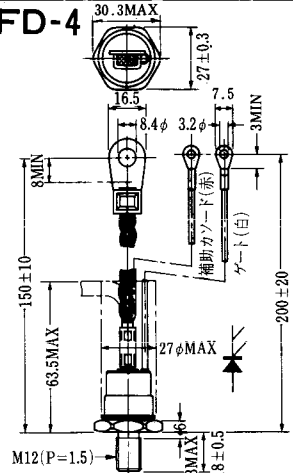
FD-2



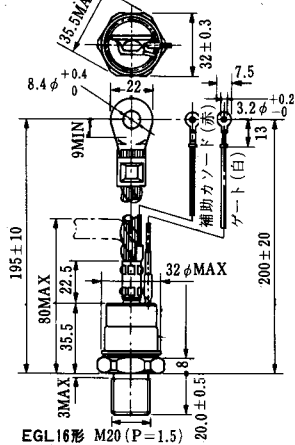
FD-3



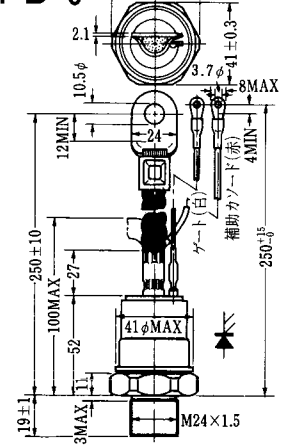
FD-4



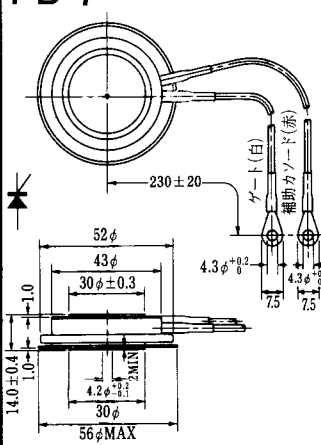
FD-5



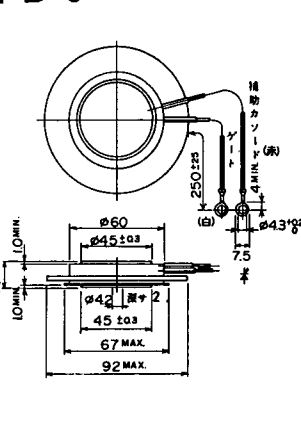
FD-6



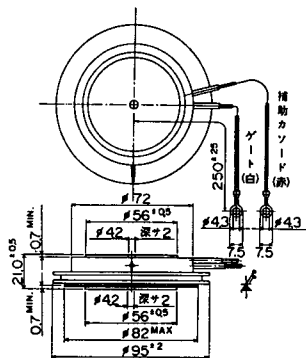
FD-7



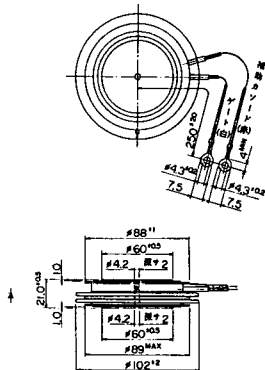
FD-8



FD-9

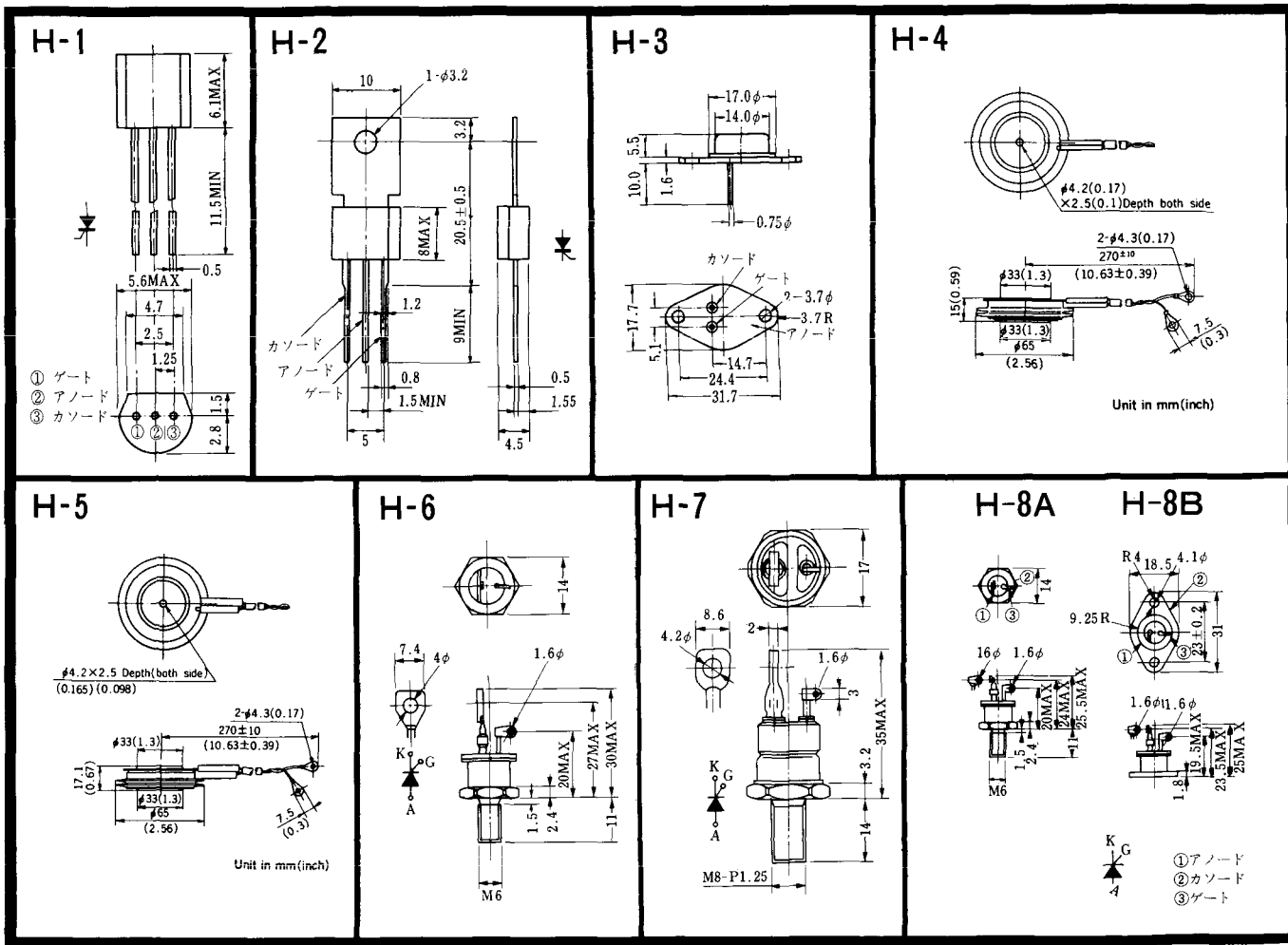


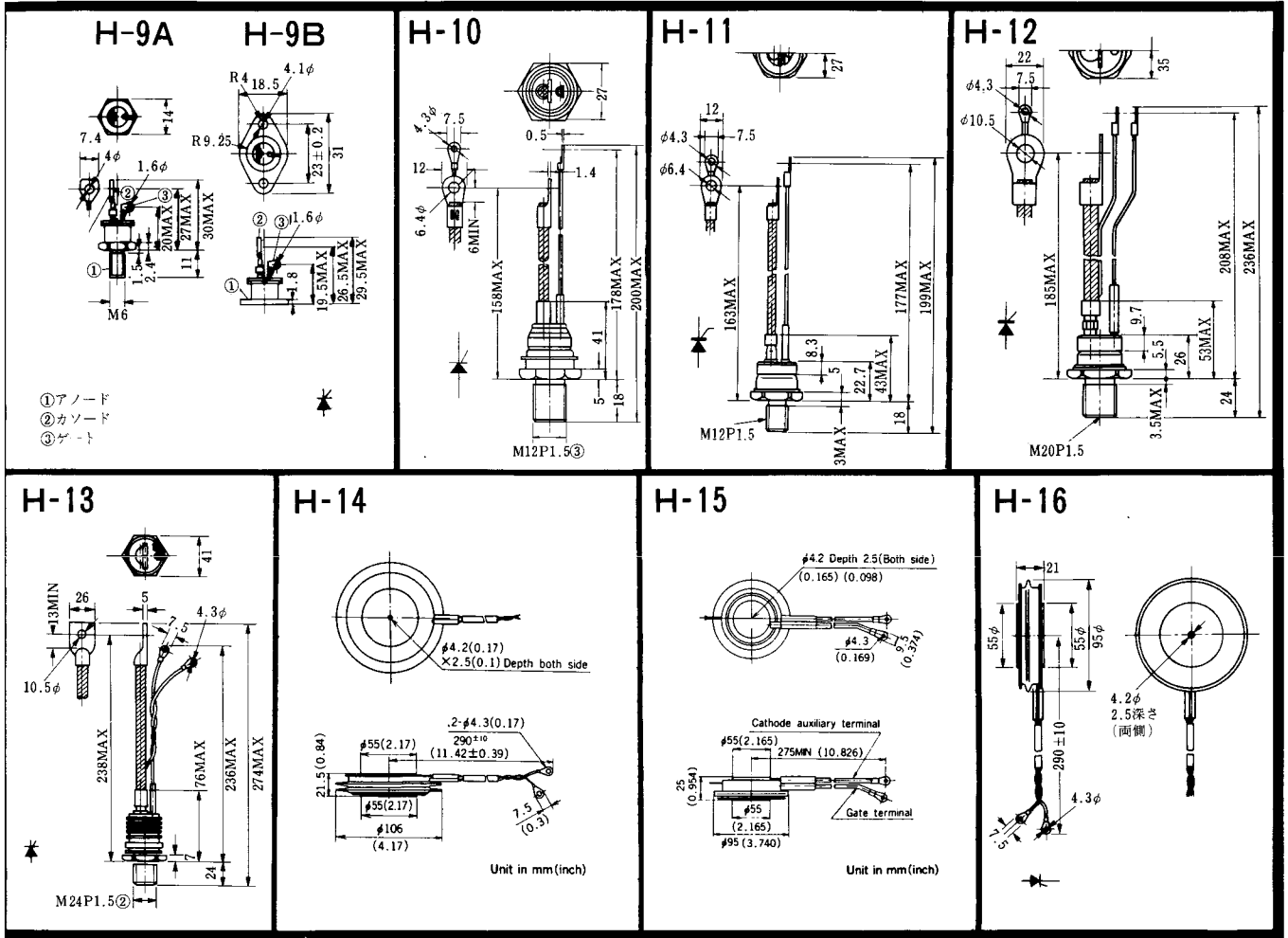
FD-10



FD-11

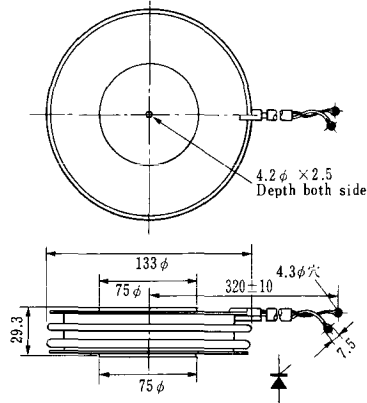
FD-12



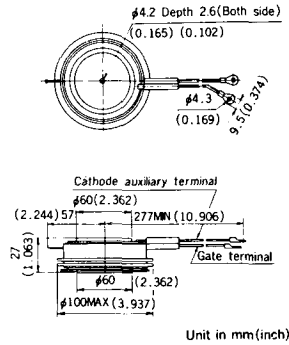


《寸法図単位：mm》

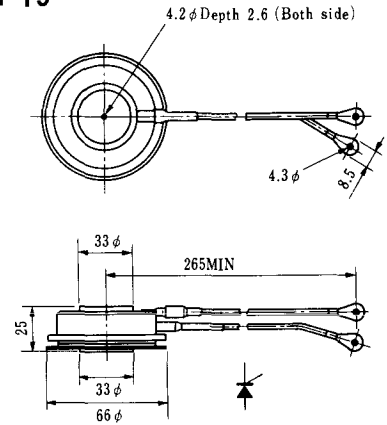
H-17



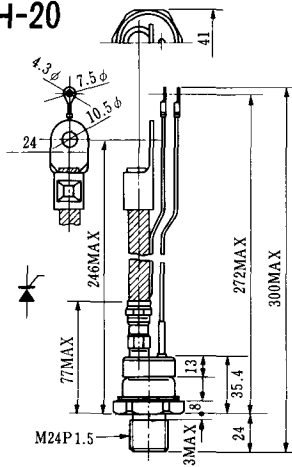
H-18



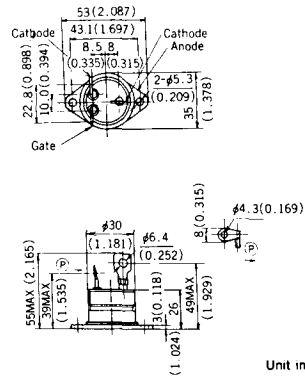
H-19



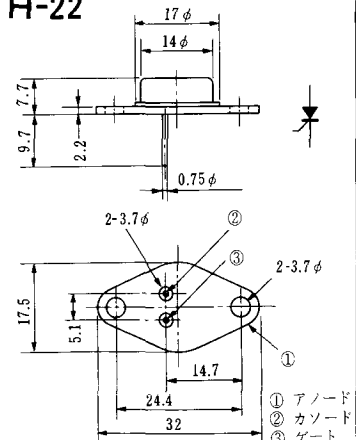
H-20



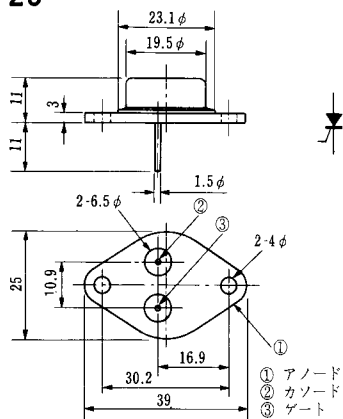
H-21



H-22

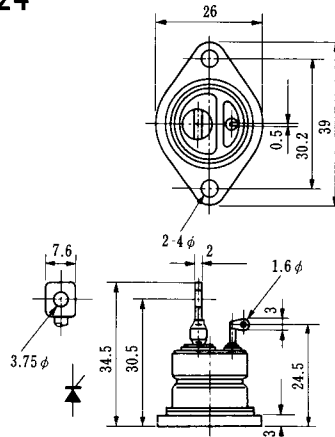


H-23

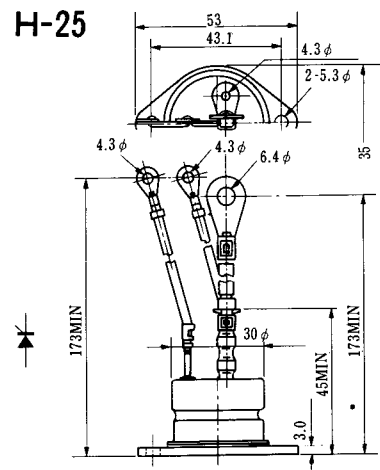


① アノード
② カソード
③ ゲート

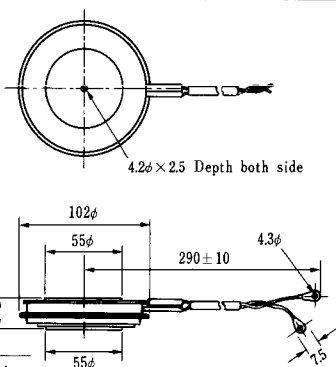
H-24



H-25



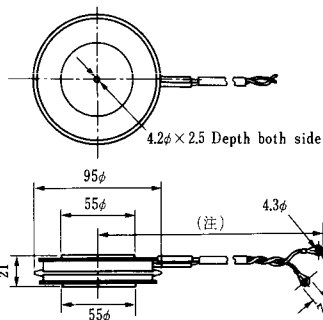
H-26



| Type | Direction of polarity |
|------|-----------------------|
|------|-----------------------|

| | |
|------|--|
| CA12 | |
|------|--|

H-27

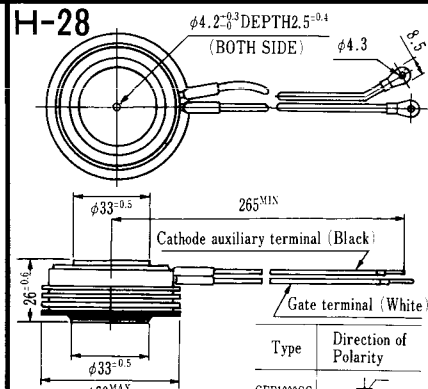


(注) CC11V : 400 ± 10
CF11V : 250 ± 10

| Type | Direction of polarity |
|------|-----------------------|
|------|-----------------------|

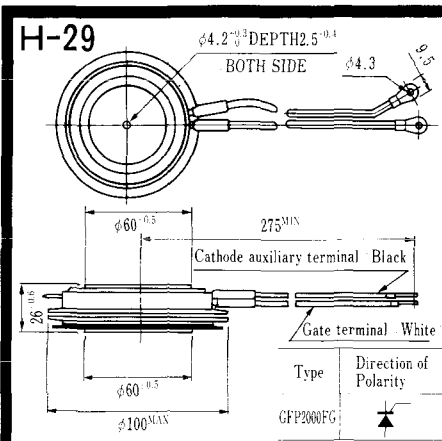
| | |
|-------|--|
| CF11V | |
|-------|--|

H-28

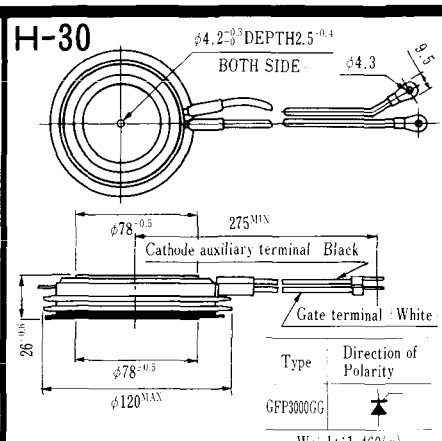


Weight: 360(g)

Note: The thickness is a dimension in press at the rated mounting force.

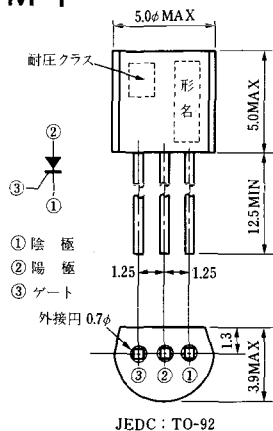


Note : The thickness is a dimension in press at the rated mounting force. Weight: 870(g)

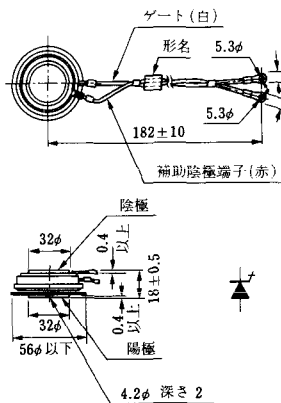


Note : The thickness is a dimension in press at the rated mounting force. Weight: 1,460(g)

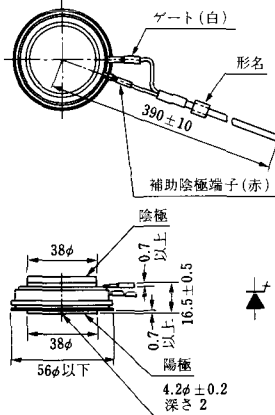
M-1



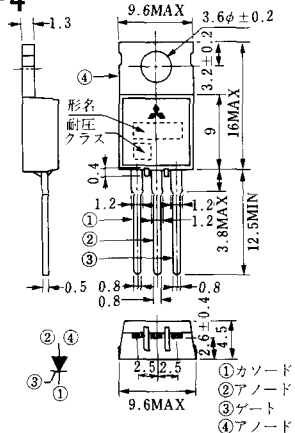
M-2



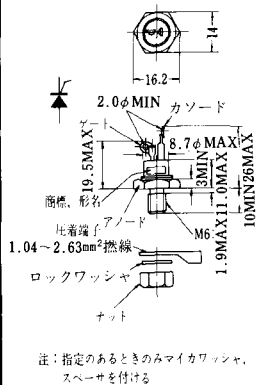
M-3



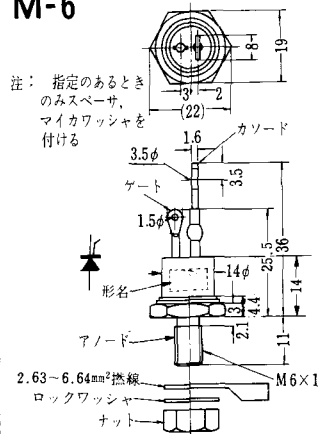
M-4



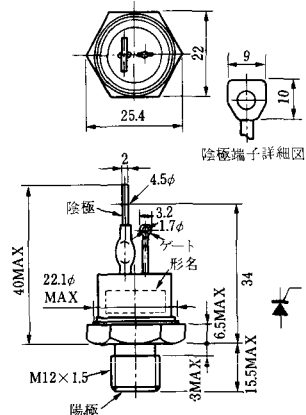
M-5



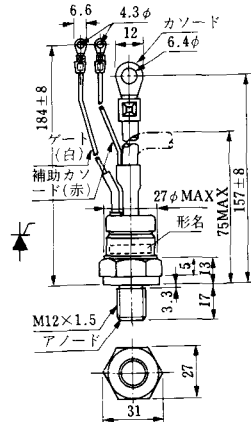
M-6



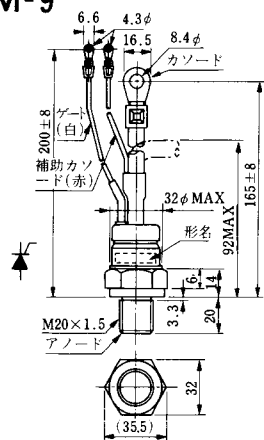
M-7



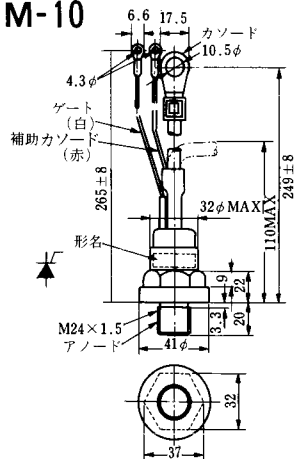
M-8



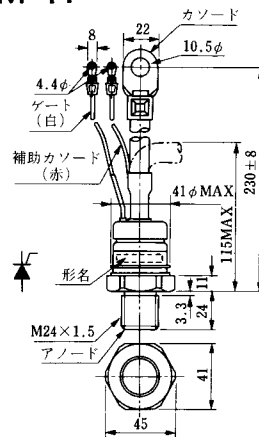
M-9



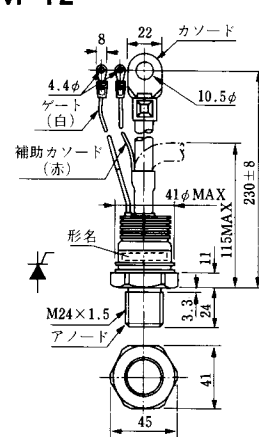
M-10



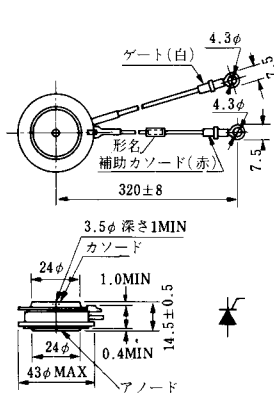
M-11



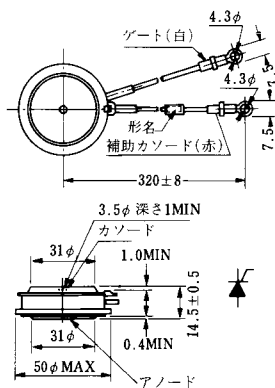
M-12



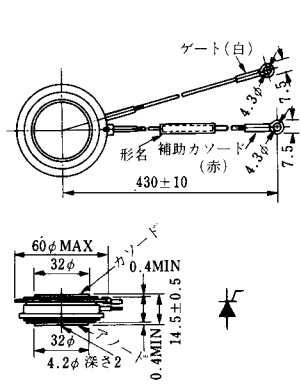
M-13



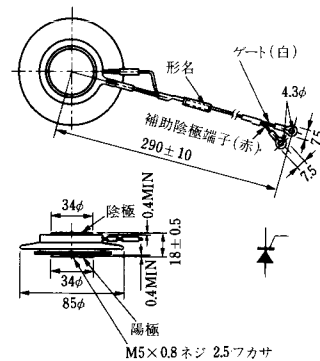
M-14

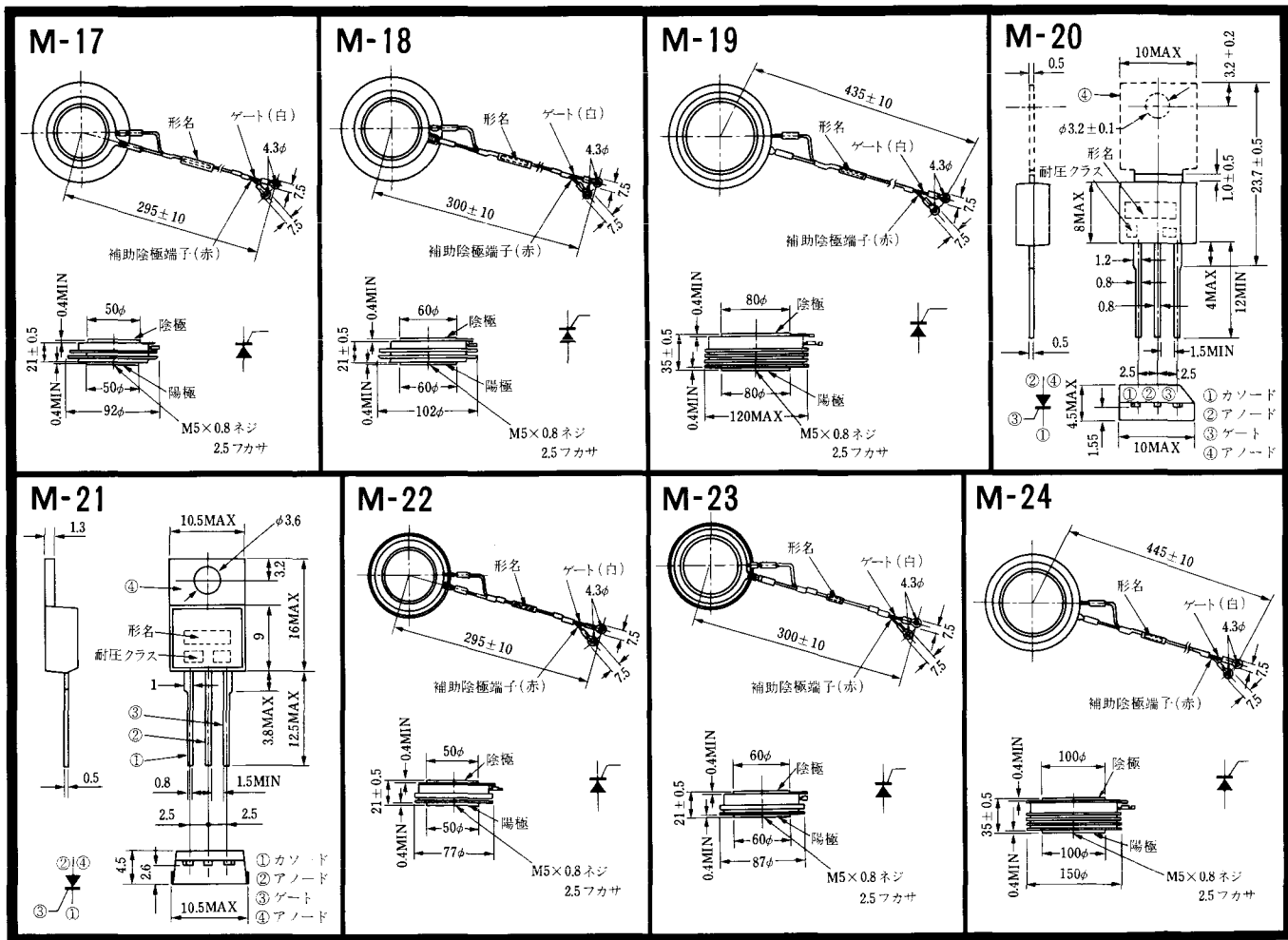


M-15

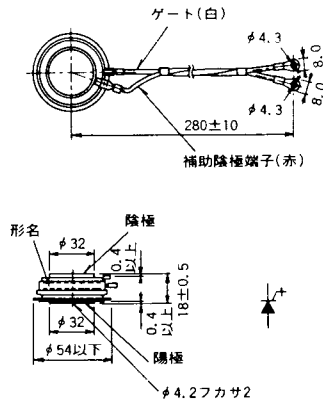


M-16

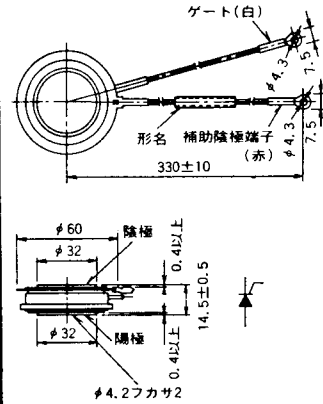




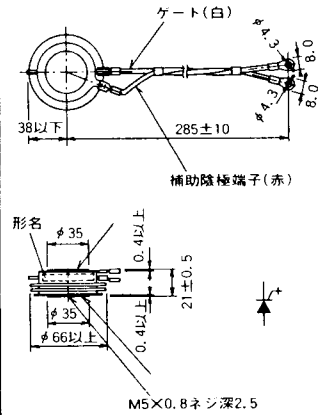
M-25



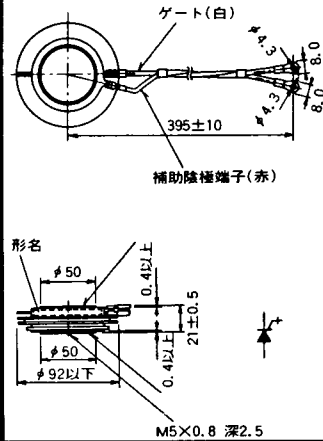
M-26



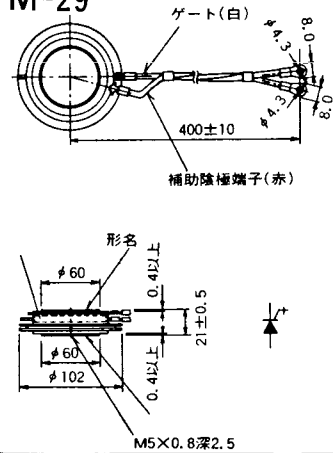
M-27



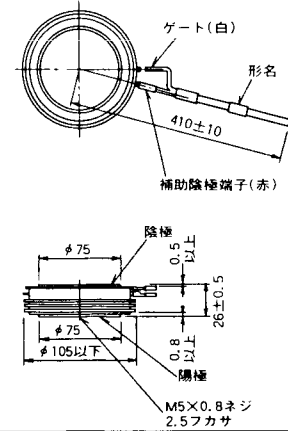
M-28



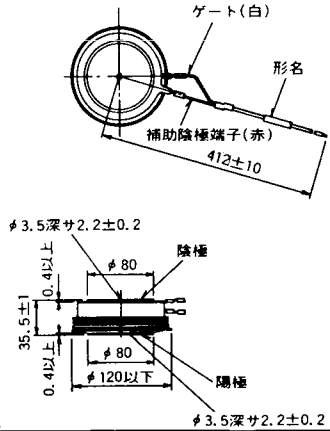
M-29



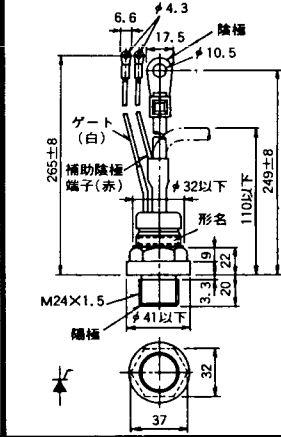
M-30



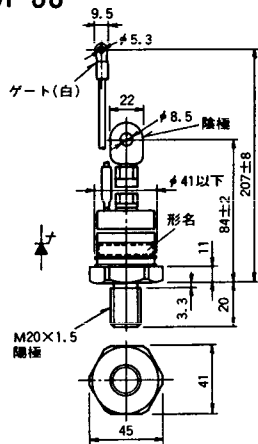
M-31



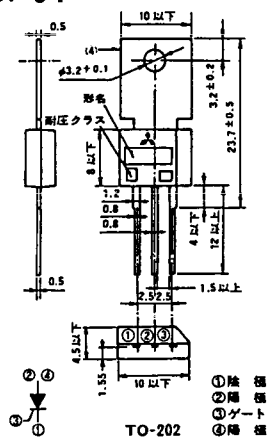
M-32



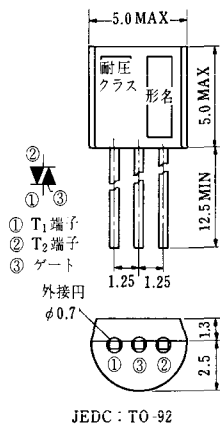
M-33



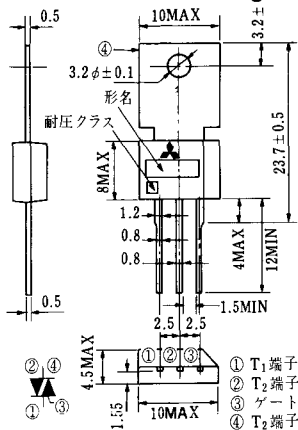
M-34



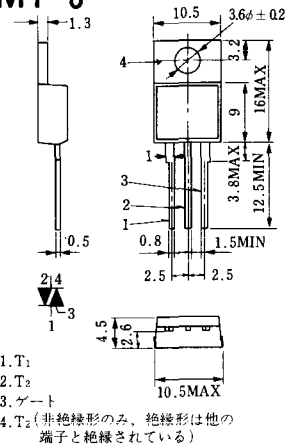
MT-1



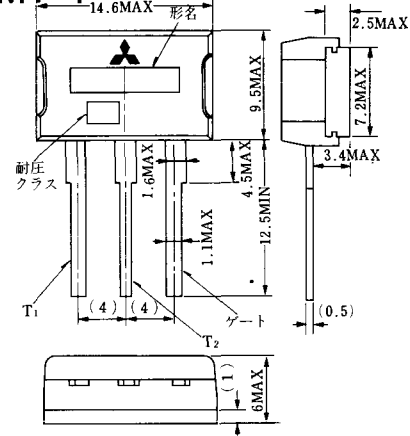
MT-2



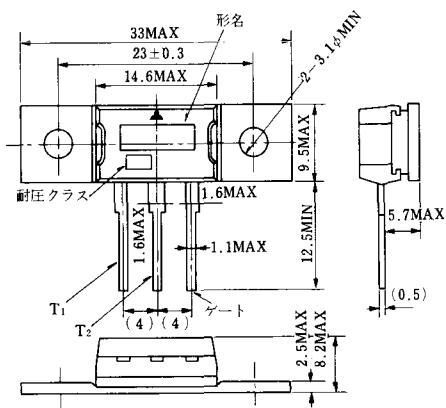
MT-3



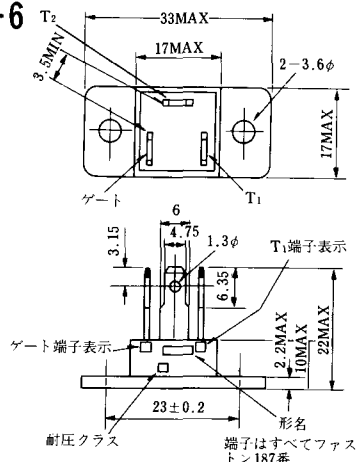
MT-4



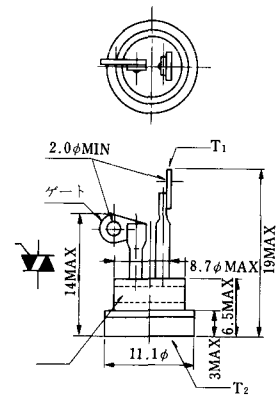
MT-5



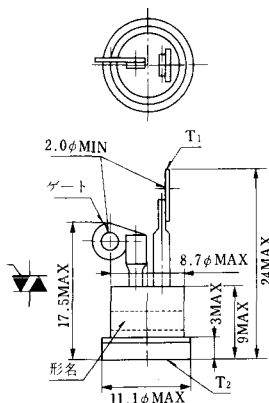
MT-6



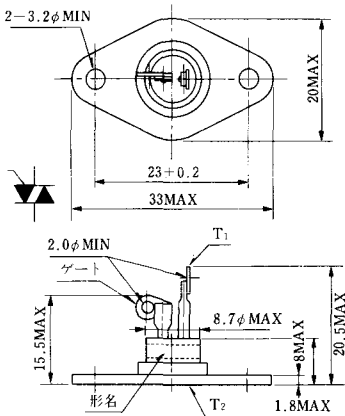
MT-7



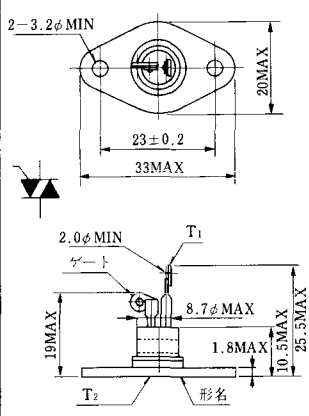
MT-8



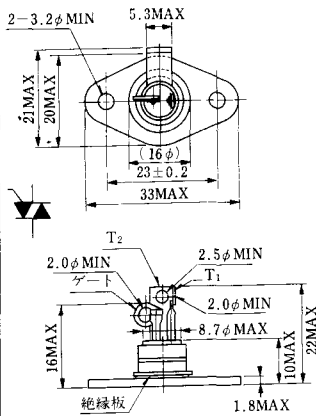
MT-9



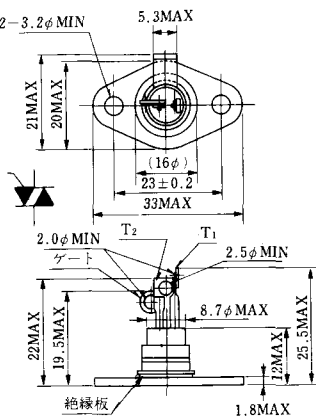
MT-10



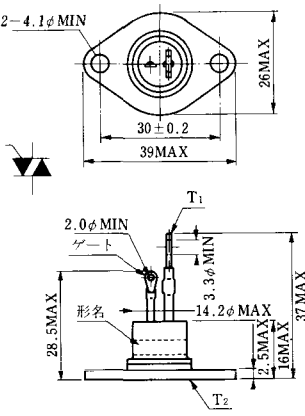
MT-11



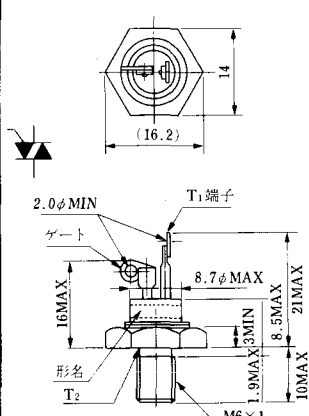
MT-12



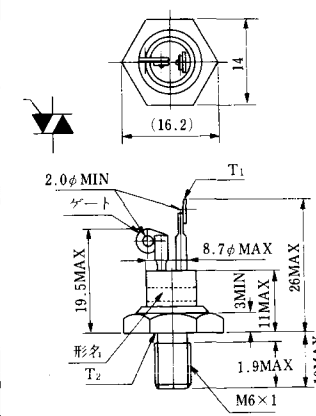
MT-13



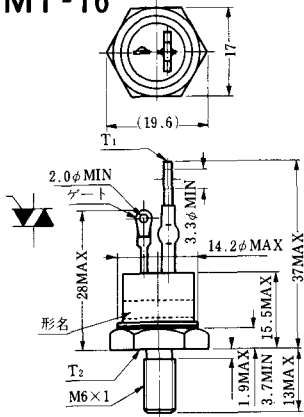
MT-14



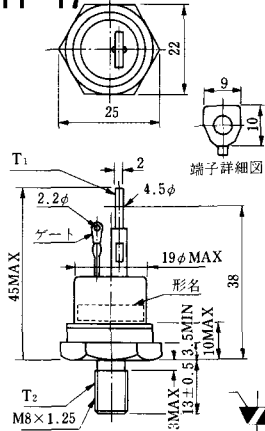
MT-15



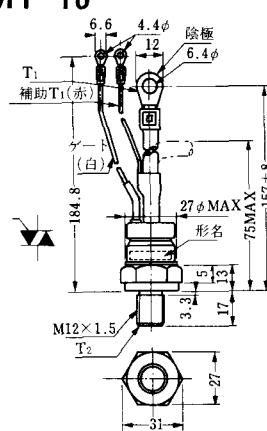
MT-16



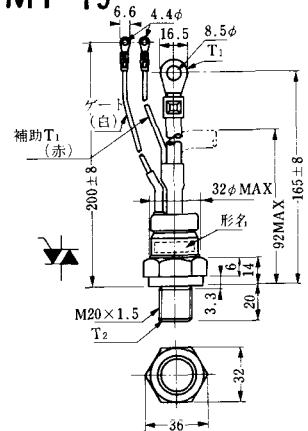
MT-17



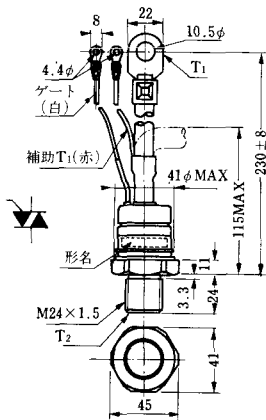
MT-18



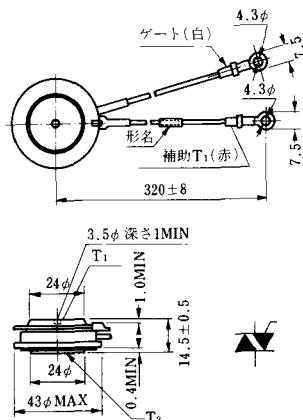
MT-19



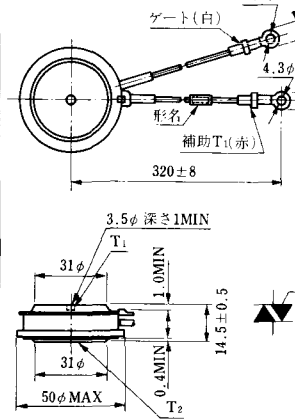
MT-20



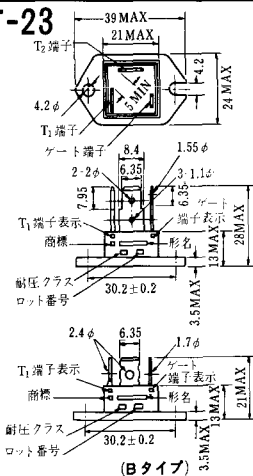
MT-21



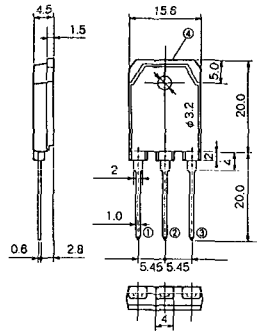
MT-22



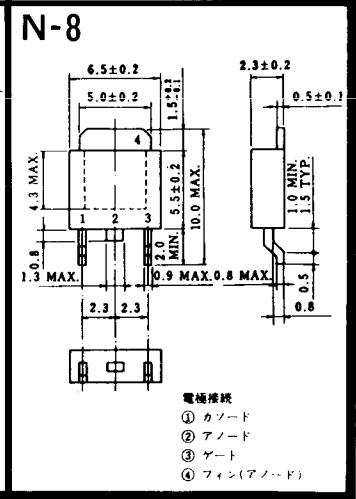
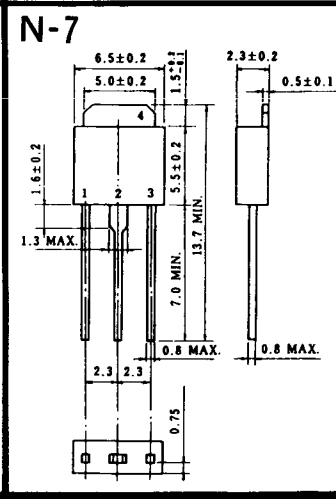
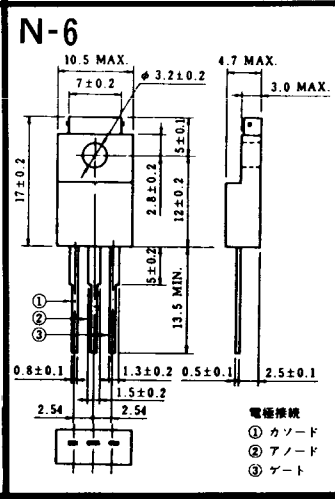
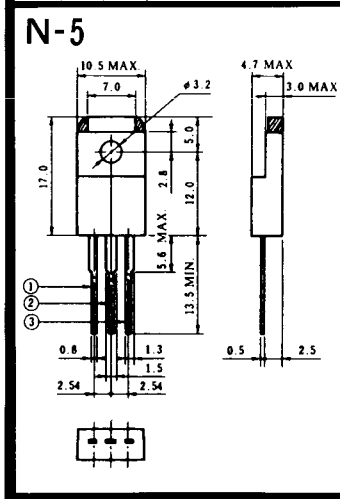
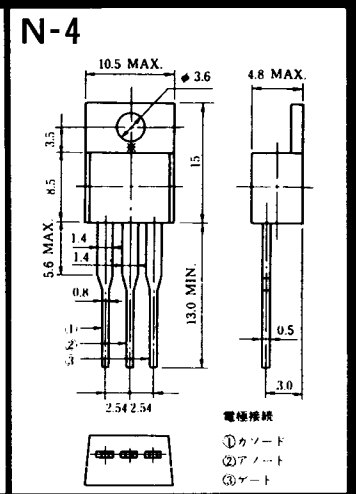
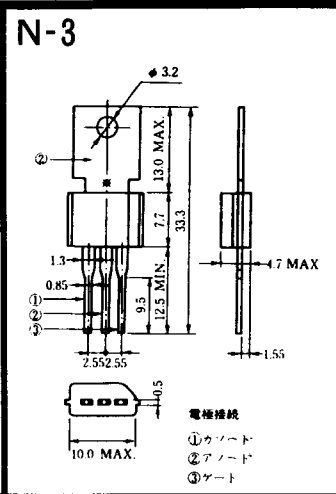
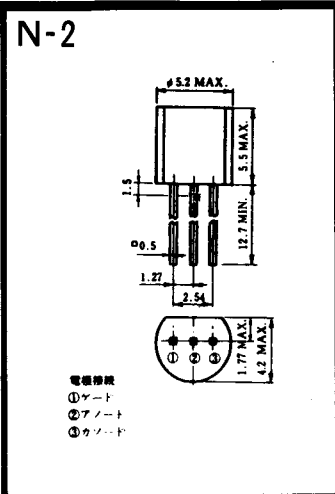
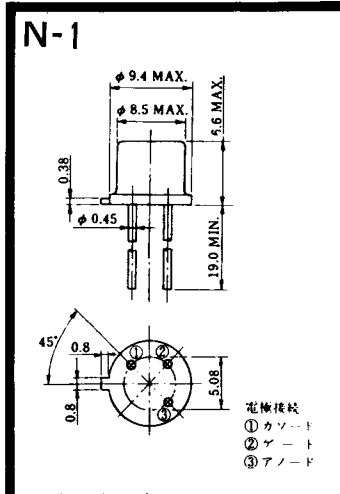
MT-23



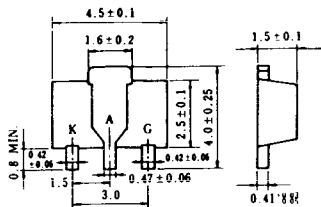
MT-24



- ① T1 端子
 - ② T2 端子
 - ③ ゲート端子
 - ④ T2 端子
- TO - 3P



N-9



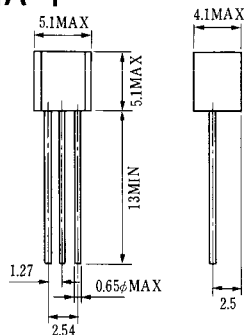
電極接続

K : カソード

A : アノード

G : ギャート

NA-1

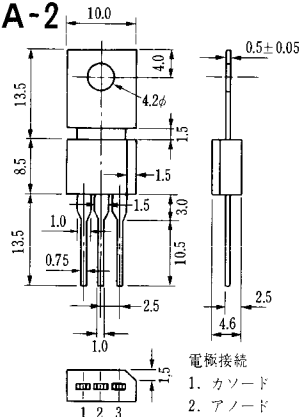


電極接続

1. ゲート
2. アノード
3. カソード

JEDEC : TO-92

NA-2

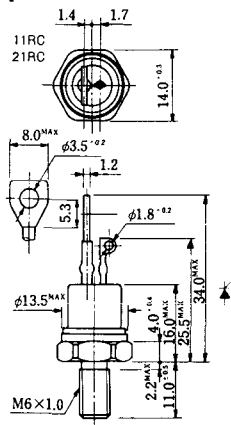


電極接続

1. カソード
2. アノード
3. ゲート

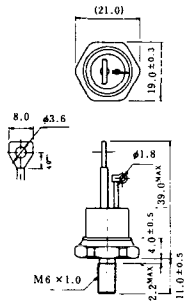
JEDEC : TO-202AA

NI-1



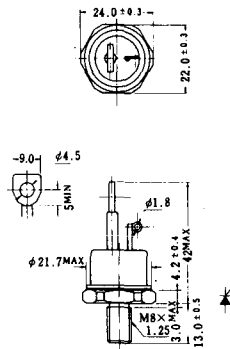
NI-2

29RD



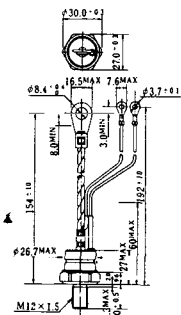
NI-3

39RC
59RC
39RF
59RF



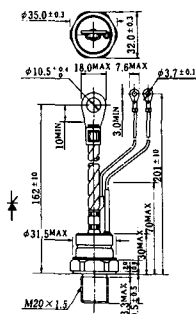
NI-4

68RP, 88RP, 108RP, 68RS,
88RS, 78RT, 88RLD, 88RLE,
88RLF, 88RLF, 88RLH, 108RLE



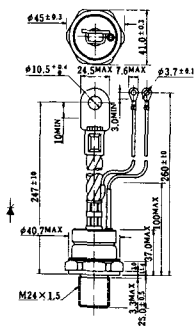
NI-5

158RP, 208RP, 128RS, 178RS,
156RT, 178RLD, 178RLE,
178RLF, 178RLG, 178RLH,
208RLE



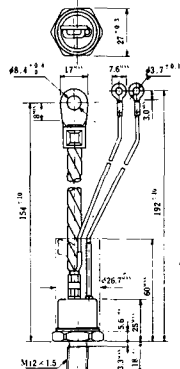
NI-6

308RP, 408RP, 508RP, 278RS,
358RS, 258RT, 258RLD, 258RLG,
258RLH, 308RLE, 308RLF,
358RLE



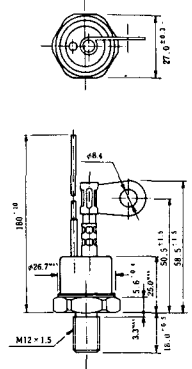
NI-7

89RW_{JL}
129RW_{JL}



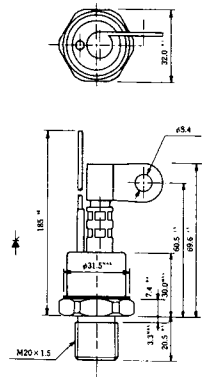
NI-8

89RW
129RW



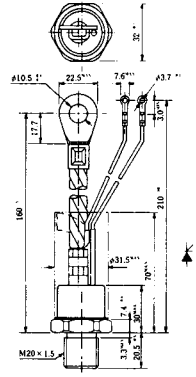
NI-9

259RW
309RW



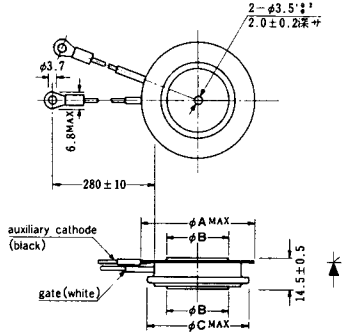
NI-10

259RW_{JL}
309RW_{JL}



NI-11

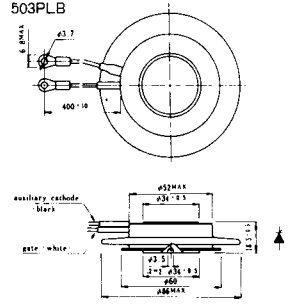
103PA
253PA
503PA
553PA
803PA
103PLE
103PLG
103PLH
203PLG
253PLE
253PLH
353PLG
403PLE
403PLH



| 型名 | 103PA, 103PLE, 103PLG, 103PLH | 253PA, 203PLG, 253PLE, 253PLH | 503PA, 553PA, 353PLG, 403PLE, 403PLH | 803PA |
|------|-------------------------------|-------------------------------|--------------------------------------|-------|
| 寸法 A | 40 | 46 | 55.5 | 55.5 |
| 寸法 B | 16 | 22 | 30 | 32 |
| 寸法 C | 36 | 42 | 50.5 | 50.5 |

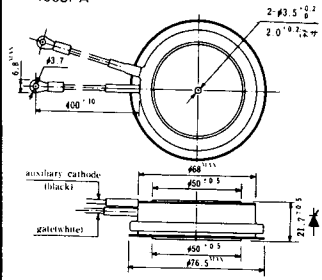
NI-12

403PAB
503PAB
503PLB



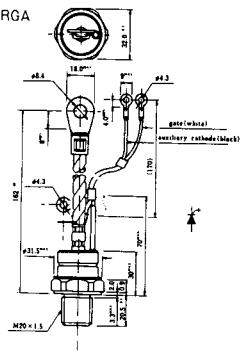
NI-13

1003PA
1003PAB
1003PLF
1003PLH
1503PA



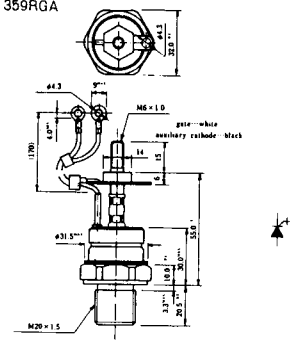
NI-14

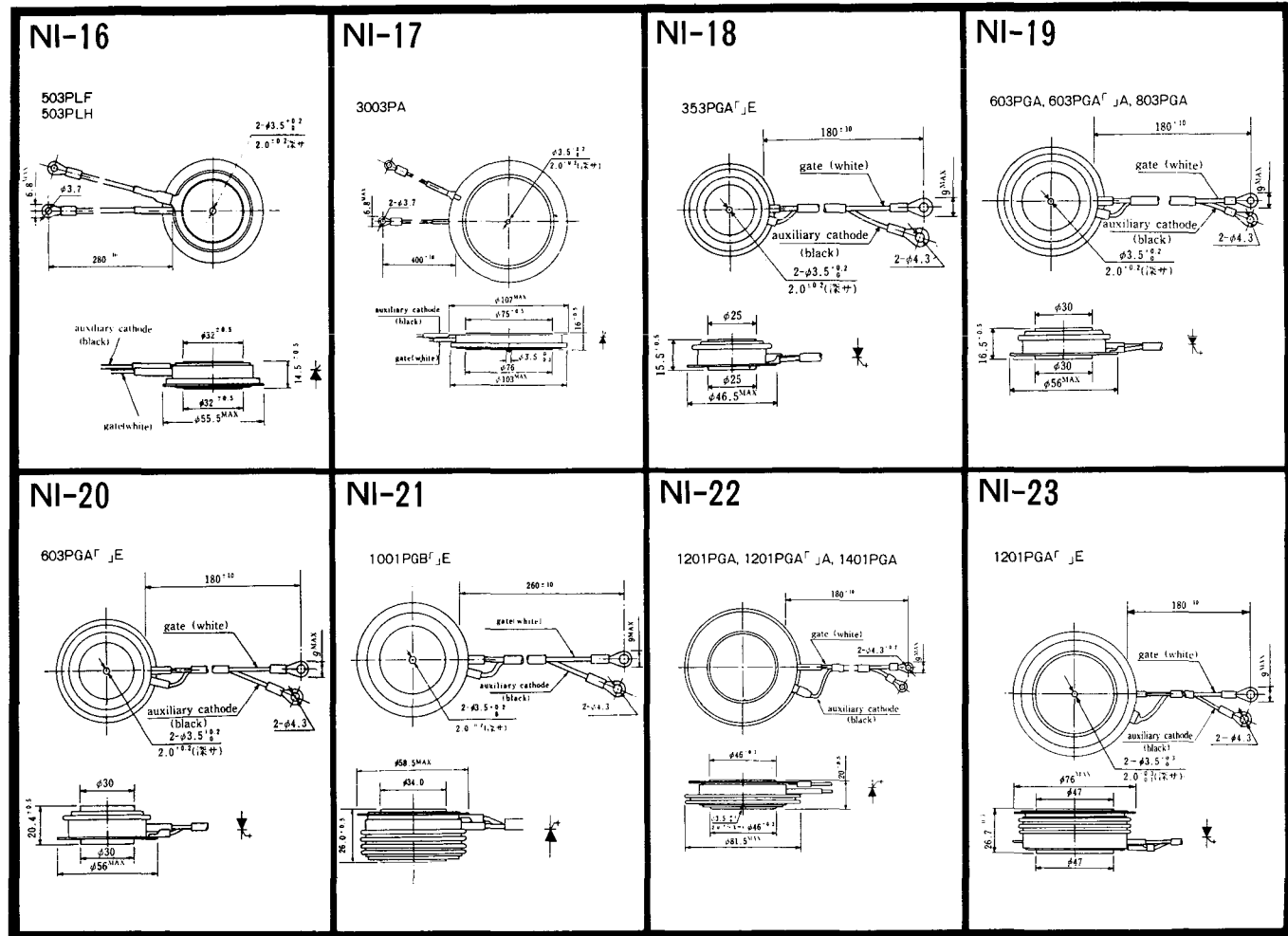
358RGA



NI-15

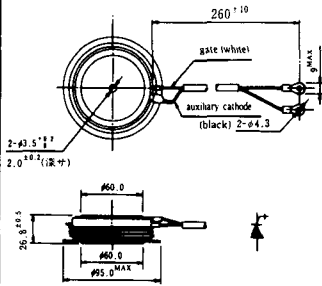
359RGA





NI-24

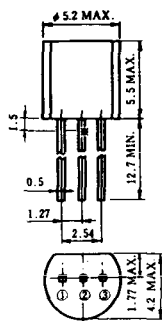
2001PGB^r JE



NI-25

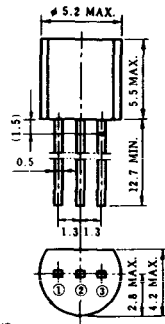
NI-26

NT-1



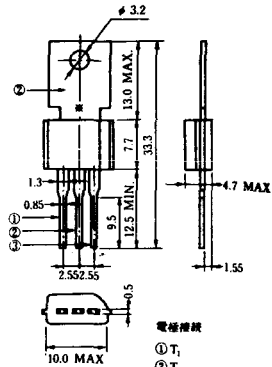
電極接続
① T₁
② ゲート
③ T₂

NT-2



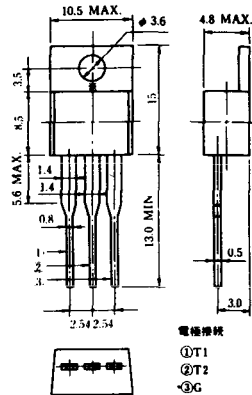
電極接続
① T₁
② ゲート
③ T₂

NT-3



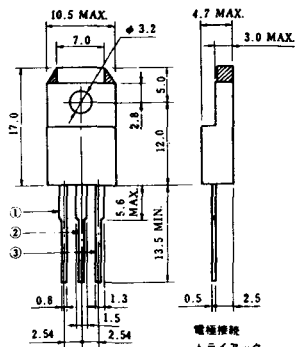
電極接続
① T₁
② T₂
③ ゲート

NT-4



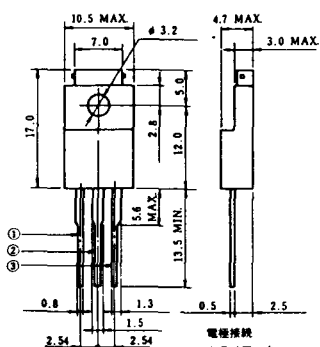
電極接続
① T₁
② T₂
③ G

NT-5



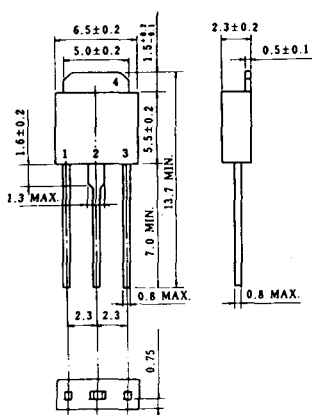
電極接続
トライアック
① T₁
② T₂
③ ゲート
④ G

NT-6

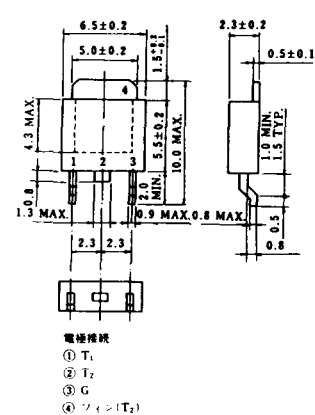


電極接続
トライアック
① T₁
② T₂
③ ゲート
④ G
⑤ 2k

NT-7

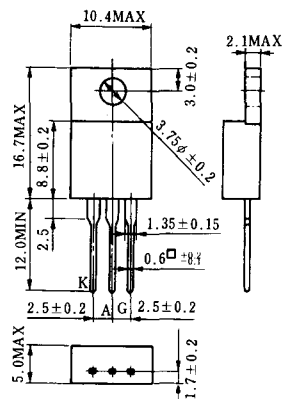


NT-8

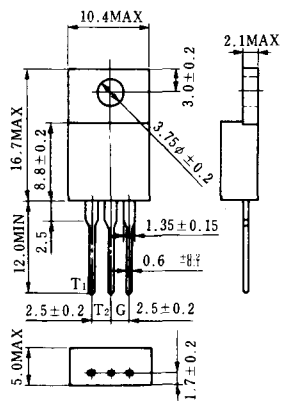


電極接続
① T₁
② T₂
③ G
④ ソリッド(T₂)

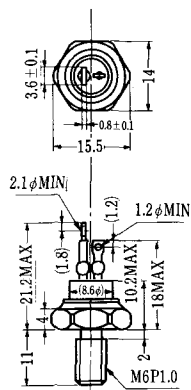
S-1



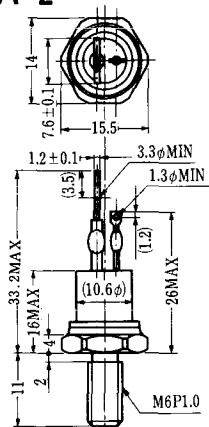
ST-1



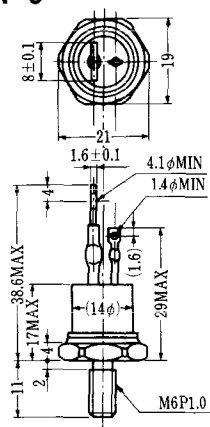
SA-1



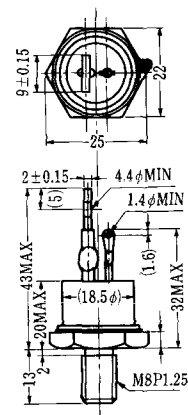
SA-2



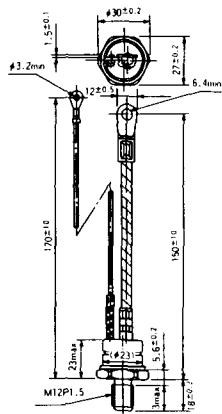
SA-3



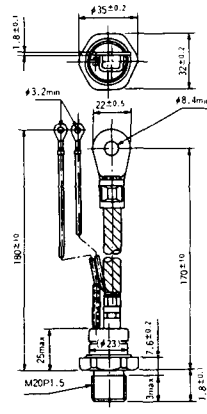
SA-4



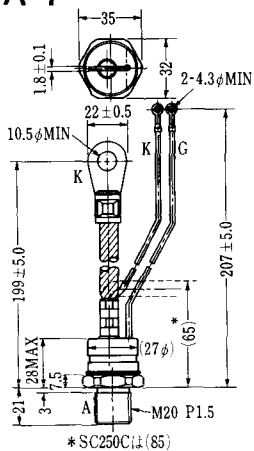
SA-5



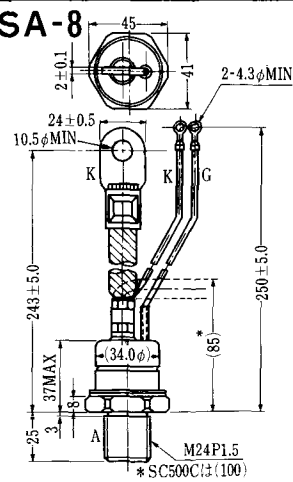
SA-6



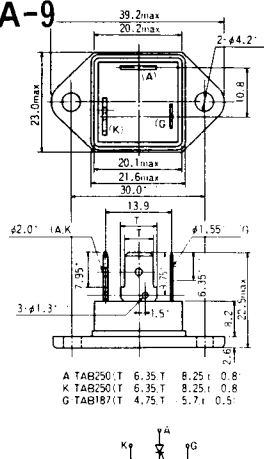
SA-7



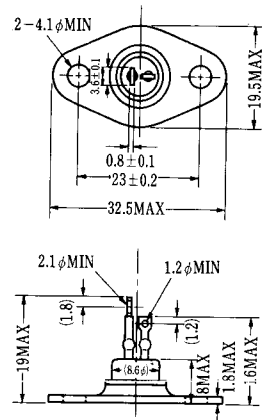
SA-8



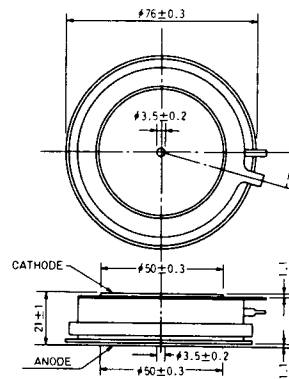
SA-9



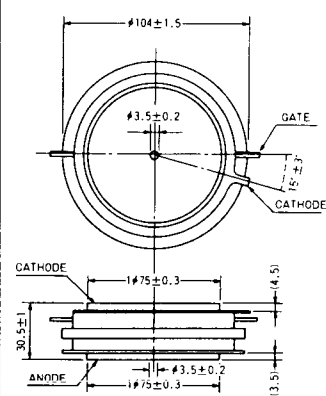
SA-10



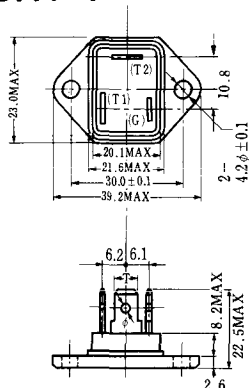
SA-11



SA-12

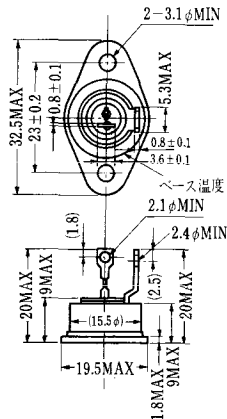


SAT-1

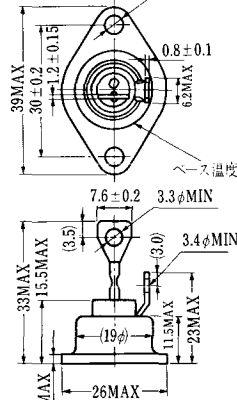


T1 端子: フラスト > 250 (T=6.35, t=0.8, φ=1.65)
 T2 端子: フラスト > 250 (T=6.35, t=0.8, φ=1.65)
 C 端子: フラスト > 187 (T=4.75, t=0.5, φ=1.3)

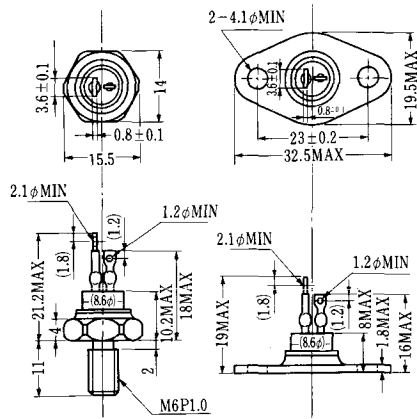
SAT-2



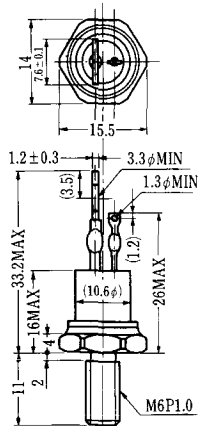
SAT-3



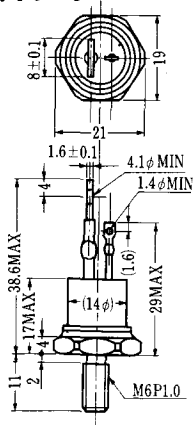
SAT-4



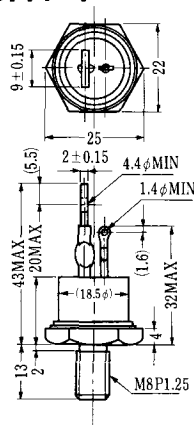
SAT-5



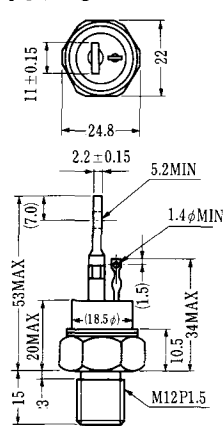
SAT-6



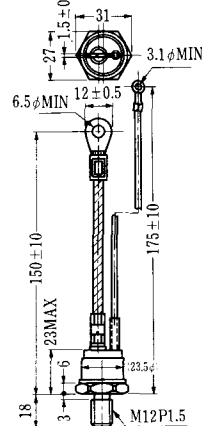
SAT-7



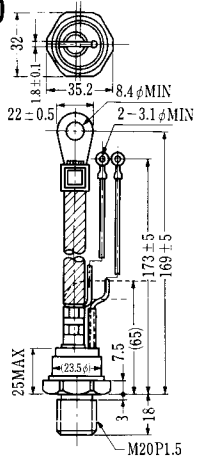
SAT-8



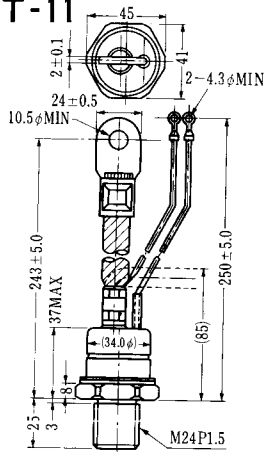
SAT-9



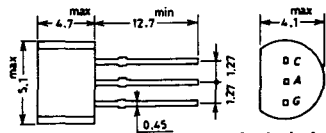
SAT-10



SAT-11

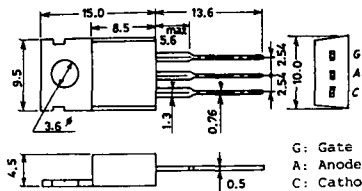


SY-1 (1096A)



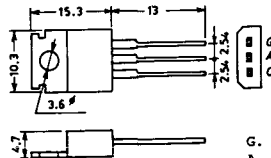
C: Cathode
A: Anode
G: Gate

SY-2 (1151)



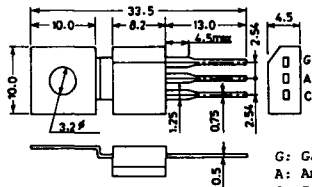
G: Gate
A: Anode
C: Cathode

SY-3 (1104)



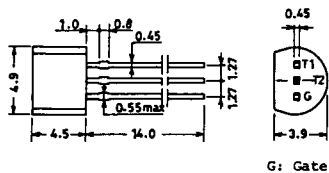
G: Gate
A: Anode
C: Cathode

SY-4 (1150)



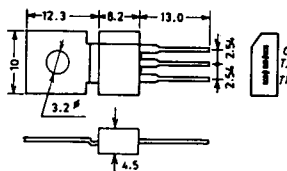
G: Gate
A: Anode
C: Cathode

1097A

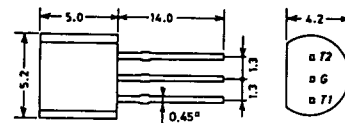


G: Gate

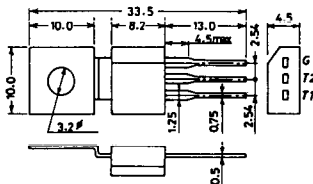
1102



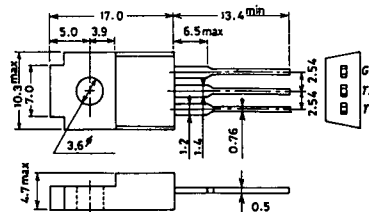
1141



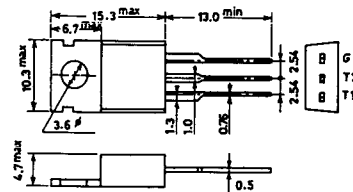
1142



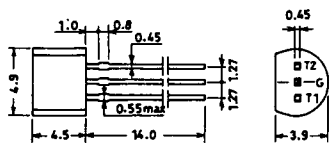
1144



1155

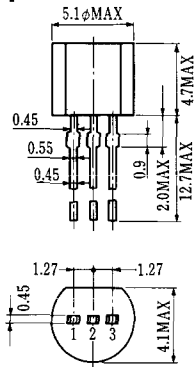


1192A



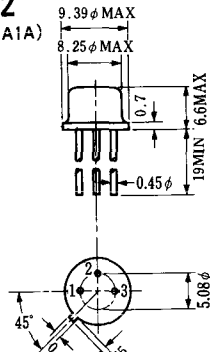
G: Gate

T-1 (13-5A1A)



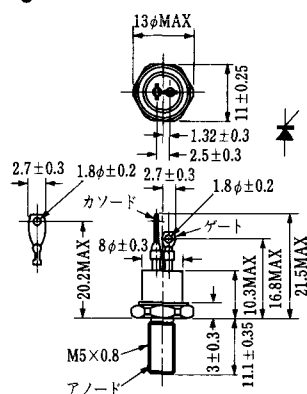
- 1 ゲート
- 2 アノード
- 3 カソード

T-2 (13-8A1A)



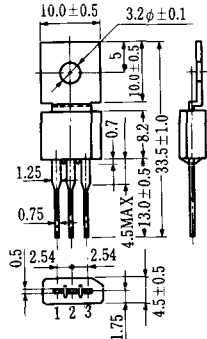
1. カソード
2. ゲート
3. アノード(ケース)

T-3 (13-8C1A)



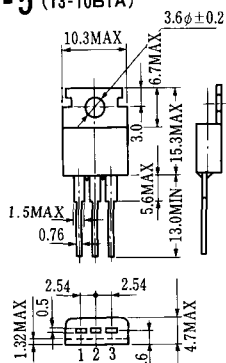
カソード
ゲート
アノード

T-4 (13-10A1A)



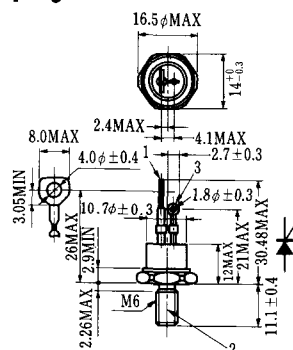
- 1 カソード
- 2 アノード
- 3 ゲート

T-5 (13-10B1A)



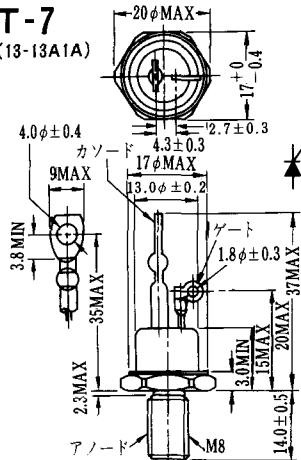
- 1 カソード
- 2 アノード
- 3 ゲート

T-6 (13-11D1A)



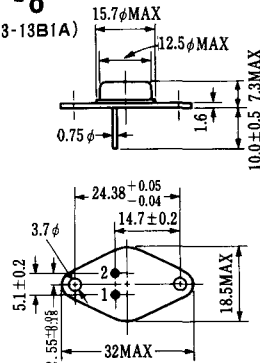
- 1 カソード
- 2 アノード
- 3 ゲート

T-7 (13-13A1A)



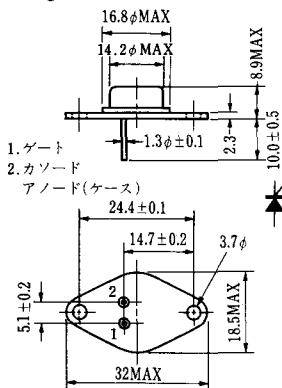
カソード
ゲート
アノード

T-8 (13-13B1A)



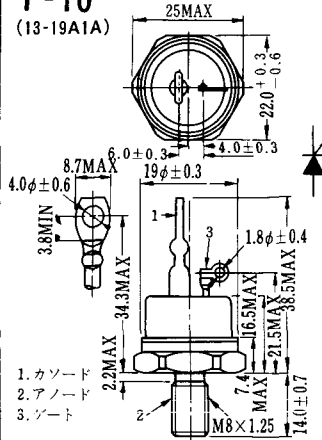
1. ゲート
2. カソード
3. アノード(ケース)

T-9 (13-14A1A)



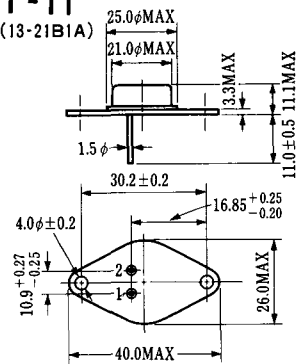
1. ゲート
2. カソード
アノード(ケース)

T-10
(13-19A1A)



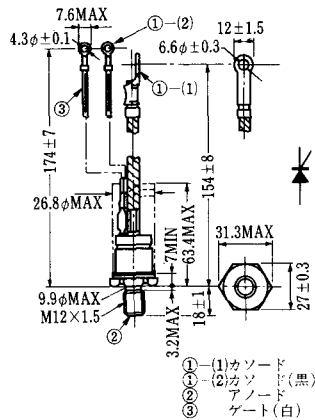
1. カソード
2. アノード
3. ゲート

T-11
(13-21B1A)



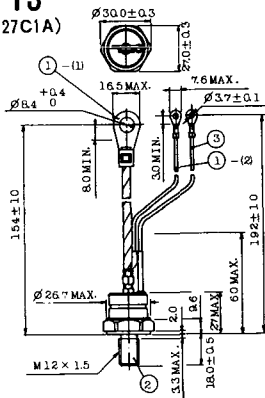
1. ゲート
2. カソード
アノード(ケース)

T-12 (13-27B1B)



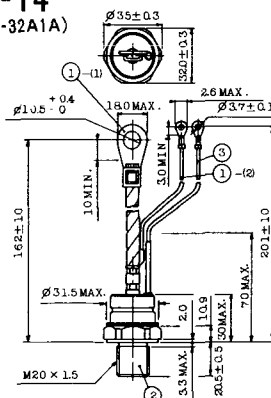
- ①(1) カソード
②(1) カソード(黒)
①(2) アノード
②(2) ゲート(白)

T-13
(13-27C1A)



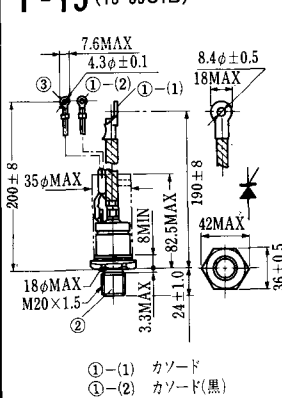
- 1-① カソード P アノード
1-② カソード(黒) B ゲート(白)

T-14
(13-32A1A)



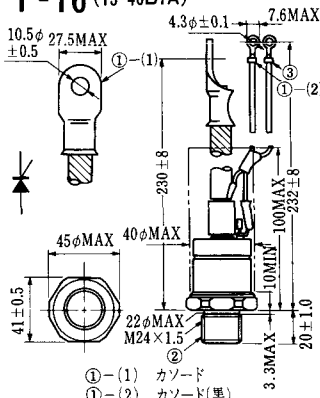
- 1-① カソード P アノード
1-② カソード(黒) B ゲート(白)

T-15 (13-35C1B)



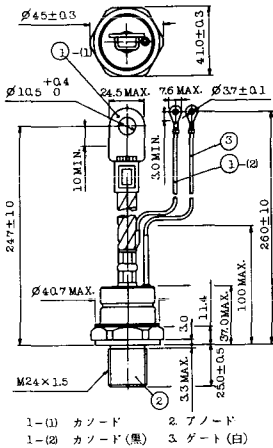
- ①(1) カソード
①(2) カソード(黒)
② アノード
③ ゲート(白)

T-16 (13-40B1A)

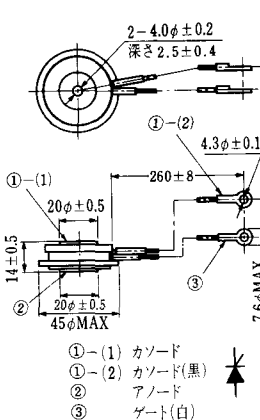


- ①(1) カソード
①(2) カソード(黒)
② アノード
③ ゲート(白)

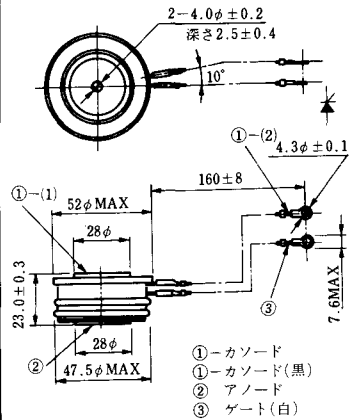
T-17 (13-42A1A)



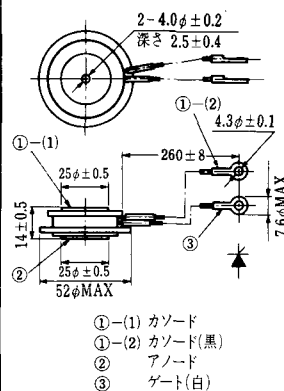
T-18 (13-45D1A)



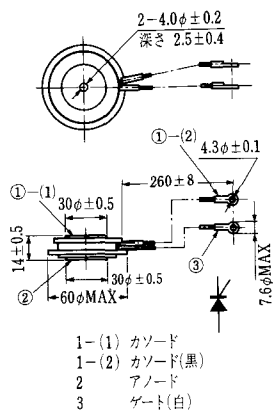
T-19 (13-52B1A)



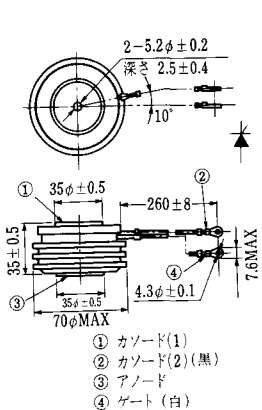
T-20 (13-52C1A)



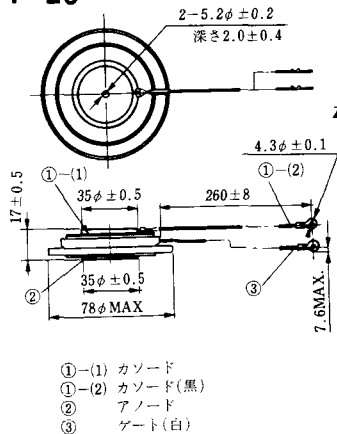
T-21 (13-60A1A)



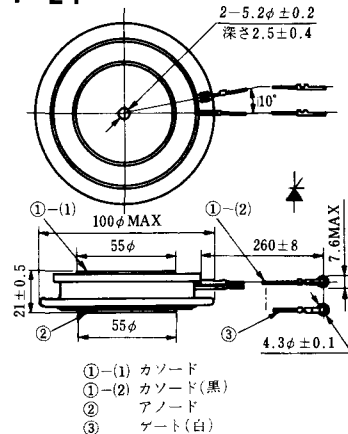
T-22 (13-70C1A)



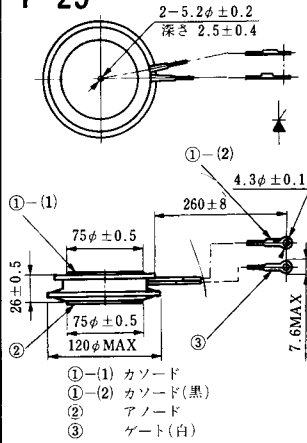
T-23 (13-78A1A)



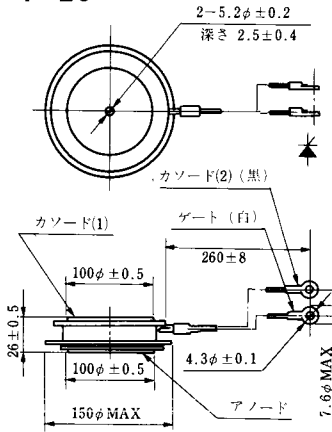
T-24 (13-100C1A)



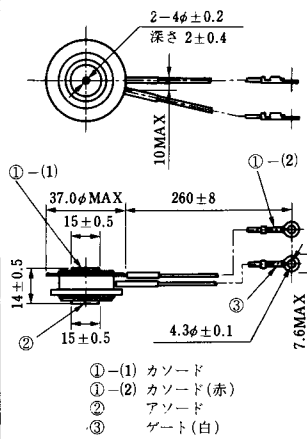
T-25 (13-120A2A)



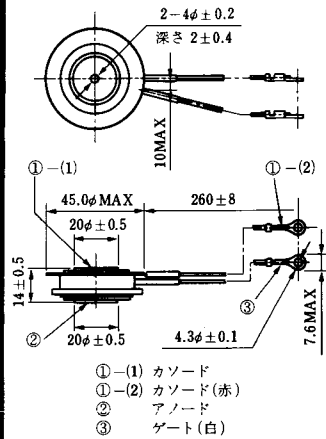
T-26 (13-150A1A)



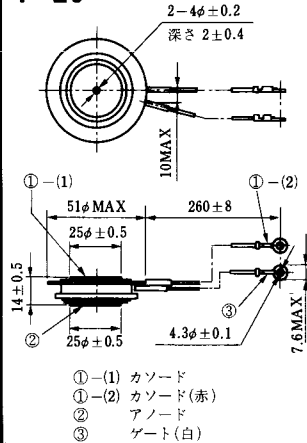
T-27 (13-37A1A)



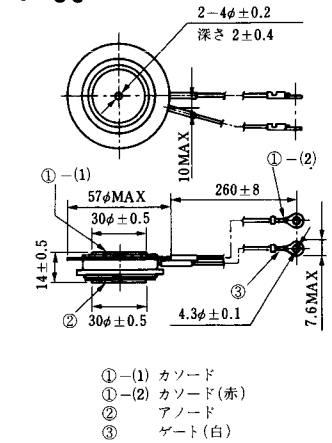
T-28 (13-45E1A)



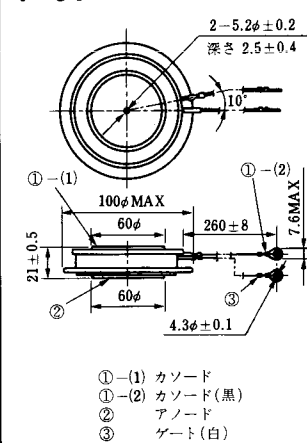
T-29 (13-51A1A)



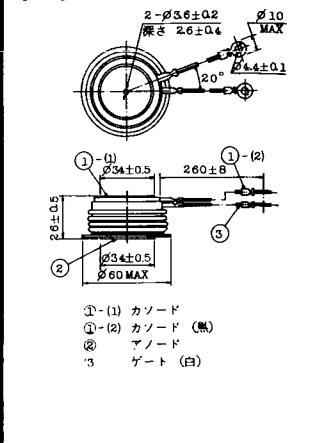
T-30 (13-57A1A)



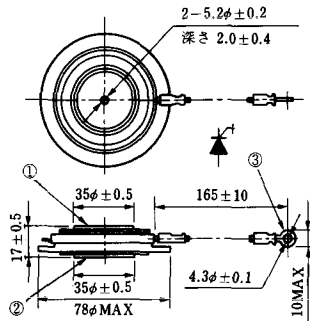
T-31 (13-100E1A)



T-32 (13-60E3A)

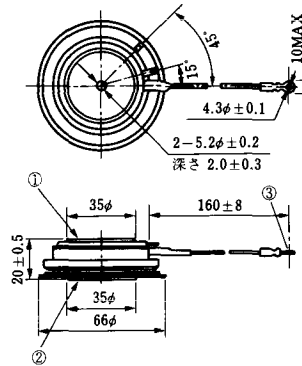


T-33 (13-78B1A)



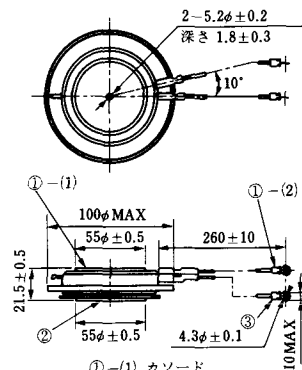
- ① カソード
- ② アノード
- ③ ゲート

T-34 (13-66A1A)



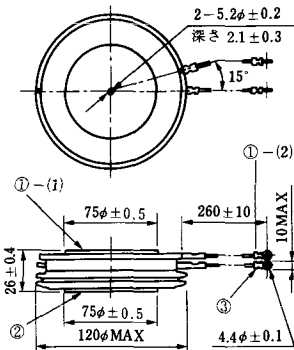
- ① カソード
- ② アノード
- ③ ゲート

T-35 (13-100D1A)



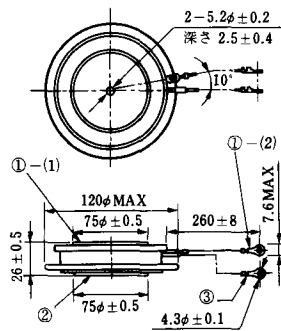
- ①-(1) カソード
- ①-(2) カソード(黒)
- ② アノード
- ③ ゲート(白)

T-36 (13-120E1A)



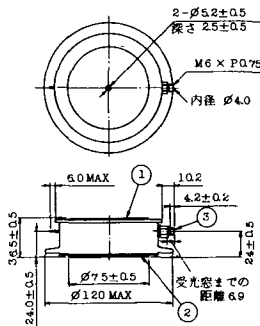
- ①-(1) カソード
- ①-(2) カソード(黒)
- ② アノード
- ③ ゲート(白)

T-37 (13-120A1A)



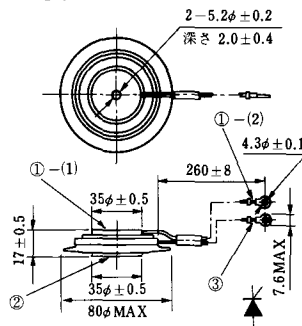
- ①-(1) カソード
- ①-(2) カソード(黒)
- ② アノード
- ③ ゲート(白)

T-38 (13-120C1A)



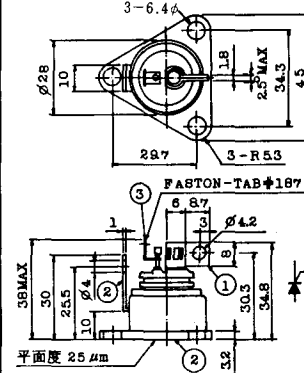
- ① カソード
- ② アノード
- ③ ゲート

T-39 (13-80B1A)



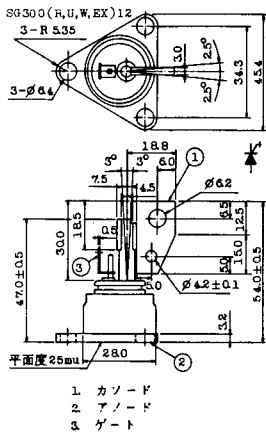
- ①-(1) カソード
- ①-(2) カソード(黒)
- ② アノード
- ③ ゲート(白)

T-40 (13-28A1A)

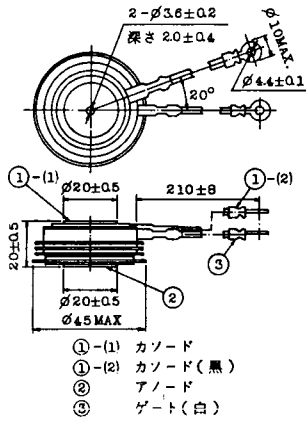


- 1. カソード
- 2. アノード
- 3. ゲート

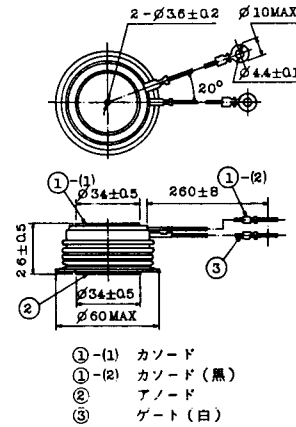
T-41 (13-28A2A)



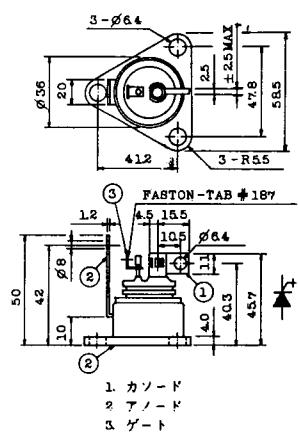
T-42 (13-45F1A)



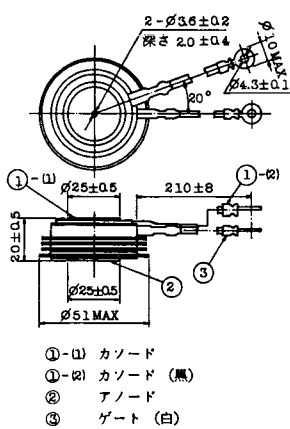
T-43 (13-60E2A)



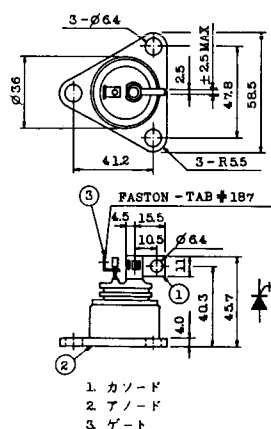
T-44 (13-36A1A)



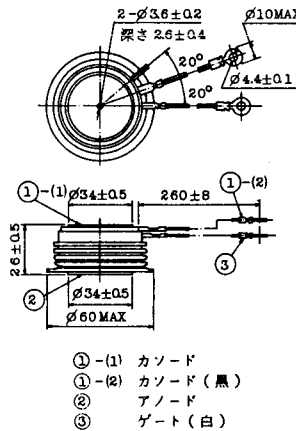
T-45 (13-51B1A)



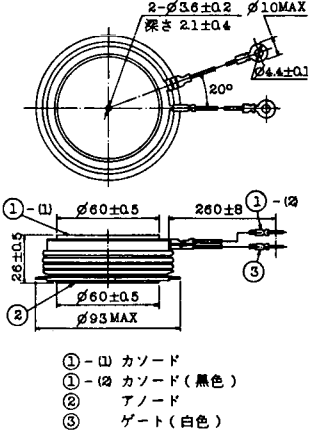
T-46 (13-36B1A)



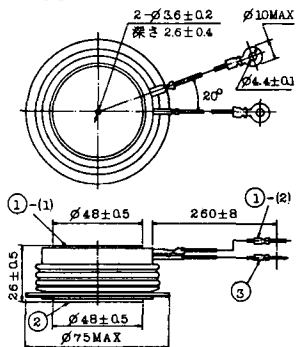
T-47 (13-60E1A)



T-48 (13-93C1A)

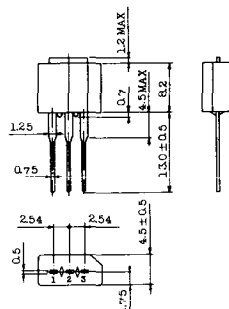


T-49 (13-75A1A)



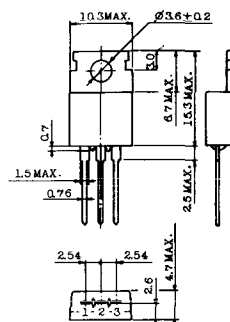
- 1-(1) カソード
- 1-(2) カソード(黒)
- 2 アノード
- 3 ゲート(白)

T-50 (13-10A3A)



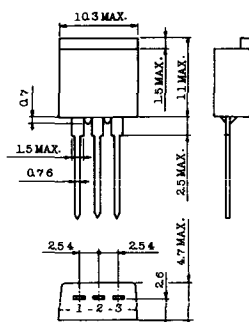
- 1 カソード
- 2 アノード
- 3 ゲート

T-51 (13-10D1A)



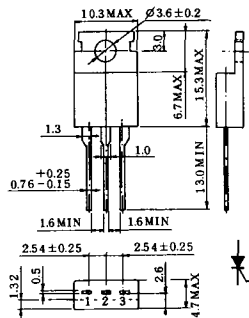
- 1 カソード
- 2 アノード
- 3 ゲート

T-52 (13-10D2A)



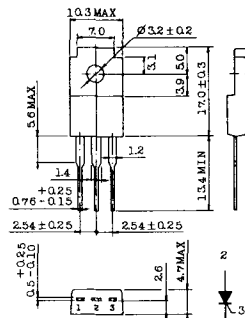
- 1 カソード
- 2 アノード
- 3 ゲート

T-53 (13-10E1B)



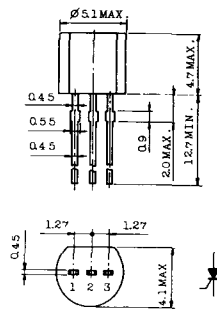
- 1 カソード
- 2 アノード
- 3 ゲート

T-54 (13-10F1B)



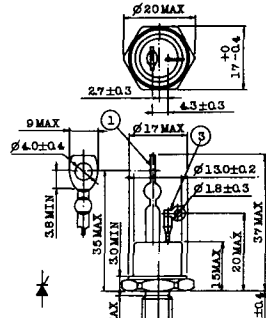
- 1 カソード
- 2 アノード
- 3 ゲート

T-55 (13-5A1D)



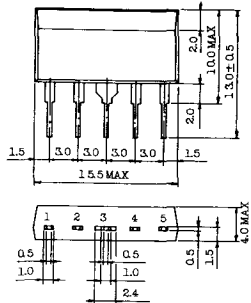
- 1 カソード
- 2 アノード
- 3 アノード

T-56 (13-13C1A)



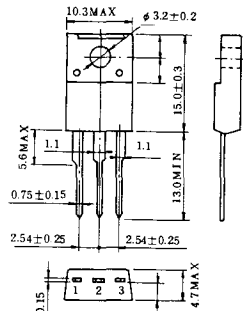
- 1 カソード
- 2 アノード
- 3 ゲート

T-57 (12-16C1A)



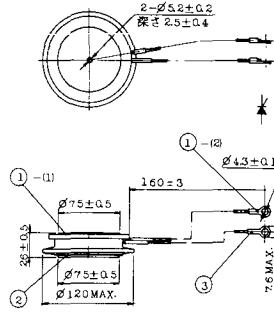
1. アノード (主)
2. ゲート (主)
3. カソード (共通)
4. ゲート (補助)
5. アノード (補助)

T-58 (13-10H1B)



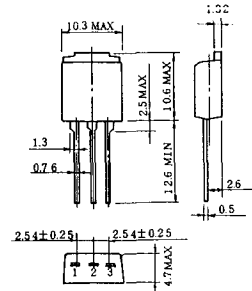
1. カソード
2. アノード
3. ゲート

T-59 (13-120A1A)



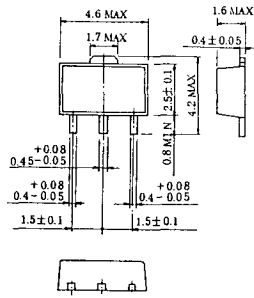
- 1-(1) カソード
- 1-(2) カソード (黒)
2. アノード
3. ゲート (白)

T-60



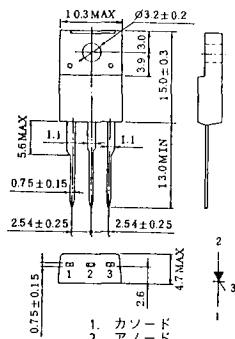
1. カソード
2. アノード
3. ゲート

T-61 (13-5B1A)



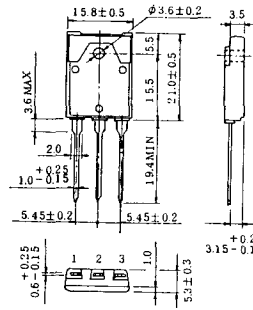
1. ゲート
2. アノード
3. カソード

T-62 (13-10H1A)



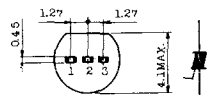
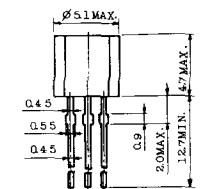
1. カソード
2. アノード
3. ゲート

T-63 (13-16A1B)



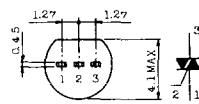
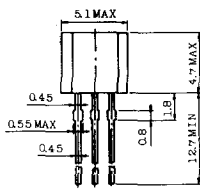
1. カソード
2. アノード
3. ゲート

TT-1



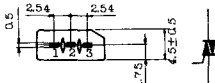
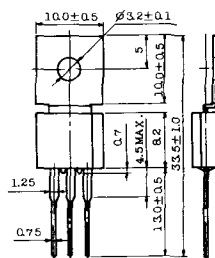
- 1 ゲート
- 2 T₂
- 3 T₁

TT-2



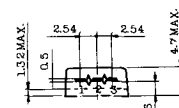
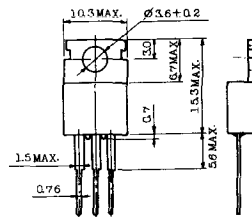
- 1 T₁
- 2 ゲート
- 3 T₂

TT-3



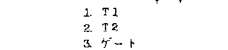
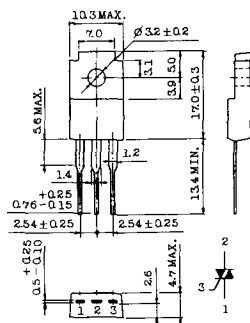
- 1 T₁
- 2 T₂
- 3 ゲート

TT-4



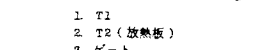
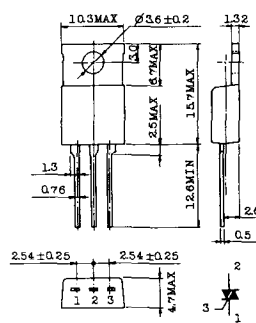
- 1 T₁
- 2 T₂
- 3 ゲート

TT-5



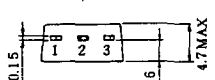
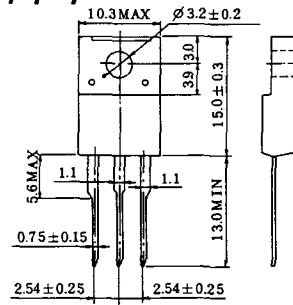
- 1 T₁
- 2 T₂
- 3 ゲート

TT-6



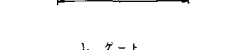
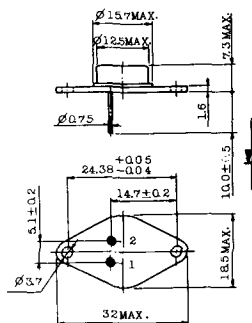
- 1 T₁
- 2 T₂ (放熱板)
- 3 ゲート

TT-7



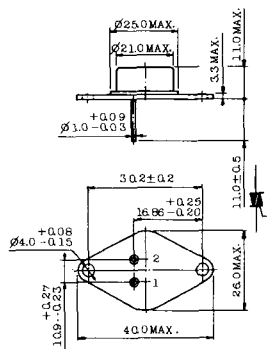
- 1 T₁
- 2 T₂
- 3 ゲート

TT-8



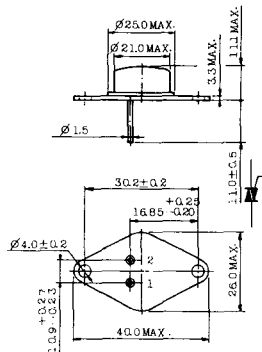
- 1 ゲート
- 2 T₁
- T₂ (ケース)

TT-9



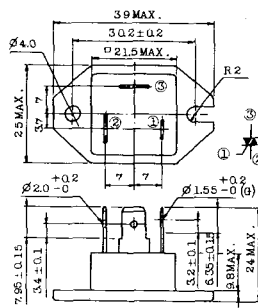
1. ゲート
2. T₁
3. T₂ (ケース)

TT-10



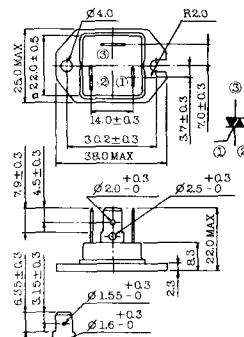
1. ゲート
2. T₁
3. T₂ (ケース)

TT-11



1. ゲート (フーストン端子 # 187)
2. T₁ (" # 250)
3. T₂ (" # 250)

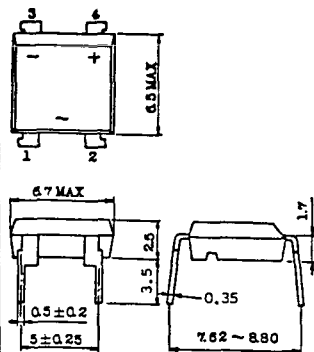
TT-12



ゲート端子詳細

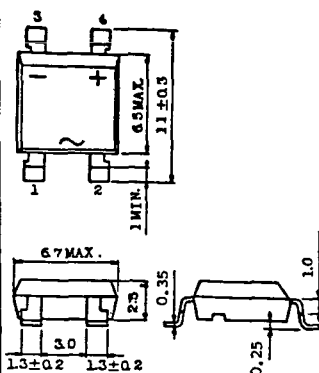
- ① ゲート (フーストン端子 # 187)
- ② T₁ (" # 250)
- ③ T₂ (" # 250)

TT-13



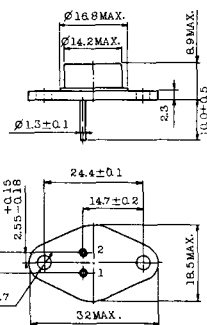
- 1, 2: T₂
- 3: GATE
- 4: T₁

TT-14



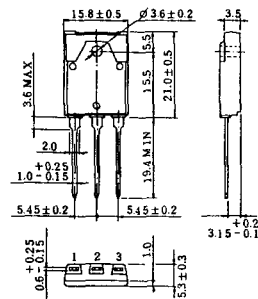
- 1, 2: T₂
- 3: GATE
- 4: T₁

TT-15 (13-14A1B)

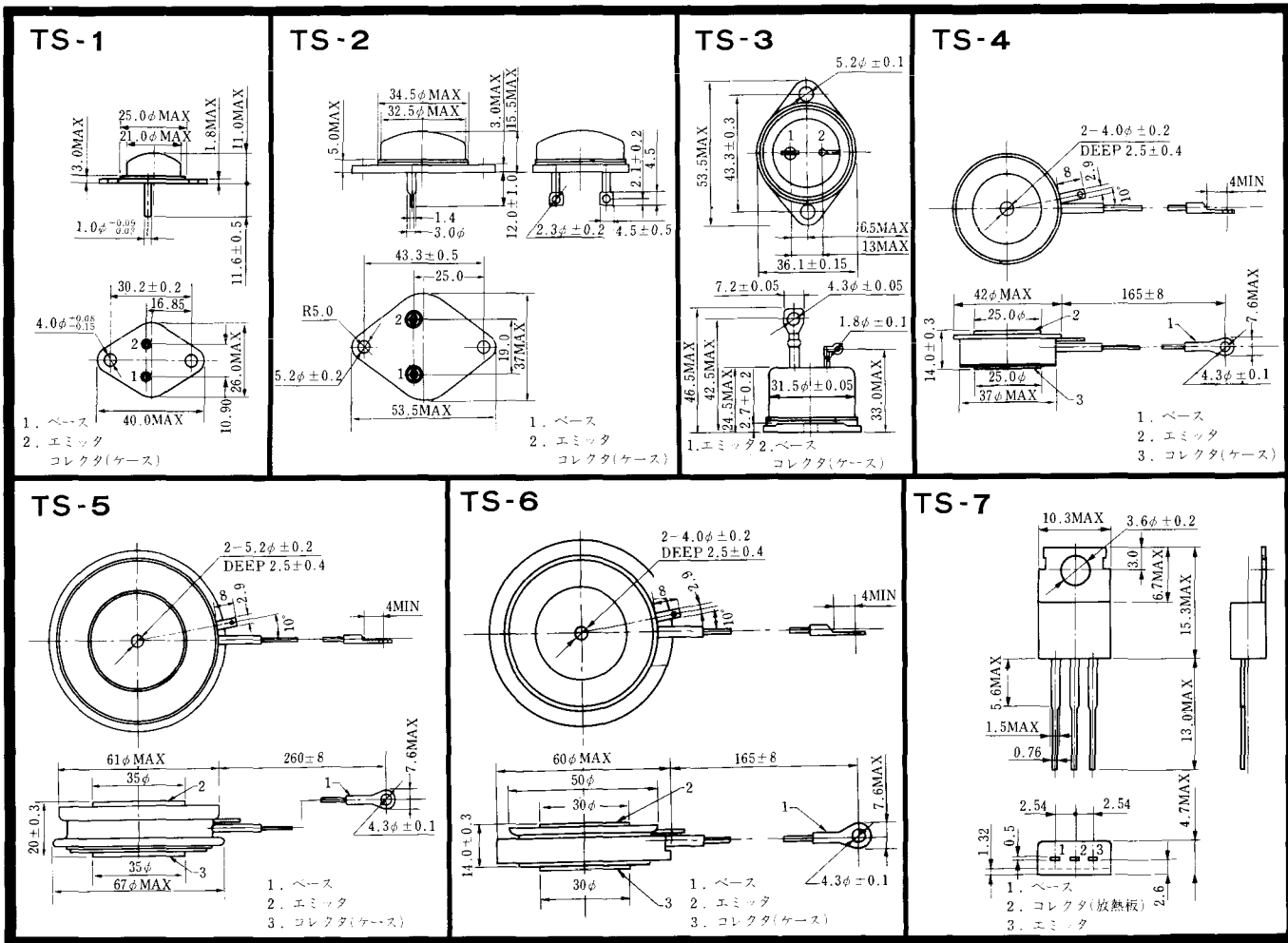


1. ゲート
2. T₁
- T₂ (ケース)

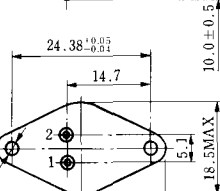
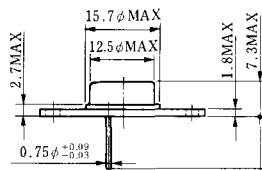
TT-16 (13-16A1A)



1. T₁
2. T₂
3. ゲート

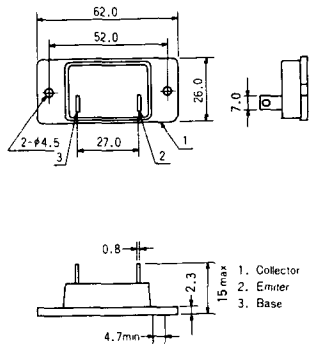


TS-8

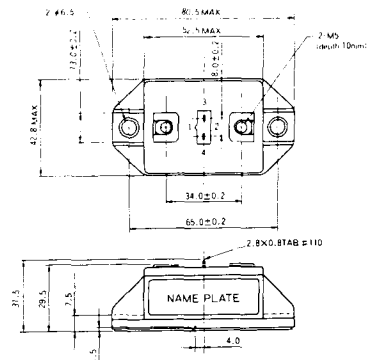


1. ベース
2. エミッタ
コレクタ
(ケース)

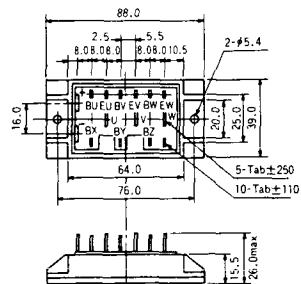
S-62A1A



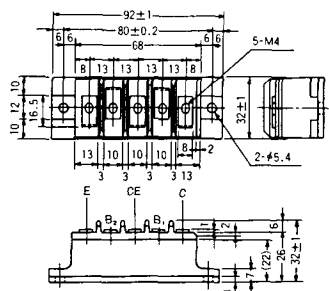
S-80A1A



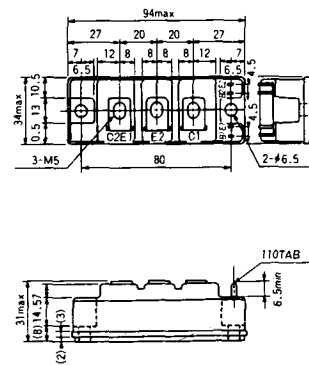
S-88D1A



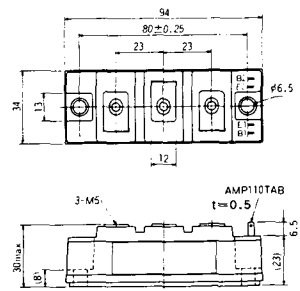
S-92B1A



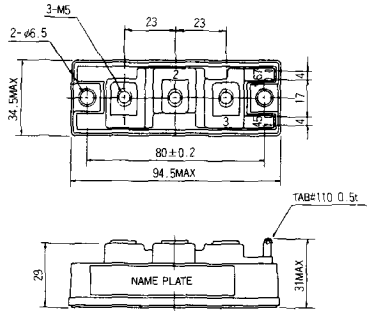
S-94B1A



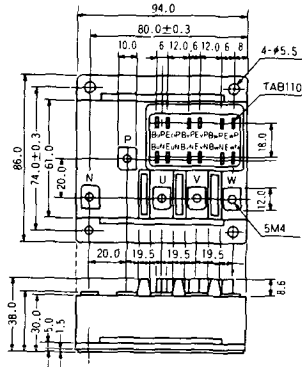
S-94B1B



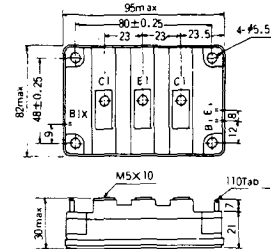
S-94B2A



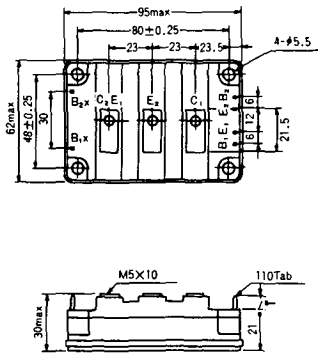
S-94D1A



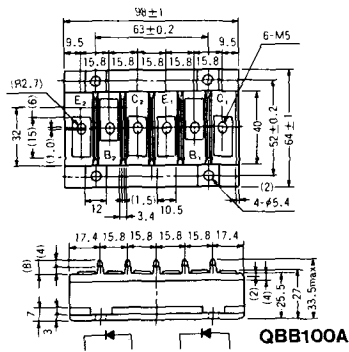
S-95A1A



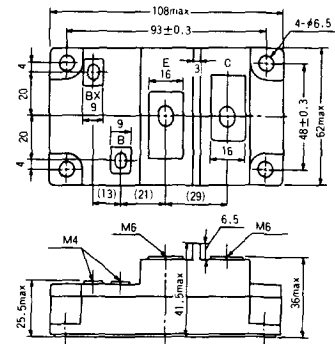
S-95B1A



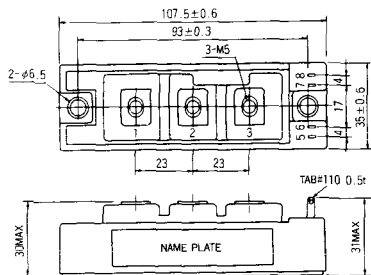
S-98B1B



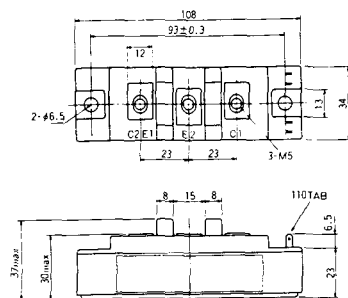
S-108A2A



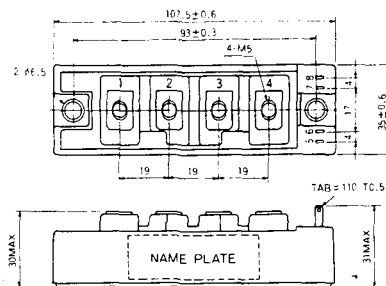
S-108B1A



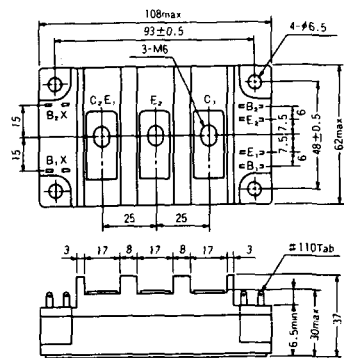
S-108B1B



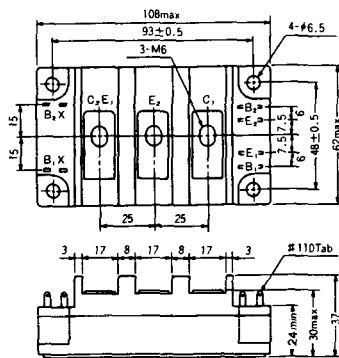
S-108B1C



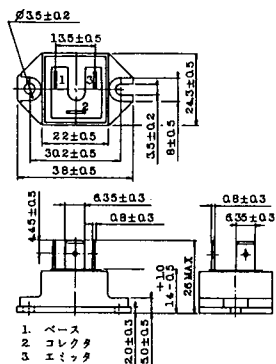
S-108B2A



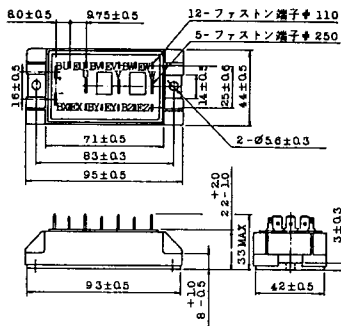
S-108B2B



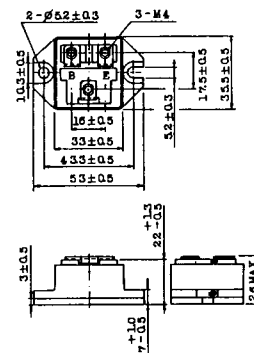
2-22B1A



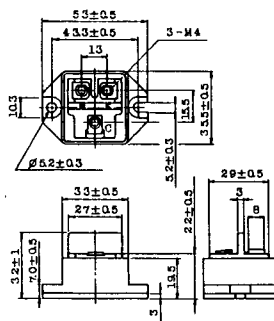
2-27A4A



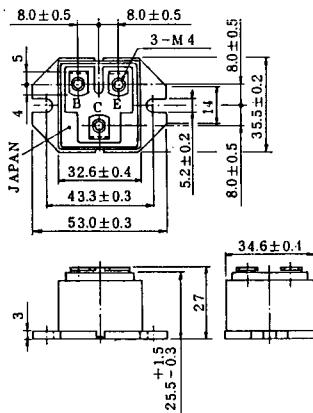
2-33C1A



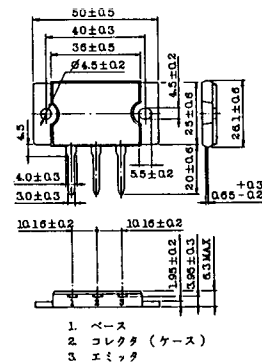
2-33D1A



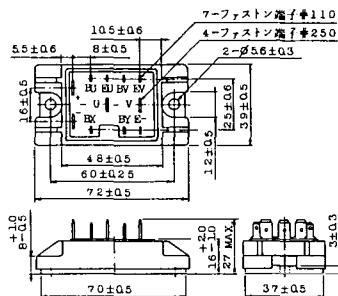
2-33F1A



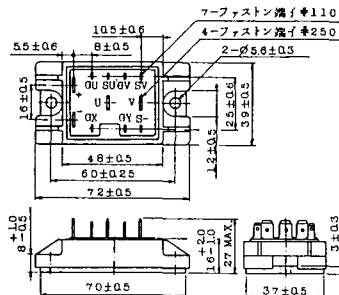
2-37A1A



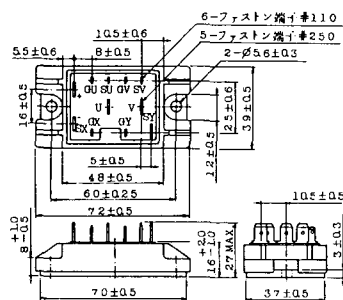
2-48A3A



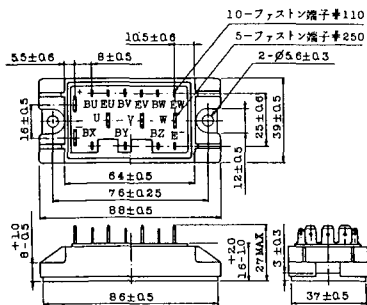
2-48A3B



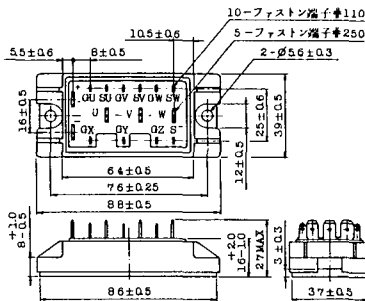
2-48A4A



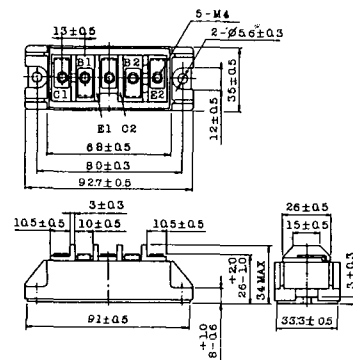
2-64A2A



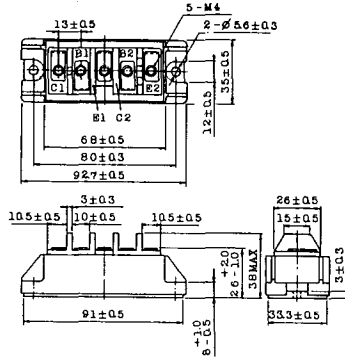
2-64A2B



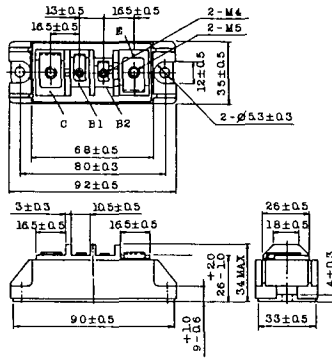
2-68A2A



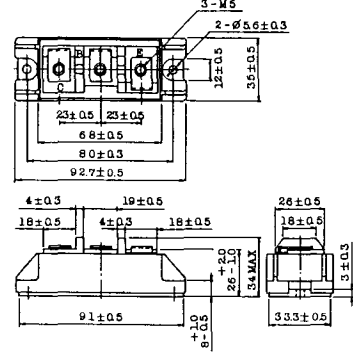
2-68B2A



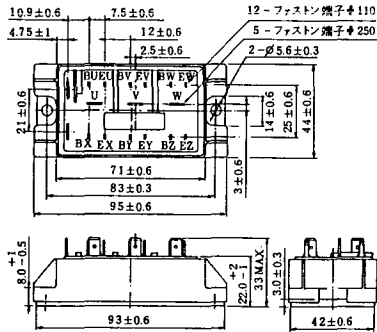
2-68C1A



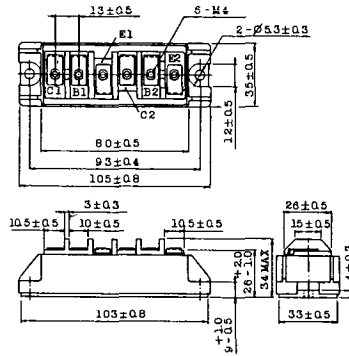
2-68D2A



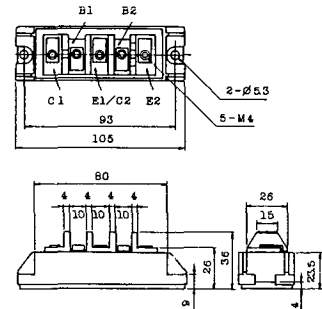
2-72A3A



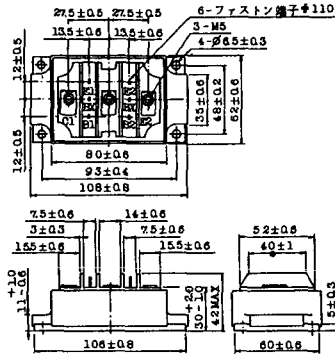
2-80A1A



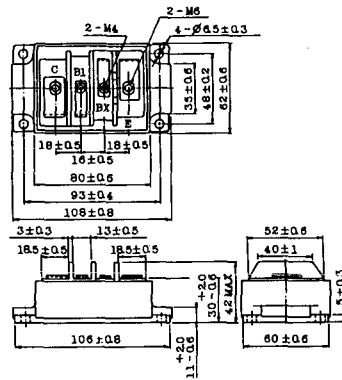
2-80B1A



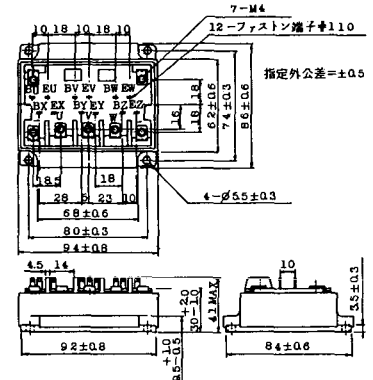
2-80C1A



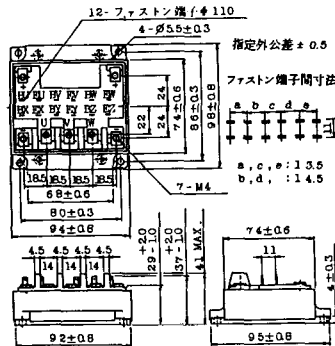
2-80D2A



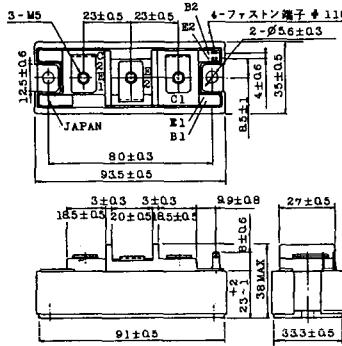
2-94A2A



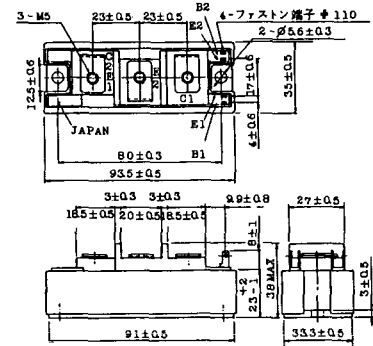
2-94B1A



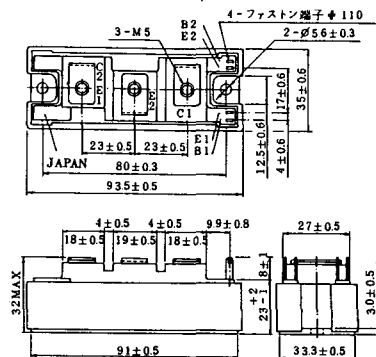
2-94C2A



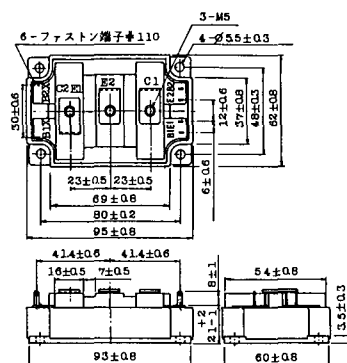
2-94C3A



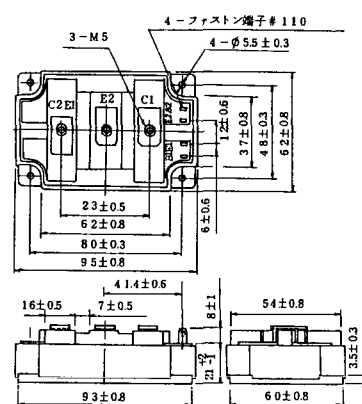
2-94D1A



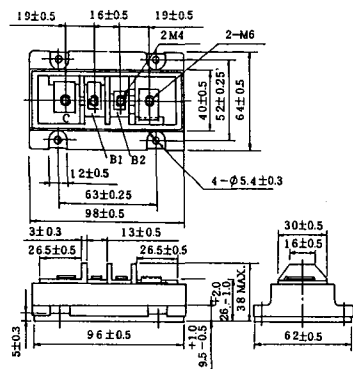
2-96A3A



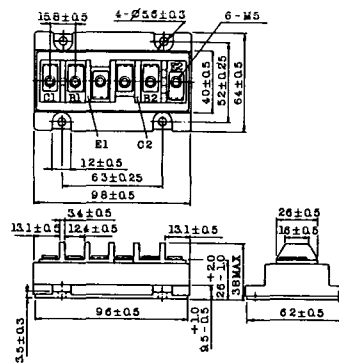
2-96A4A



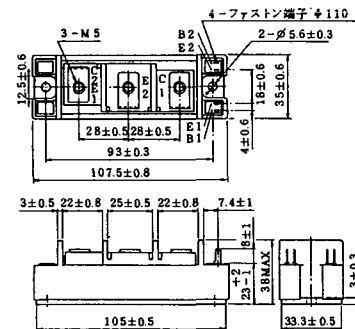
2-98B1A



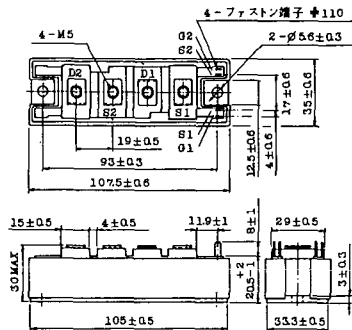
2-98C2A



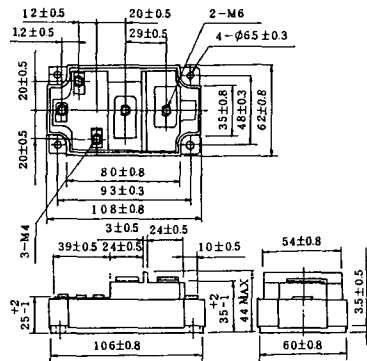
2-108A2A



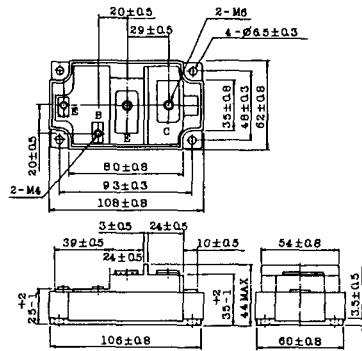
2-108B1A



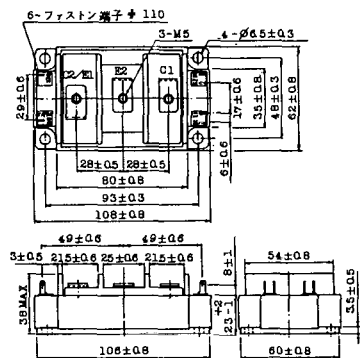
2-109A3A



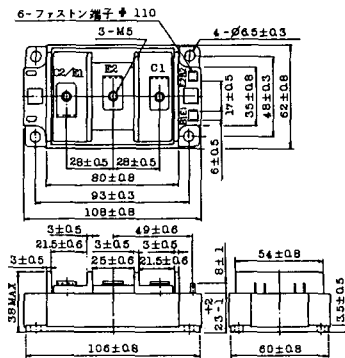
2-109A4A



2-109B3A

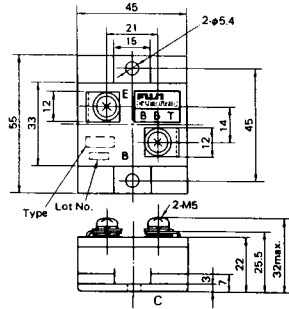


2-109B4A



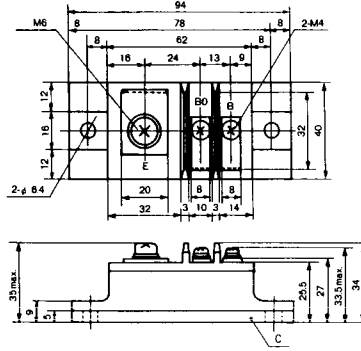
BBT-II

BBTII
1D200A-020



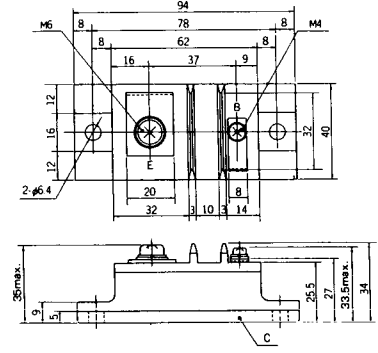
BBT-III

BBTIII
ETN31-055
ETM36-030
ETN36-030
ETN35-030



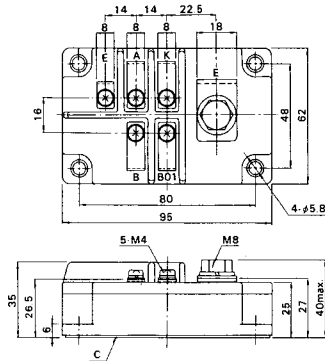
BBT-III

BBTIII
ETN01-055
ET1257

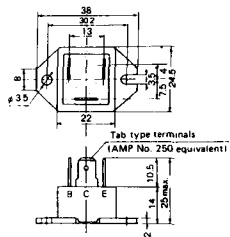


BBT-IV

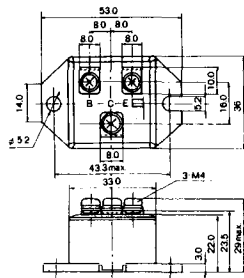
BBTIV
1D500A-030



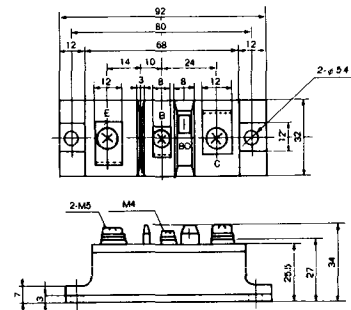
M-101



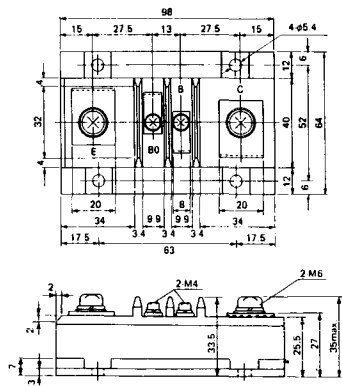
M-102



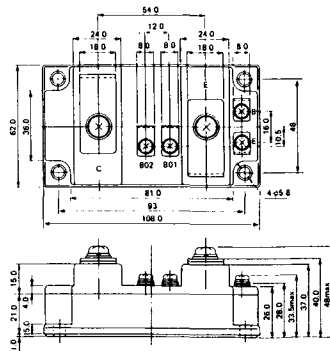
M-103



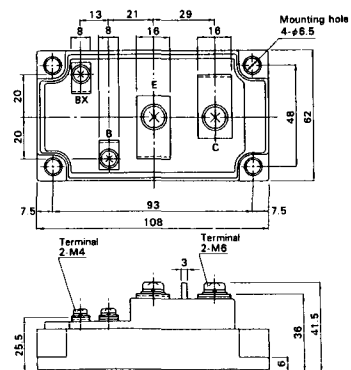
M-104



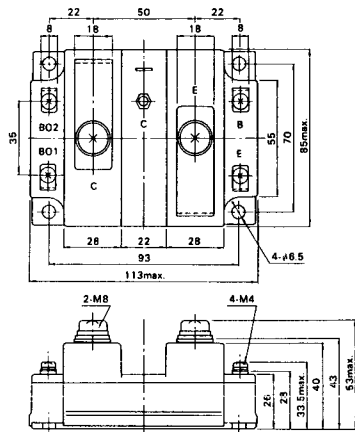
M-105



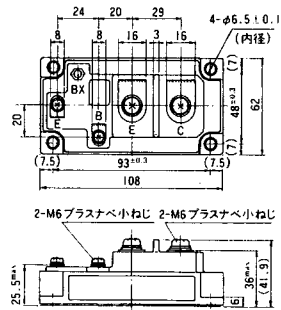
M-106



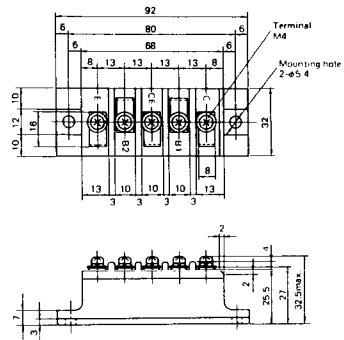
M-107



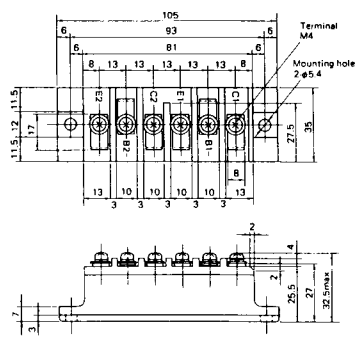
M-116



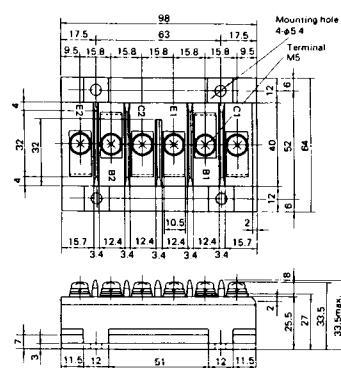
M-201



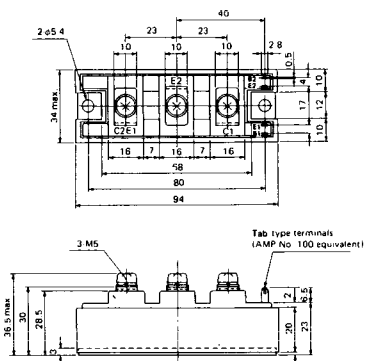
M-202



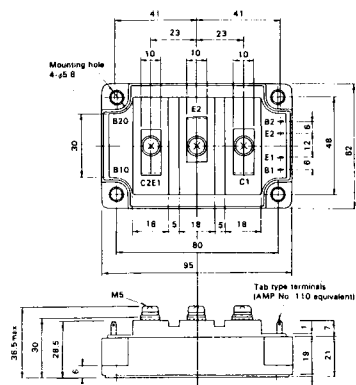
M-203



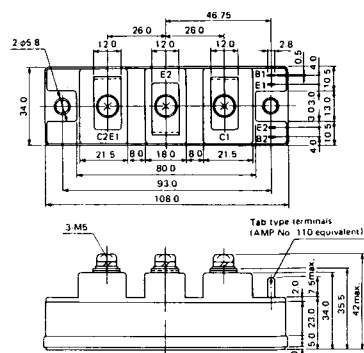
M-204



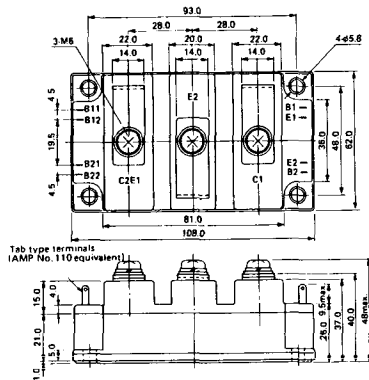
M-205



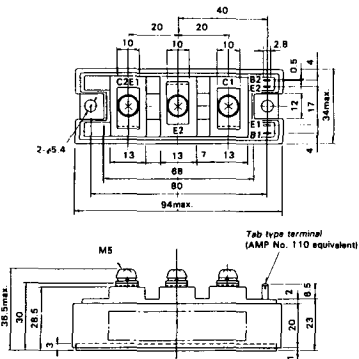
M-206



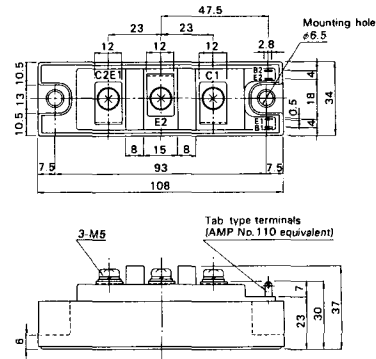
M-207



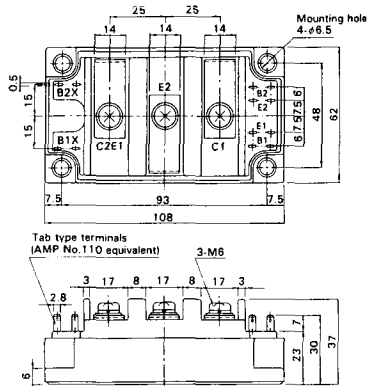
M-208



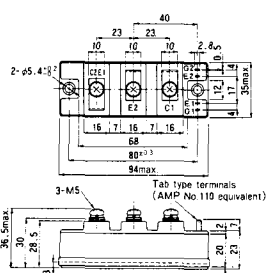
M-209



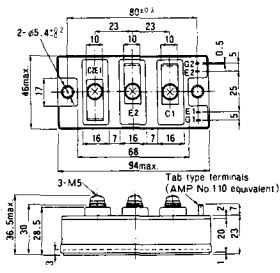
M-210



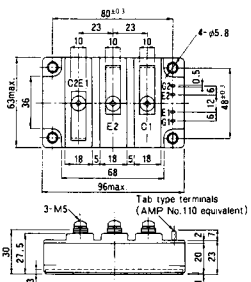
M-211



M-212

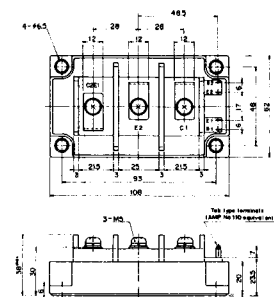


M-213

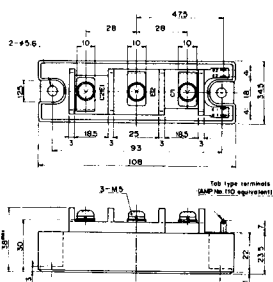


M-214

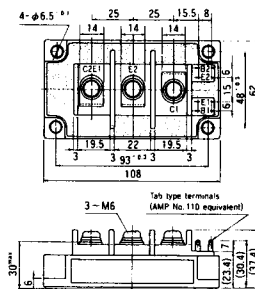
M-215



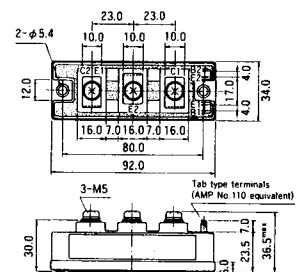
M-216



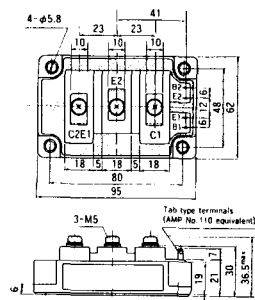
M-217



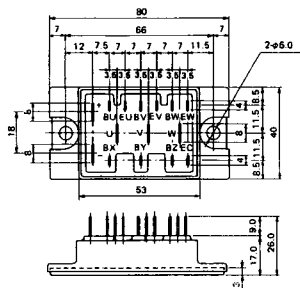
M-218



M-219



M-601



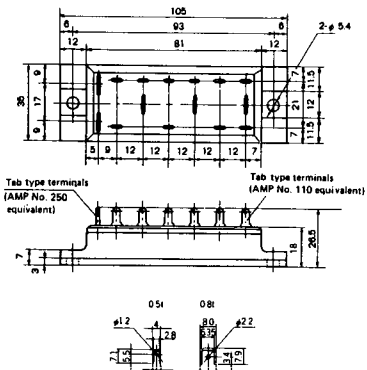
Tab type terminals
(AMP No. 110 equivalent)



Tab type terminals
(AMP No. 250 equivalent)



M-602



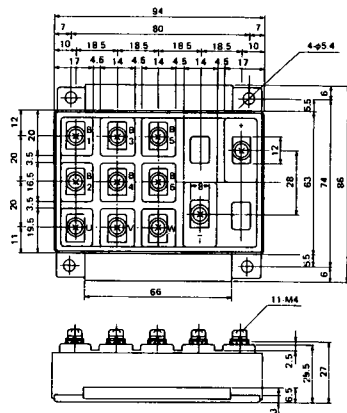
Tab type terminals
(AMP No. 250 equivalent)



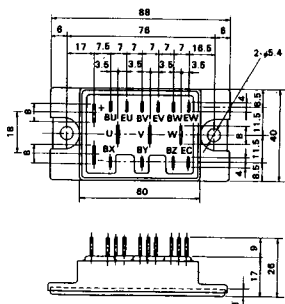
Tab type terminals
(AMP No. 110 equivalent)



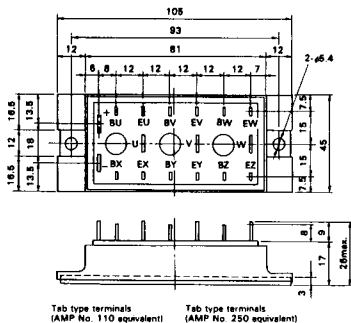
M-603



M-604



M-605



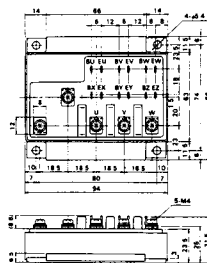
Tab type terminals
(AMP No. 110 equivalent)



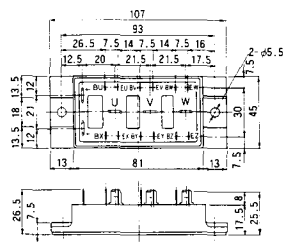
Tab type terminals
(AMP No. 250 equivalent)



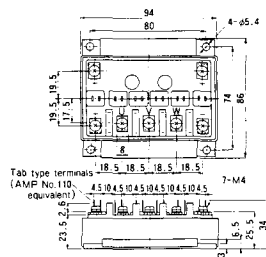
M-606



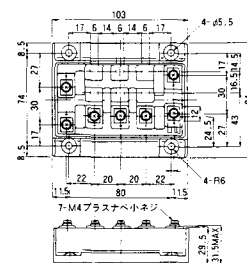
M-607



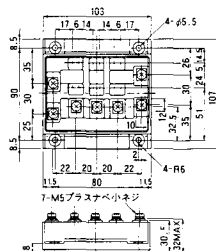
M-608



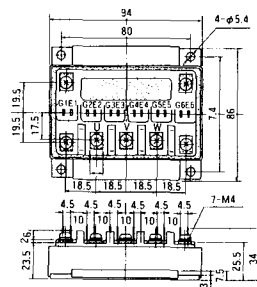
M-609



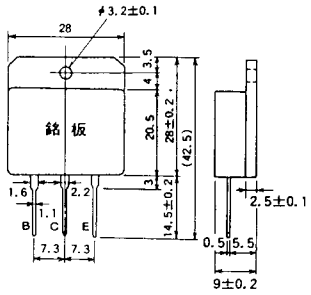
M-610



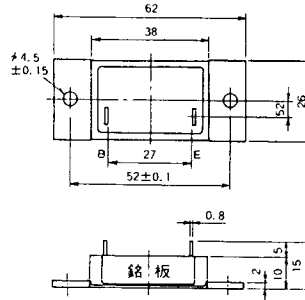
M-616



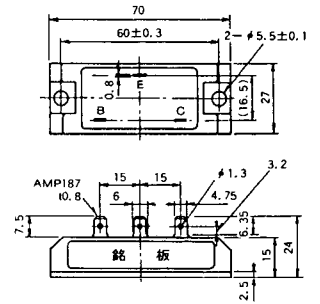
M-1A1A



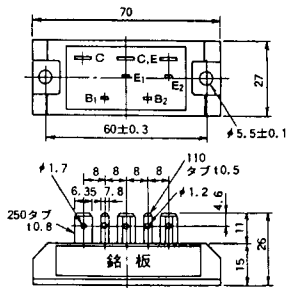
M-2A1A



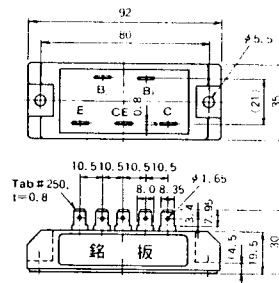
M-2B1A



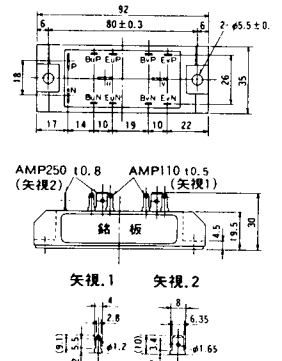
M-2B2A



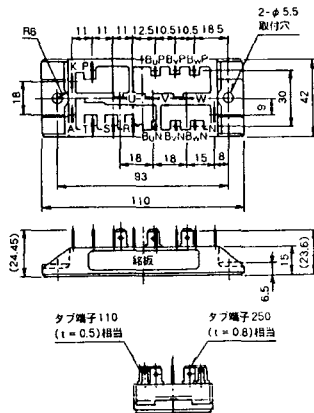
M-2C2A



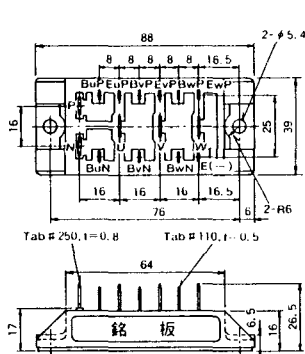
M-2D4A



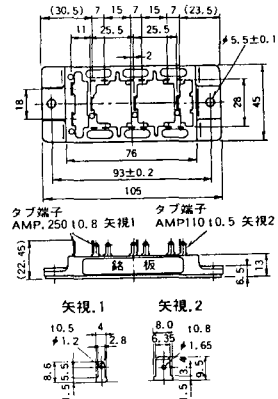
M-2E6A



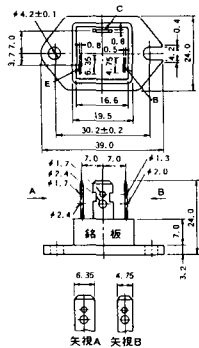
M-2F6A



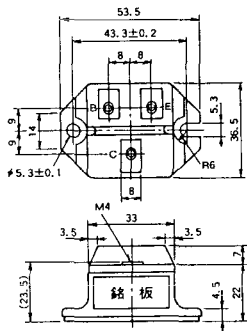
M-2G6A



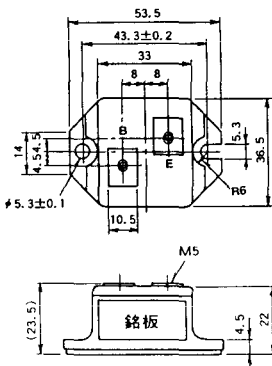
M-3A1A



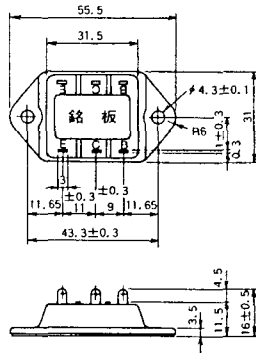
M-3B1A



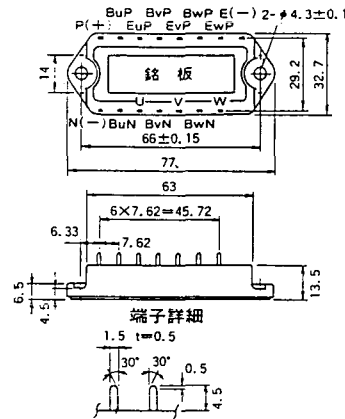
M-3B1B



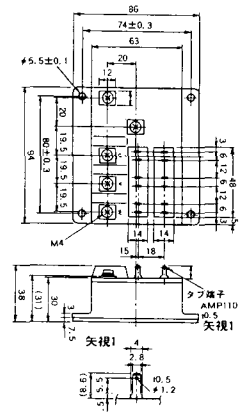
M-3C1A



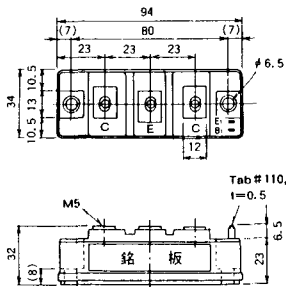
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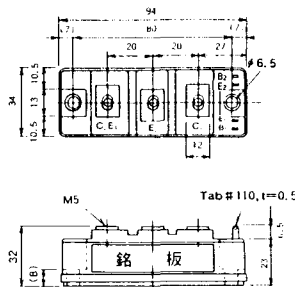
M-3E6A



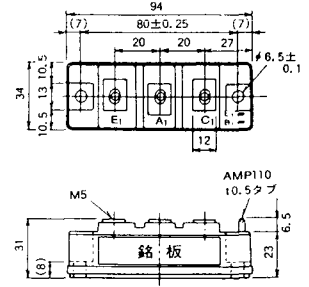
M-4A1A



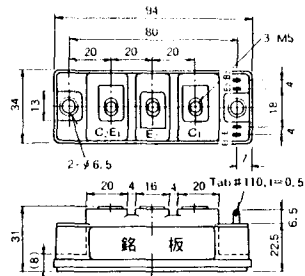
M-4A2A



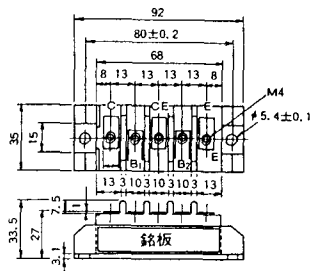
M-4A1B



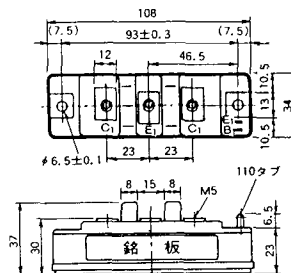
M-4A2B



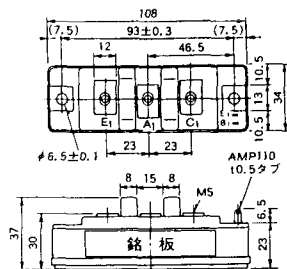
M-4B2A



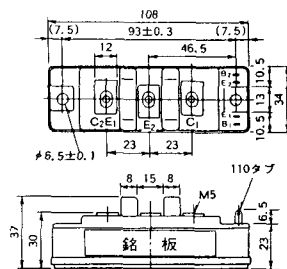
M-5A1A



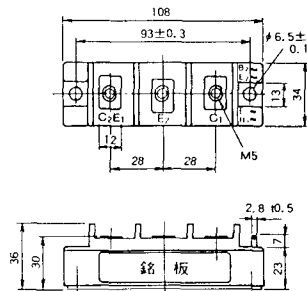
M-5A1B



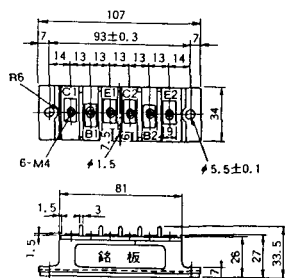
M-5A2A



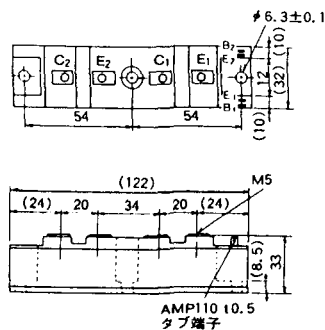
M-5B2A



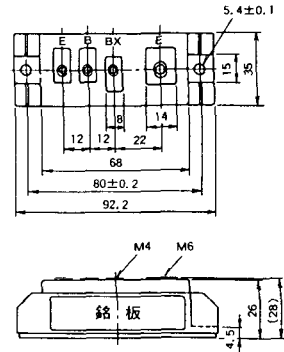
M-5C2A



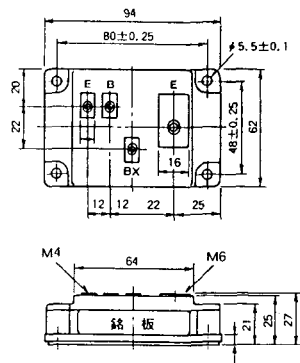
M-5D2A



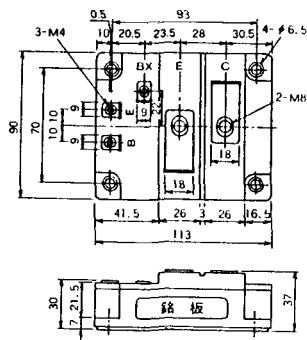
M-6A1A



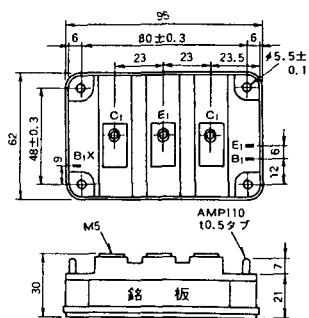
M-7A1A



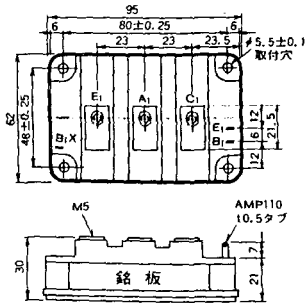
M-7B1A



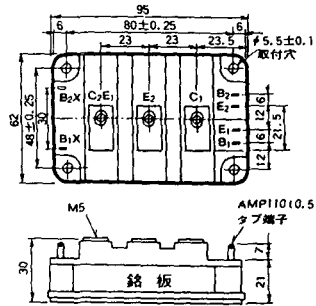
M-8A1A



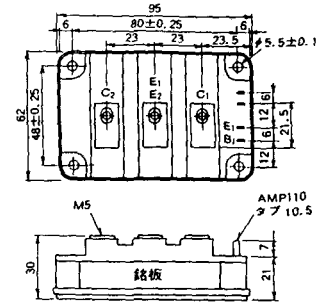
M-8A1B



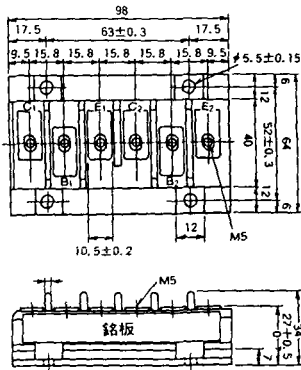
M-8A2A



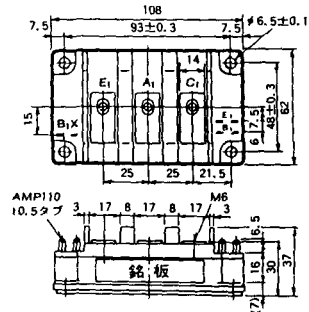
M-8A2B



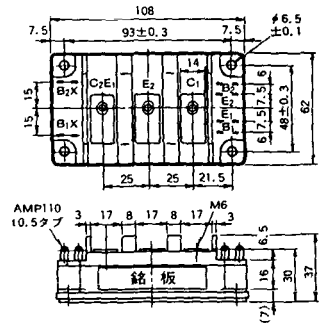
M-8B2A



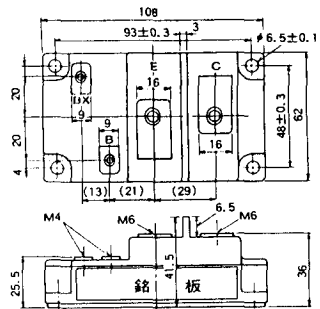
M-9A1A



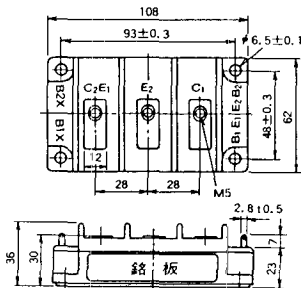
M-9A2A



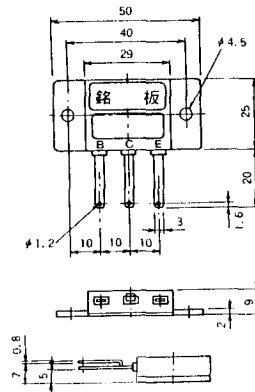
M-9B1A



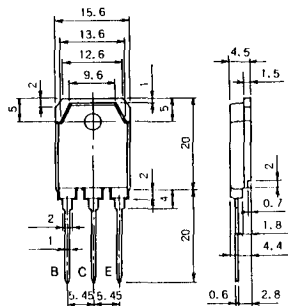
M-9C2A



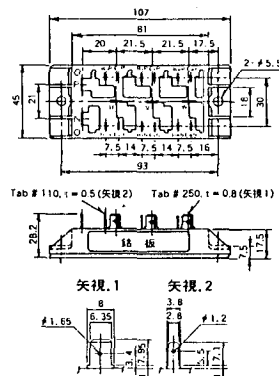
M-1A1B



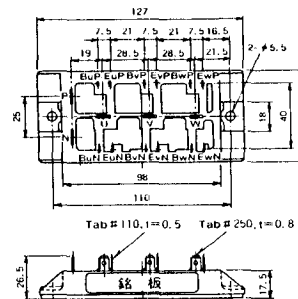
M-1A1C



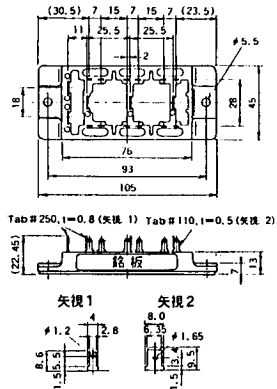
M-2E6B



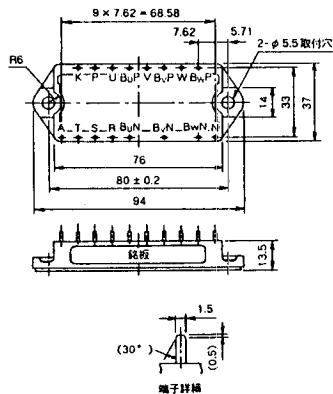
M-2E6C



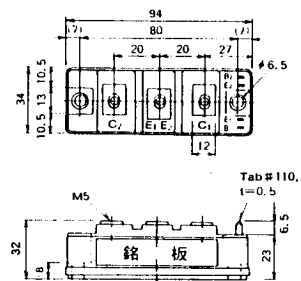
M-2G6B



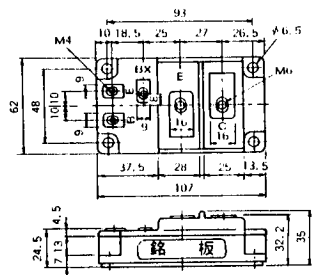
M-3D6B



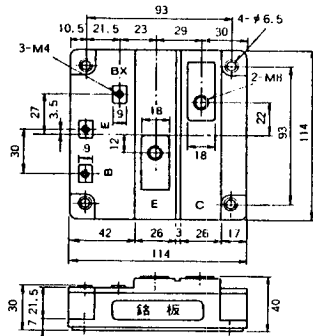
M-4A2C



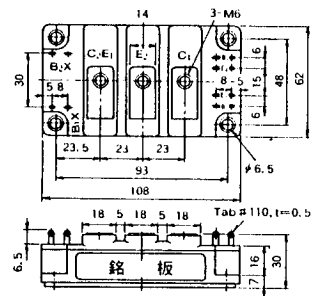
M-7A1B



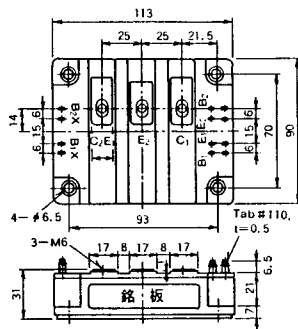
M-7C1A



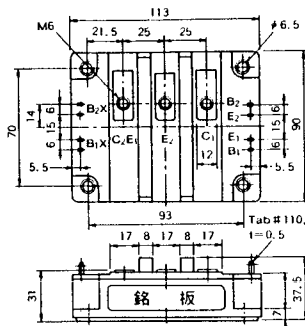
M-8A2C



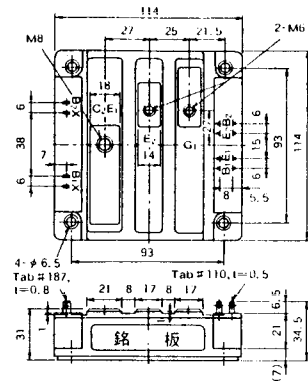
M-10A2A



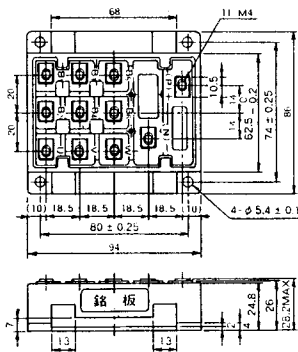
M-10A2B



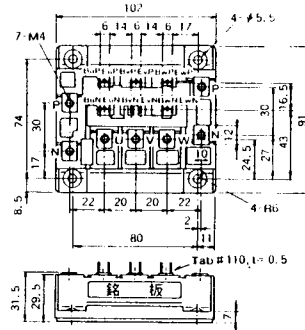
M-11A2A



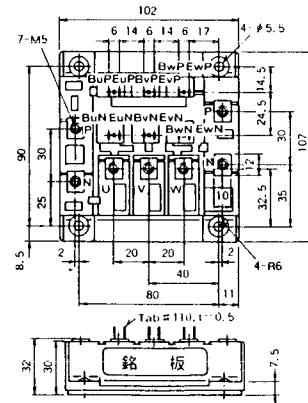
M-12A6A



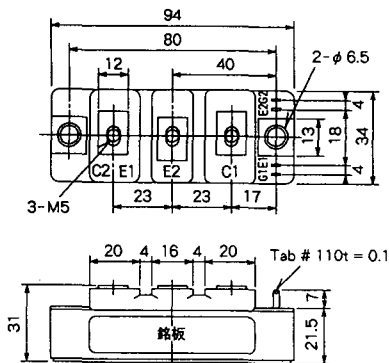
M-12B6A



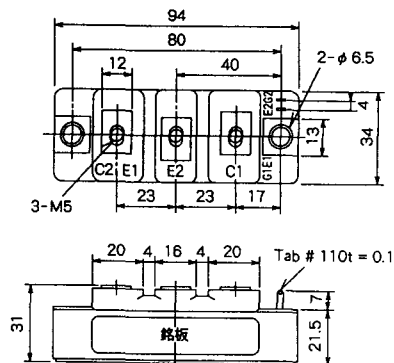
M-12B6B



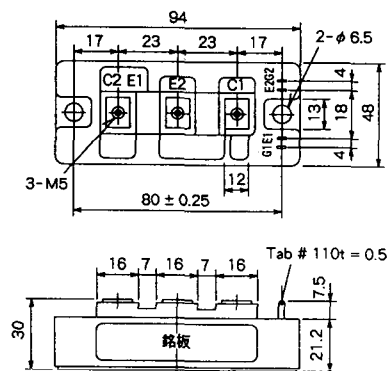
M-4A2D



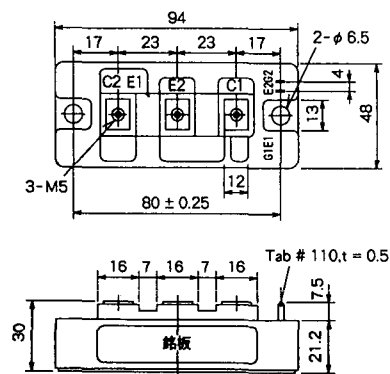
M-4A2E



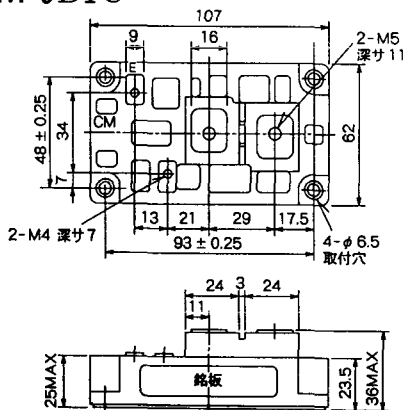
M-4C2A



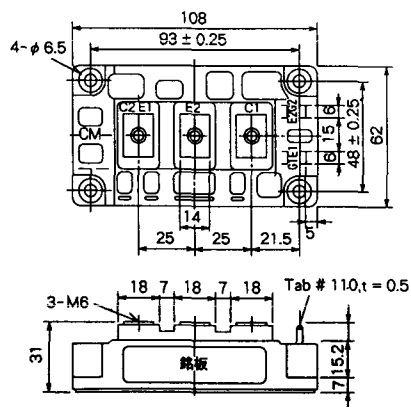
M-4C2B



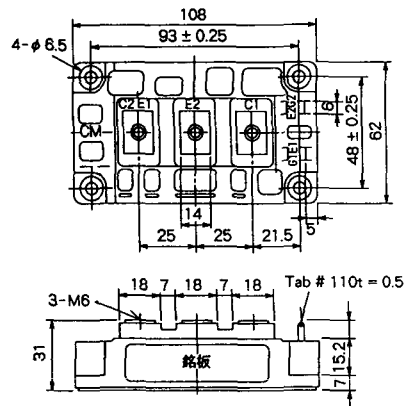
M-9B1C



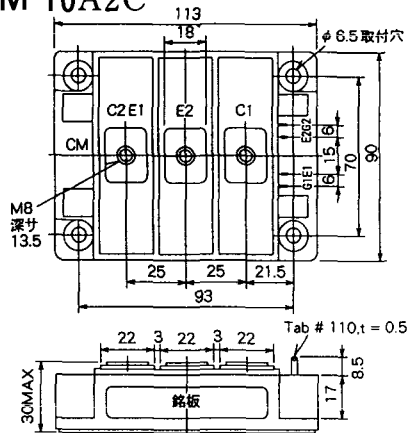
M-9D2A



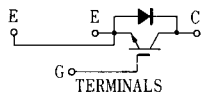
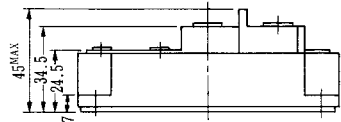
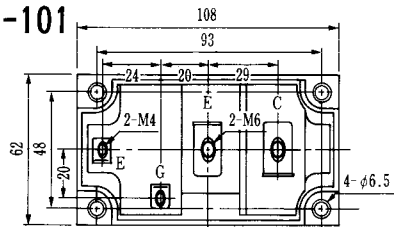
M-9D2B



M-10A2C

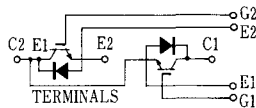
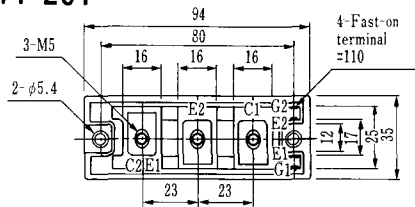


H-101



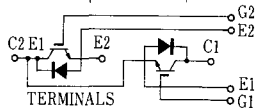
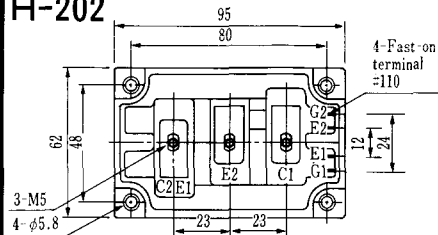
Weight :480g

H-201



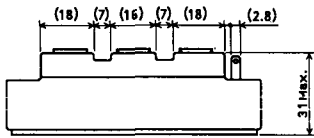
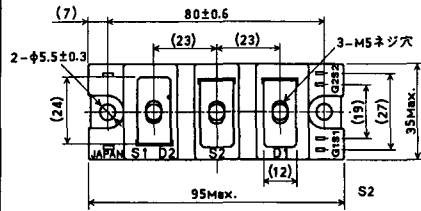
Weight: 200g

H-202



Weight: 360g

LF-J



LF-K

