

混合モジュール (サイリスタ+ダイオード)

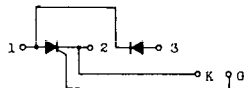
MSA60()41

○電力制御用

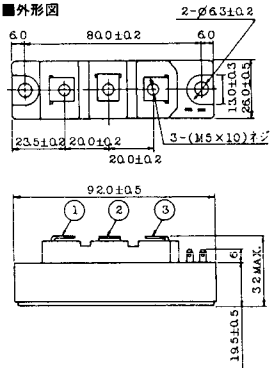
○絶縁耐圧 MSA60G41~MSA60L41 2000V

MSA60N41~MSA60U41 2500V

■接続図



■外形図



■最大定格

記号	G	J	L	N	Q	S	U		単位
V_{RSM}	500	720	960	1200	1440	1600	1750		V
V_{RRM}	400	600	800	1000	1200	1400	1600		V
V_{DRM}	400	600	800	1000	1200	1400	1600		V
$I_{T(AV)}$	50	(単相半波, $T_r=86^\circ\text{C}$)							A
$I_{T(RMS)}$	79								A
I_{TSM}	1000	(50Hz 60Hz, 正弦半波1サイクル波高値)							A
$I^2 \cdot t$	5000								A ² S
di/dt	100	$(V_D = \frac{1}{2} V_{DRM})$							A/ μs
P_{GM}	5								W
$P_{G(AV)}$	0.5								W
V_{GDM}	5								V
I_{GPM}	2								A
T_j	-40 ~ +125								$^\circ\text{C}$
T_{DK}	-40 ~ +125								$^\circ\text{C}$

■電気的特性

記号	測定条件	最小	標準	最大	単位
I_{RRM}	$T_j = 125^\circ\text{C}$, $V_D = V_{RRM}$			10	mA
I_{DRM}	$T_j = 125^\circ\text{C}$, $V_D = V_{DRM}$			10	mA
V_{TM}	$T_a = 25^\circ\text{C}$, $I_{TM} = 150\text{A}$			1.5	V
V_{GT}	$T_a = 25^\circ\text{C}$, $V_D = 6\text{V}$			1.5	V
I_{GT}	$R_L = 10\Omega$			80	mA
V_{GD}	$T_j = 125^\circ\text{C}$, $V_D = \frac{1}{2} V_{DRM}$	0.25			V
I_{GD}					mA
dv/dt	$T_r = 125^\circ\text{C}$, $V_D = \frac{2}{3} V_{DRM}$	500			V/ μs
I_H	$T_a = 25^\circ\text{C}$, $R_L = 100\Omega$			150	mA
R_{th}	接合部-ケース間			0.5	$^\circ\text{C/W}$

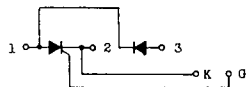
MSA100()41

○電力制御用

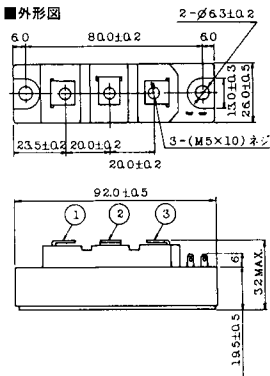
○絶縁耐圧 MSA100G41~MSA100L41 2000V

MSA100N41~MSA100U41 2500V

■接続図



■外形図



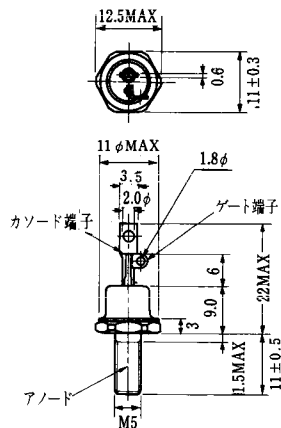
■最大定格

記号	G	J	L	N	Q	S	U		単位
V_{RSM}	500	720	960	1200	1440	1600	1750		V
V_{RRM}	400	600	800	1000	1200	1400	1600		V
V_{DRM}	400	600	800	1000	1200	1400	1600		V
$I_{T(AV)}$	30	(単相半波, $T_r=84^\circ\text{C}$)							A
$I_{T(RMS)}$	47								A
I_{TSM}	600	(50Hz 60Hz, 正弦半波1サイクル波高値)							A
$I^2 \cdot t$	1800								A ² S
di/dt	100	$(V_D = \frac{1}{2} V_{DRM})$							A/ μs
P_{GM}	5								W
$P_{G(AV)}$	0.5								W
V_{GDM}	5								V
I_{GPM}	2								A
T_j	-40 ~ +125								$^\circ\text{C}$
T_{DK}	-40 ~ +125								$^\circ\text{C}$

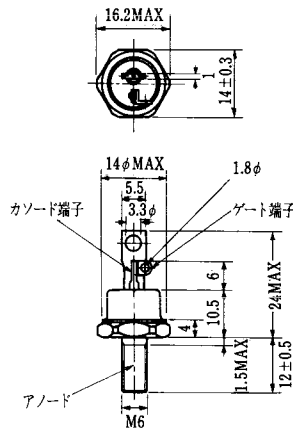
■電気的特性

記号	測定条件	最小	標準	最大	単位
I_{RRM}	$T_j = 125^\circ\text{C}$, $V_D = V_{RRM}$			6	mA
I_{DRM}	$T_j = 125^\circ\text{C}$, $V_D = V_{DRM}$			6	mA
V_{TM}	$T_a = 25^\circ\text{C}$, $I_{TM} = 100\text{A}$			1.5	V
V_{GT}	$T_a = 25^\circ\text{C}$, $V_D = 6\text{V}$			1.5	V
I_{GT}	$R_L = 10\Omega$			80	mA
V_{GD}	$T_j = 125^\circ\text{C}$, $V_D = \frac{1}{2} V_{DRM}$	0.25			V
I_{GD}					mA
dv/dt	$T_r = 125^\circ\text{C}$, $V_D = \frac{2}{3} V_{DRM}$	500			V/ μs
I_H	$T_a = 25^\circ\text{C}$, $R_L = 100\Omega$			150	mA
R_{th}	接合部-ケース間			0.8	$^\circ\text{C/W}$

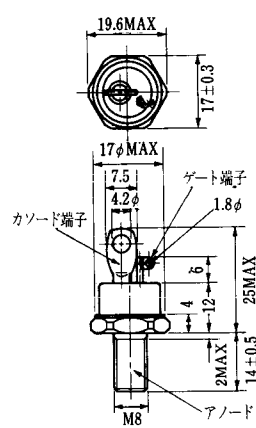
FD-1



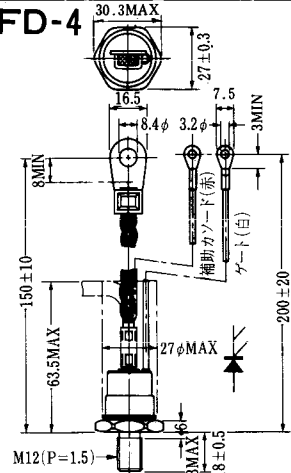
FD-2



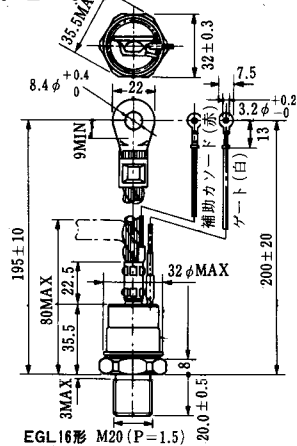
FD-3



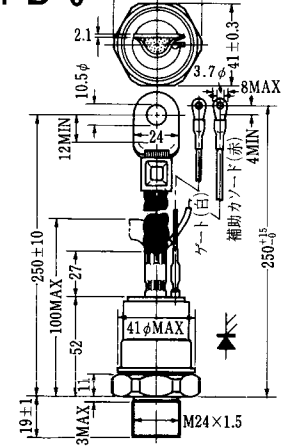
FD-4



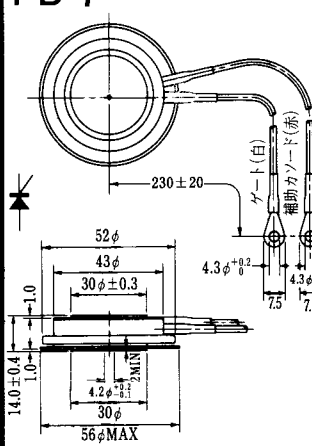
FD-5



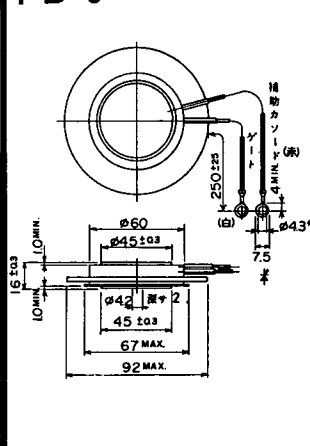
FD-6



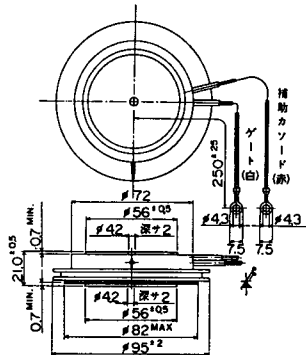
FD-7



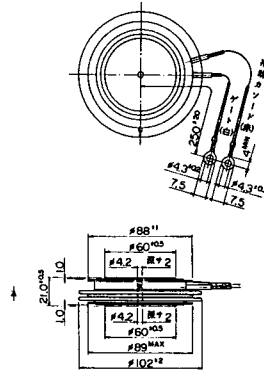
FD-8



FD-9



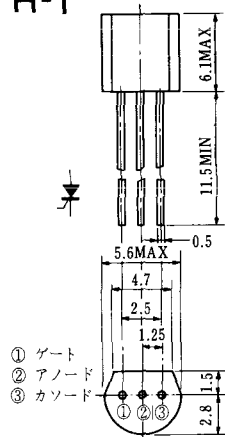
FD-10



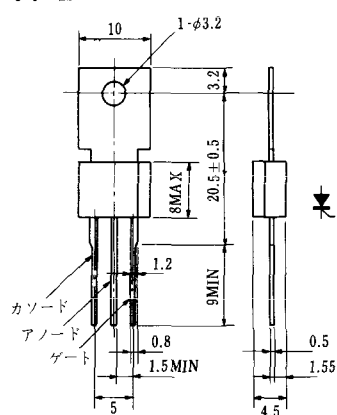
FD-11

FD-12

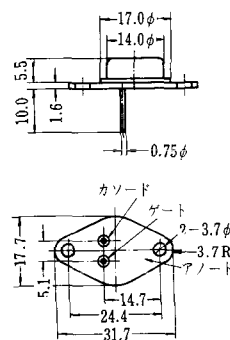
H-1



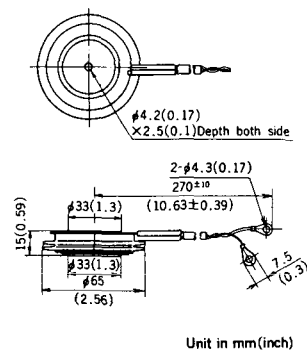
H-2



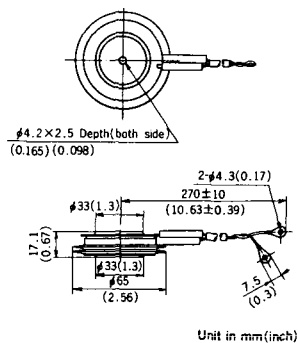
H-3



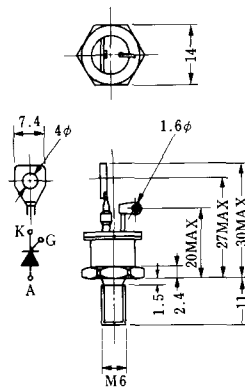
H-4



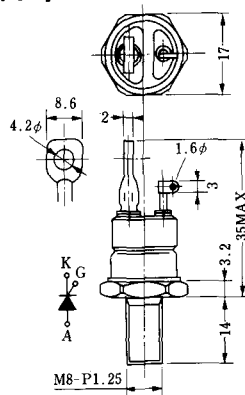
H-5



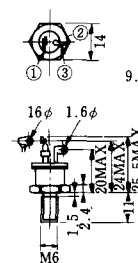
H-6



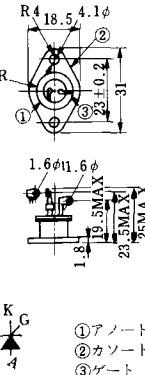
H-7



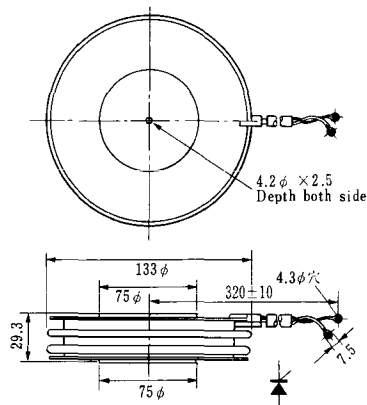
H-8A



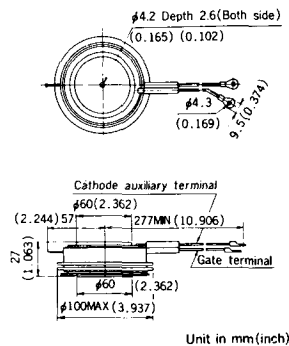
H-8B



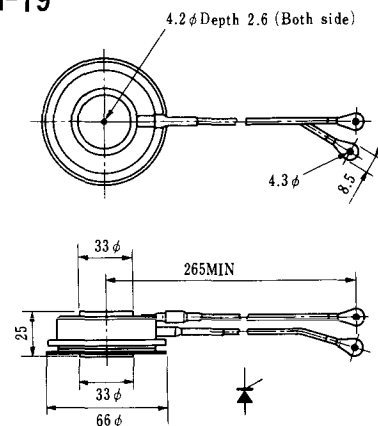
H-17



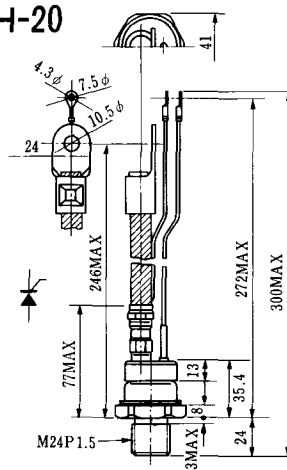
H-18



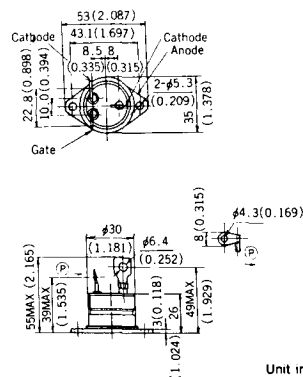
H-19



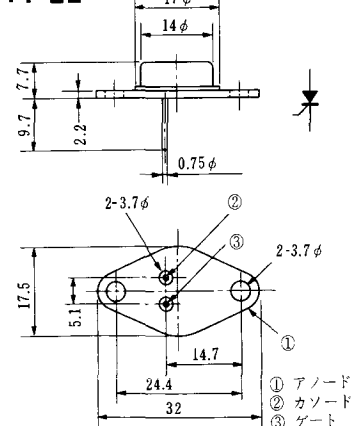
H-20



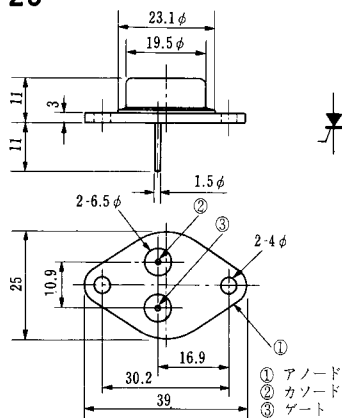
H-21



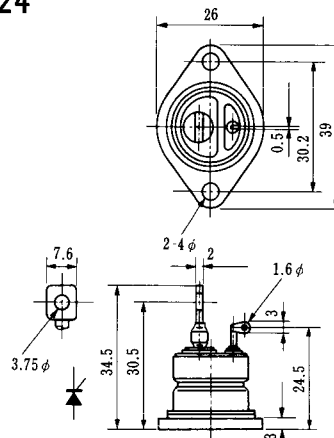
H-22



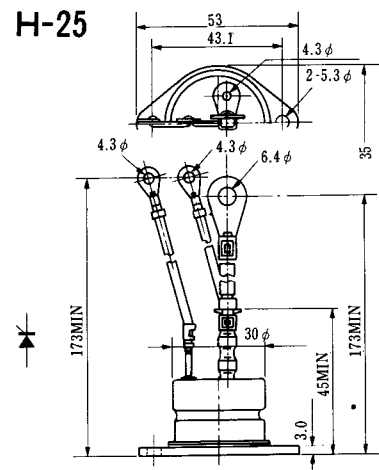
H-23



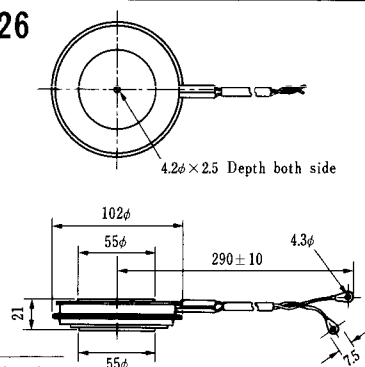
H-24



H-25

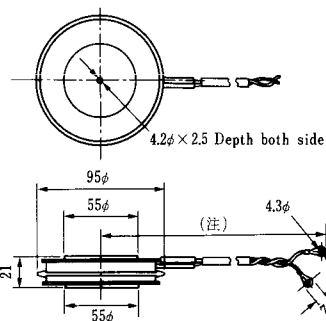


H-26



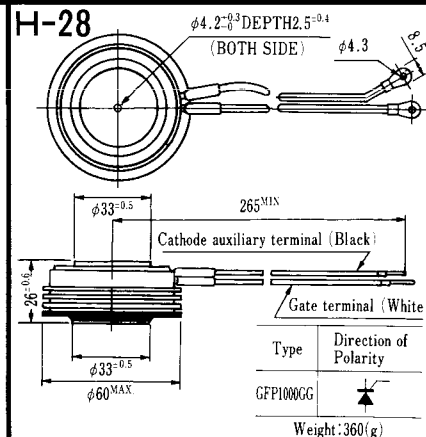
Type	Direction of polarity
CA12	

H-27



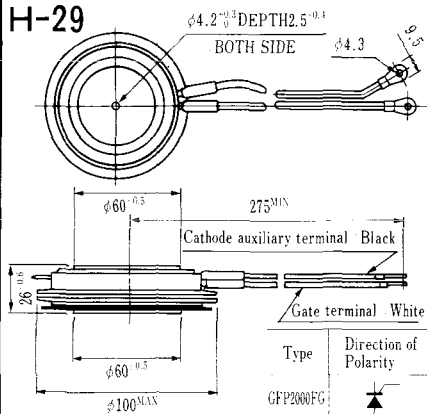
Type	Direction of polarity
CF11V	

H-28



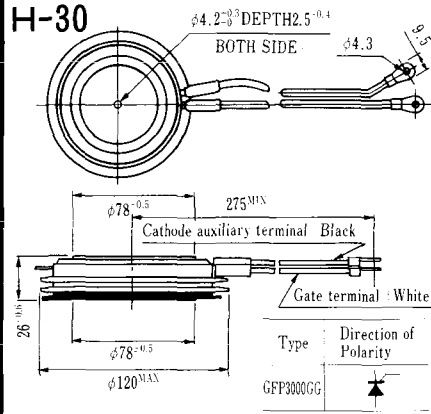
Note: The thickness is a dimension in press at the rated mounting force.

H-29



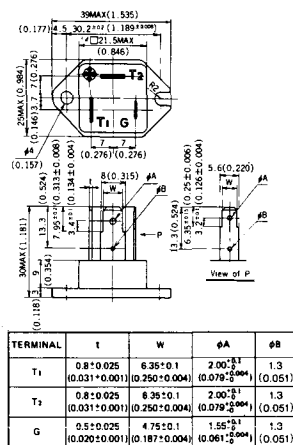
Note : The thickness is a dimension in press at the rated mounting force. Weight: 870(g)

H-30



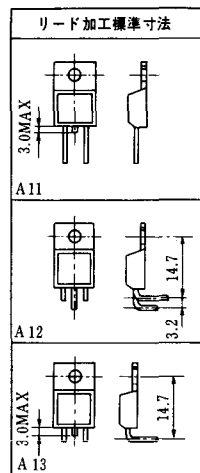
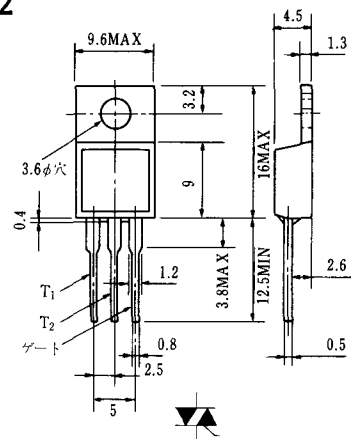
Note : The thickness is a dimension in press at the rated mounting force. Weight: 1,460(g)

HT-1

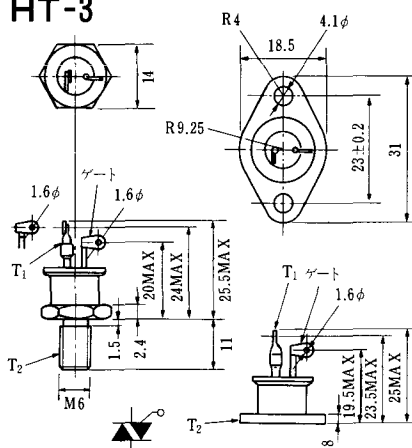


Unit in mm (inch)

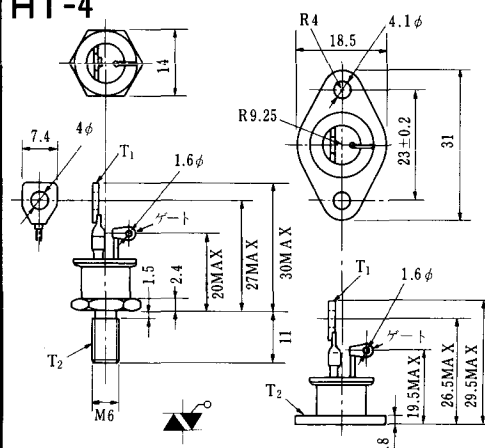
HT-2



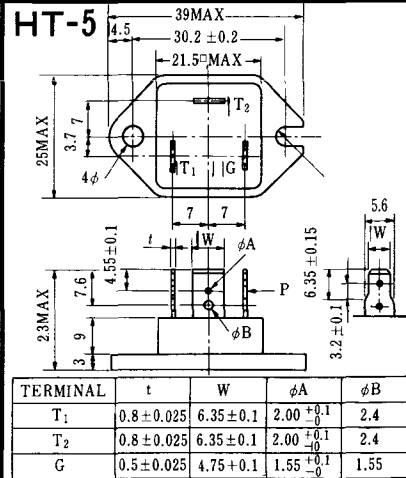
HT-3



HT-4

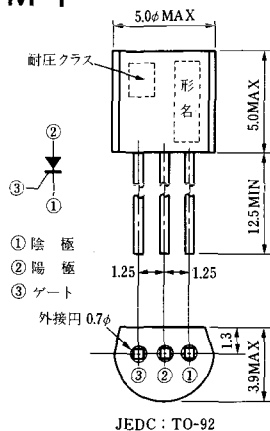


HT-5

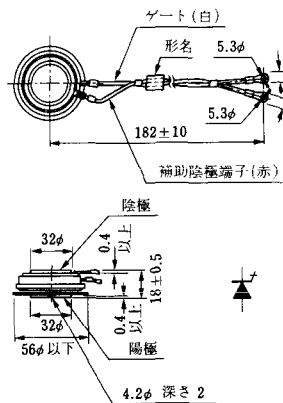


《寸法図単位：mm》

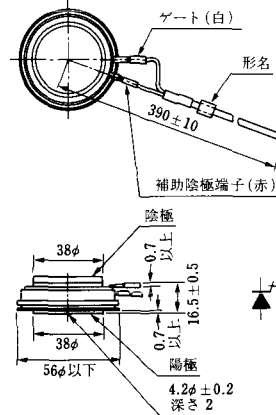
M-1



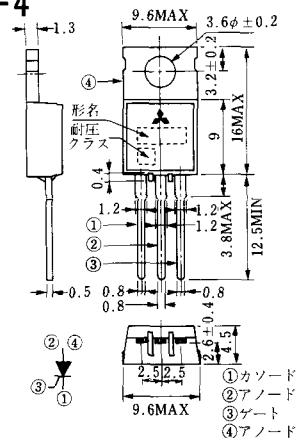
M-2



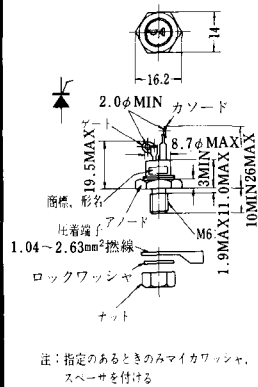
M-3



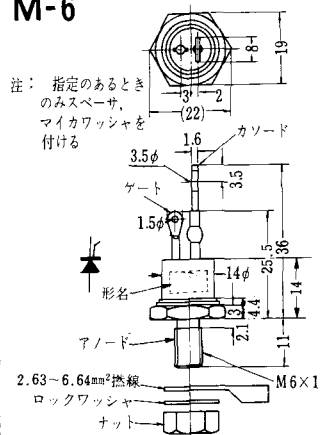
M-4



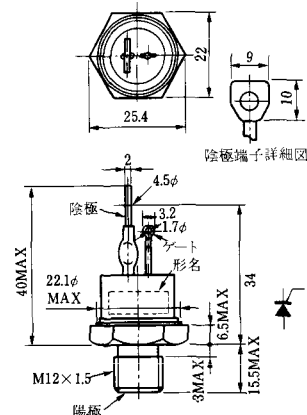
M-5



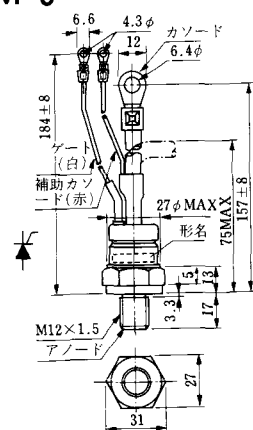
M-6



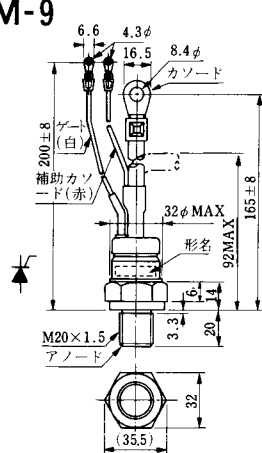
M-7



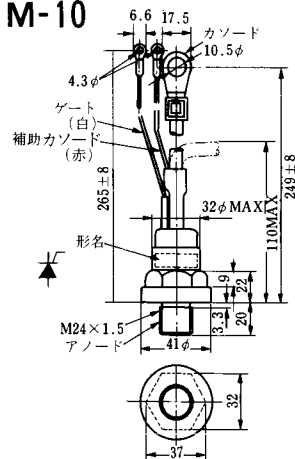
M-8



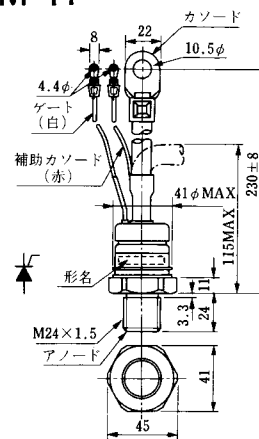
M-9



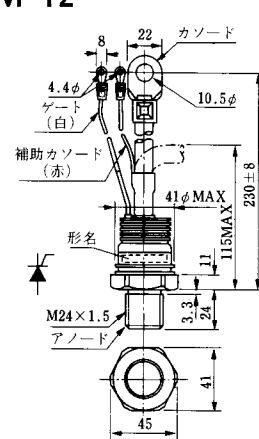
M-10



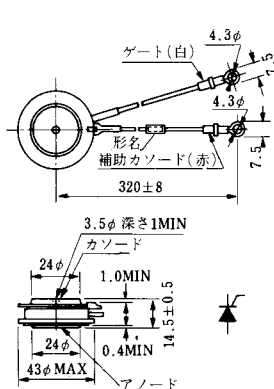
M-11



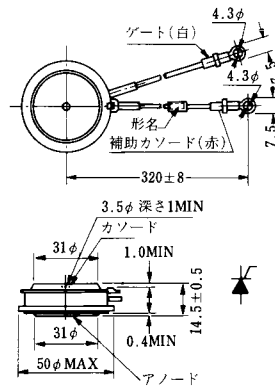
M-12



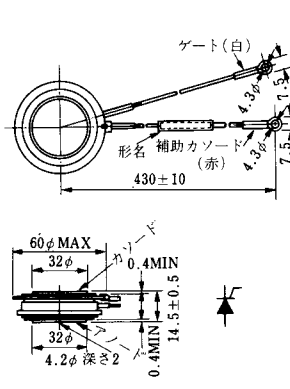
M-13



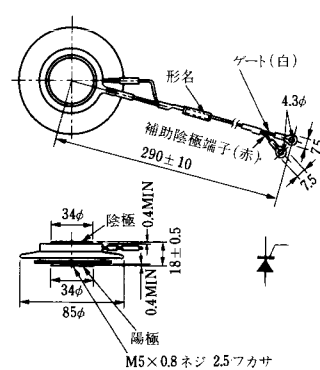
M-14



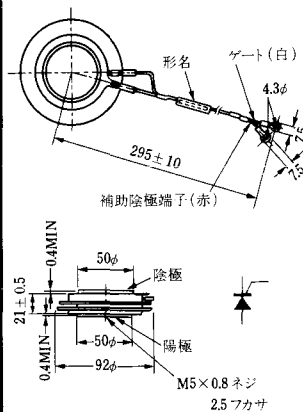
M-15



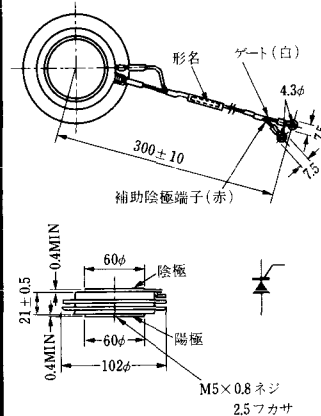
M-16



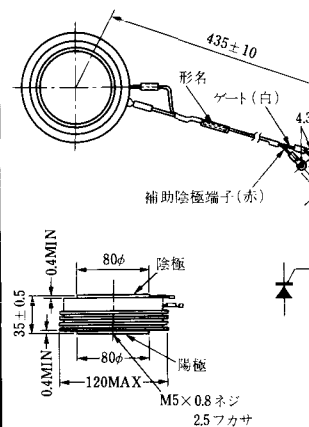
M-17



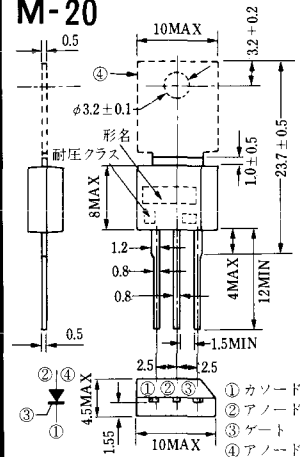
M-18



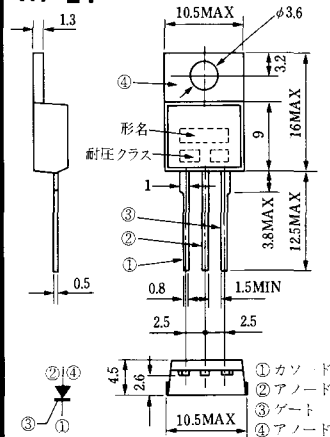
M-19



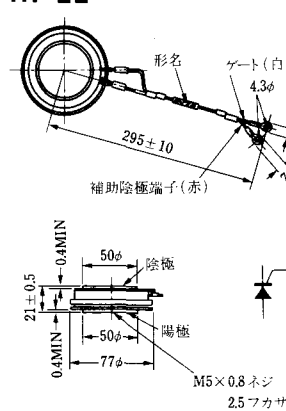
M-20



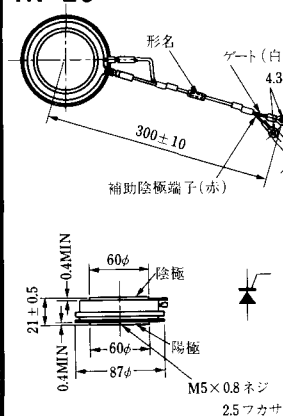
M-21



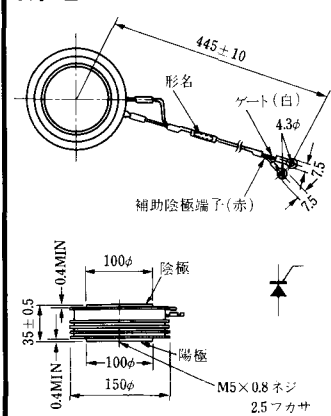
M-22



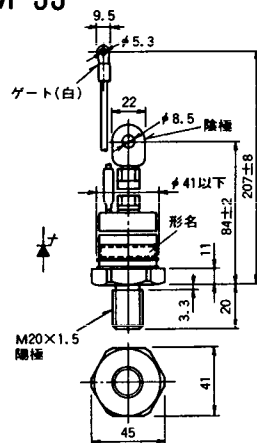
M-23



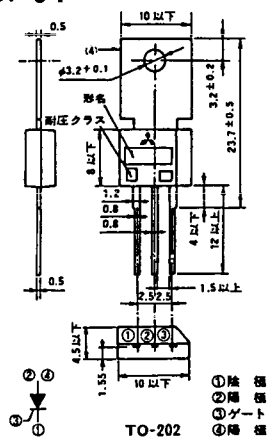
M-24



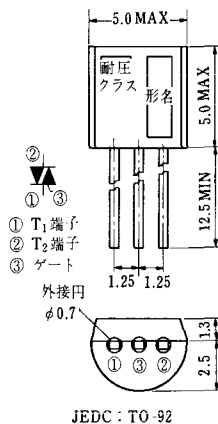
M-33



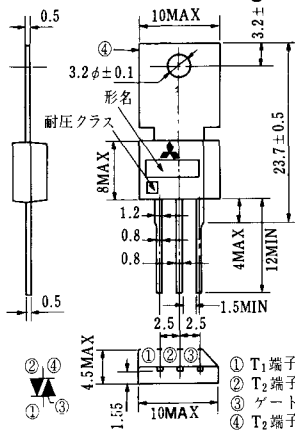
M-34



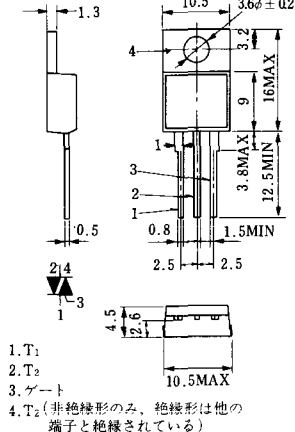
MT-1



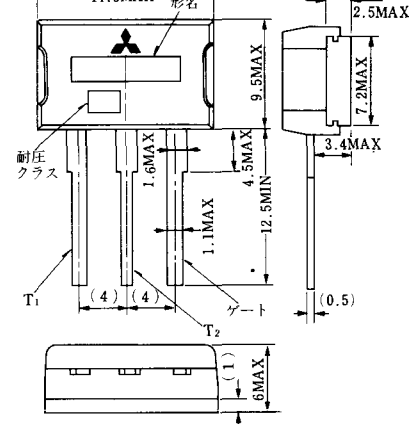
MT-2



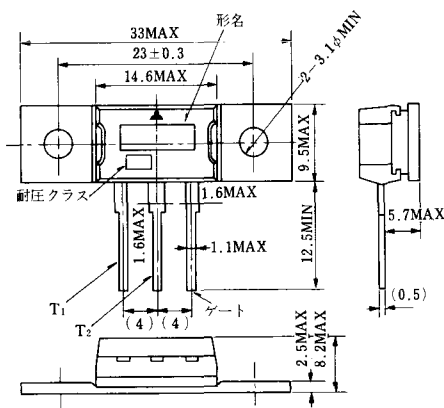
MT-3



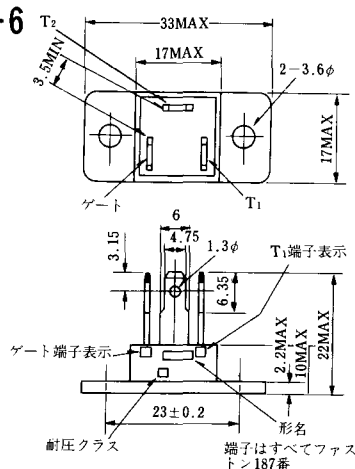
MT-4



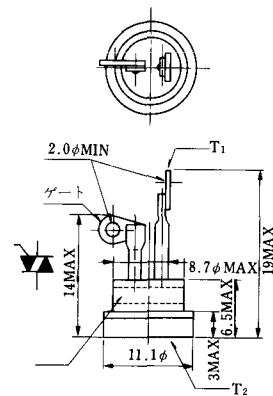
MT-5



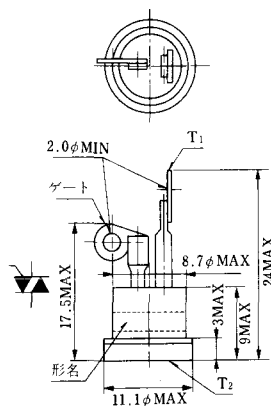
MT-6



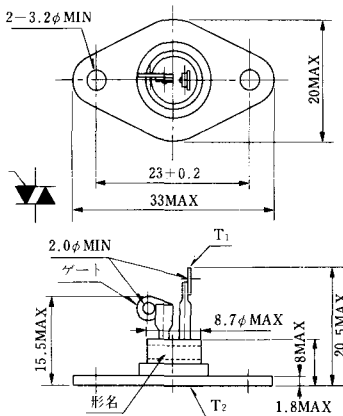
MT-7



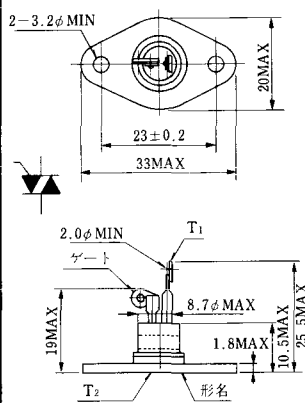
MT-8



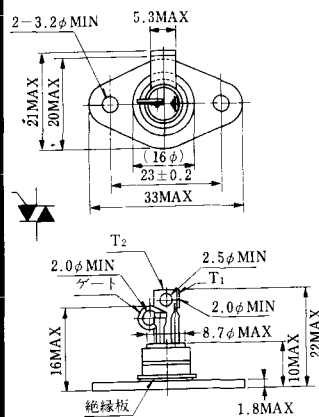
MT-9



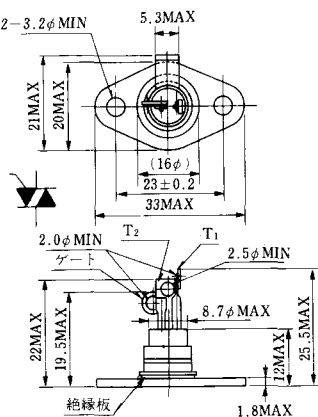
MT-10



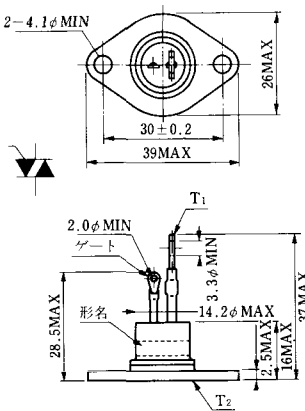
MT-11



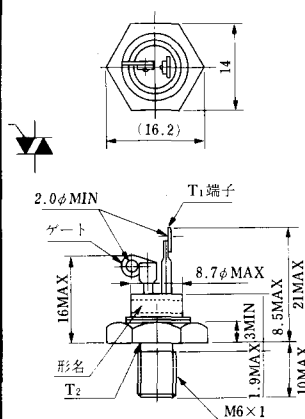
MT-12



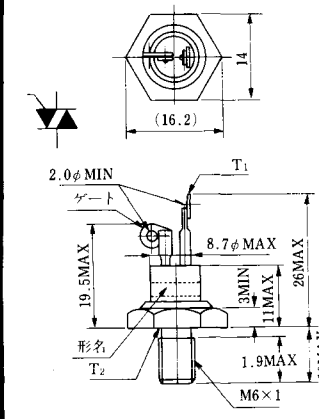
MT-13



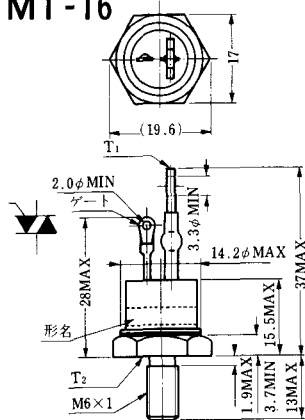
MT-14



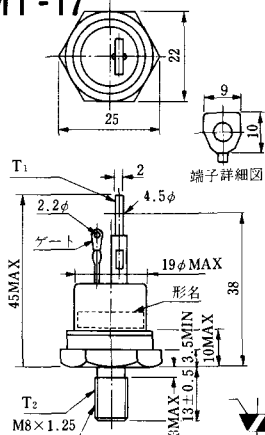
MT-15



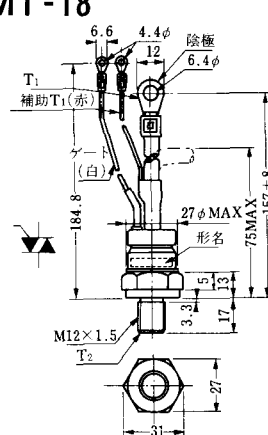
MT-16



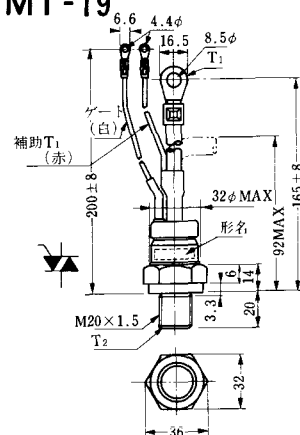
MT-17



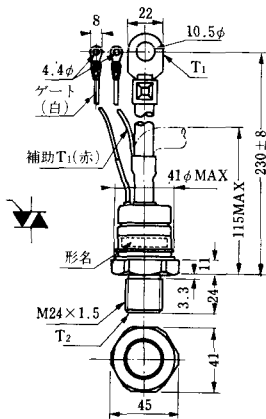
MT-18



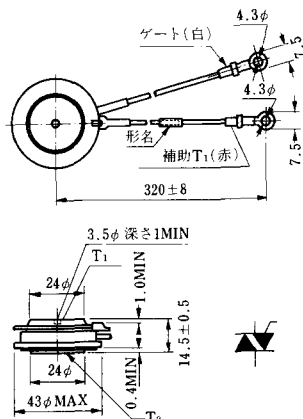
MT-19



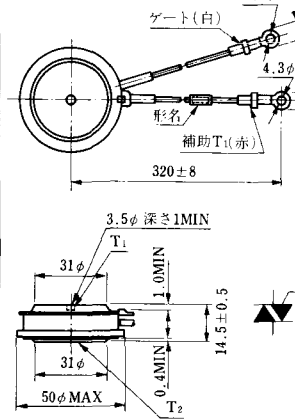
MT-20



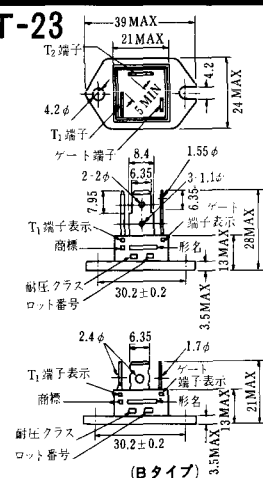
MT-21



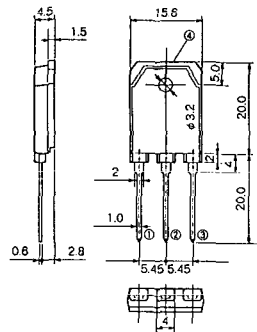
MT-22



MT-23



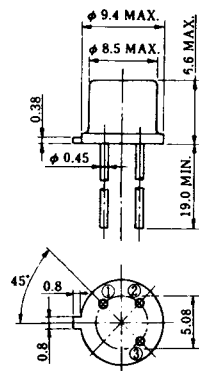
MT-24



TO-3P

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

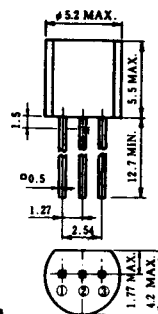
N-1



電極接続

- ① カソード
- ② ゲート
- ③ アノード

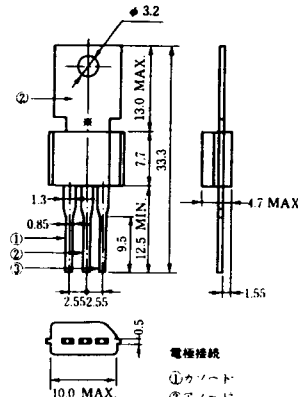
N-2



電極接続

- ① ヤート
- ② アノード
- ③ カソード

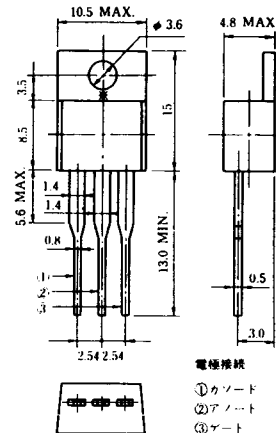
N-3



電極接続

- ① カソード
- ② アノード
- ③ ゲート

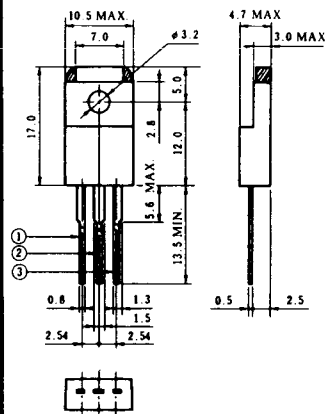
N-4



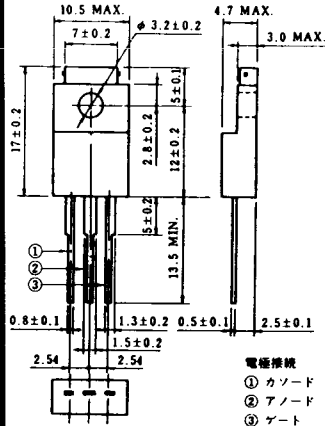
電極接続

- ① カソード
- ② アノード
- ③ ゲート

N-5



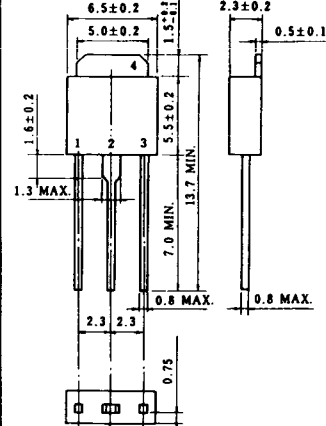
N-6



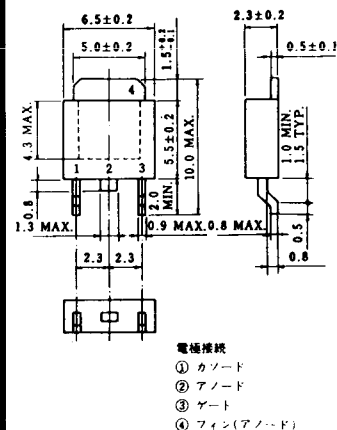
電極接続

- ① カソード
- ② アノード
- ③ ゲート

N-7



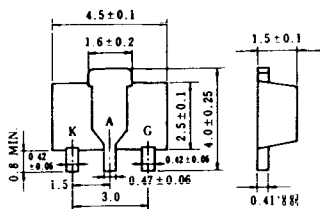
N-8



電極接続

- ① カソード
- ② アノード
- ③ ゲート
- ④ フィン(アノード)

N-9



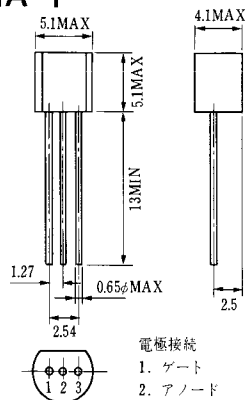
電極接続

K : カソード

A : アノード

G : ゲート

NA-1

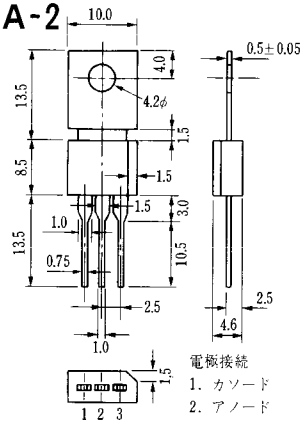


電極接続

1. ゲート
2. アノード
3. カソード

JEDEC: TO-92

NA-2



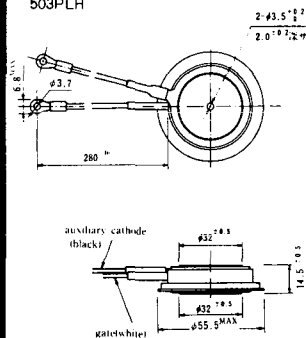
電極接続

1. カソード
2. アノード
3. ゲート

JEDEC: TO-202AA

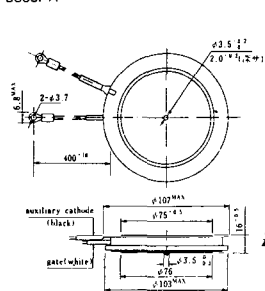
NI-16

503PLF
503PLH



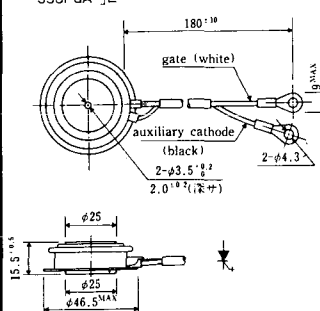
NI-17

3003PA



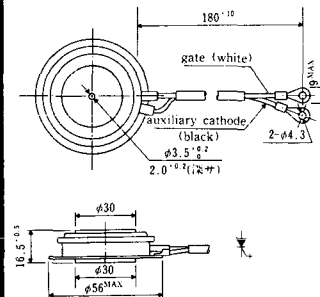
NI-18

353PGA「J」E



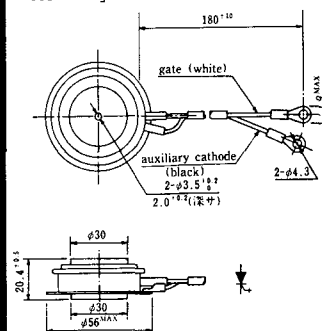
NI-19

603PGA, 603PGA「J」A, 803PGA



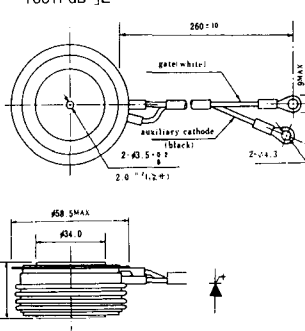
NI-20

603PGA「J」E



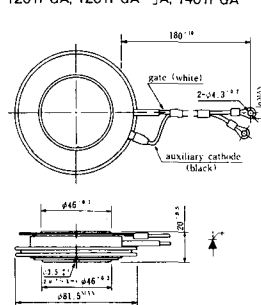
NI-21

1001PGB「J」E



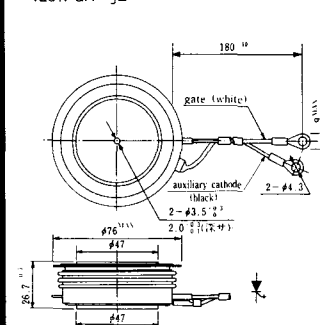
NI-22

1201PGA, 1201PGA「J」A, 1401PGA



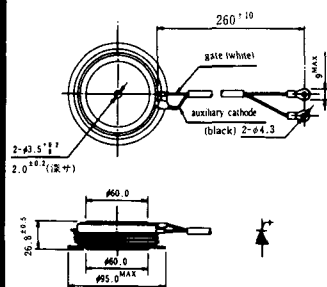
NI-23

1201PGA「J」E



NI-24

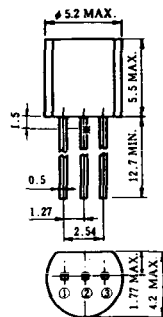
2001PGB[®] JE



NI-25

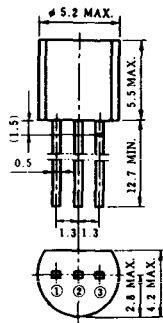
NI-26

NT-1



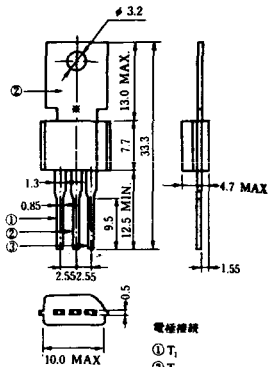
電線接続
① T₁
② ゲート
③ T₂

NT-2



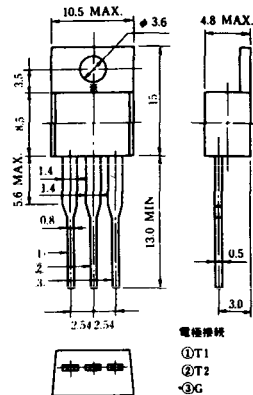
電線接続
① T₁
② ゲート
③ T₂

NT-3



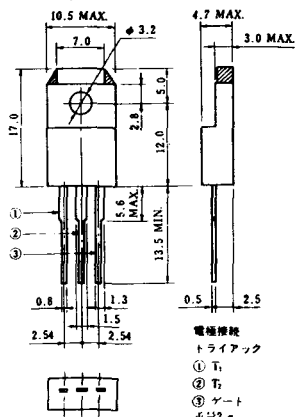
電線接続
① T₁
② T₂
③ ゲート

NT-4



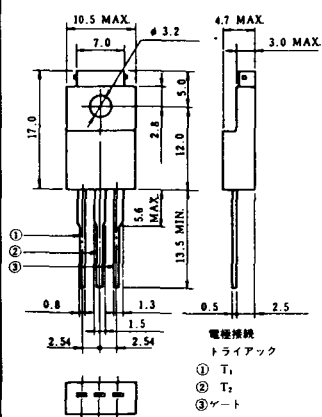
電線接続
① T₁
② T₂
③ G

NT-5



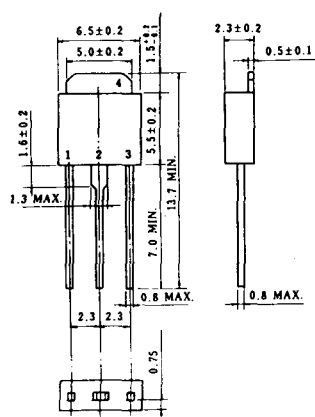
電線接続
トリアック
① T₁
② T₂
③ ゲート
④ 2K

NT-6

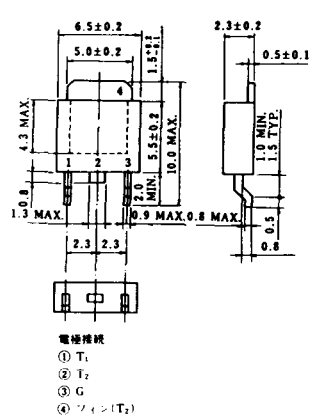


電線接続
トリアック
① T₁
② T₂
③ ゲート
④ 2K

NT-7

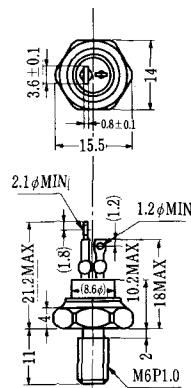


NT-8

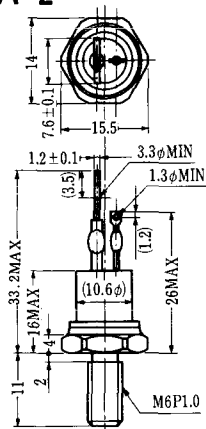


電線接続
① T₁
② T₂
③ G
④ T₁ (T₂)

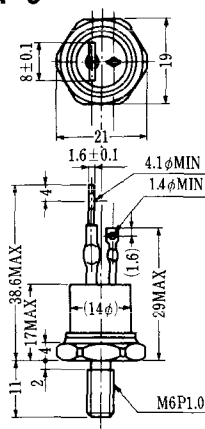
SA-1



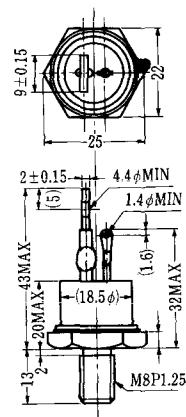
SA-2



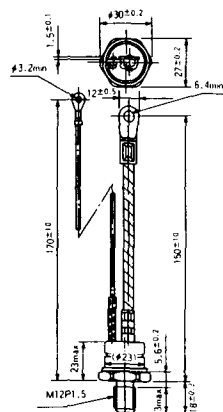
SA-3



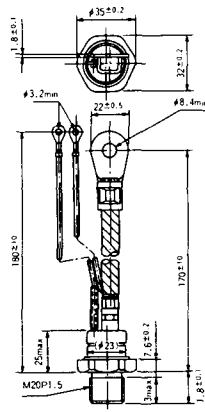
SA-4



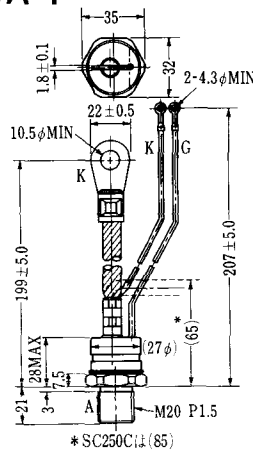
SA-5



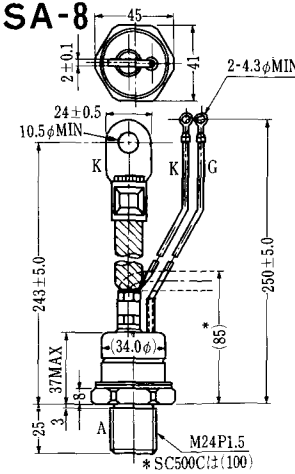
SA-6



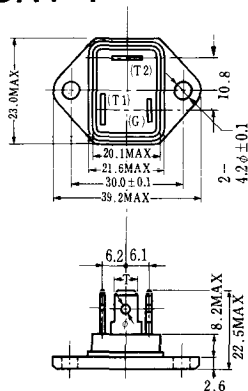
SA-7



SA-8

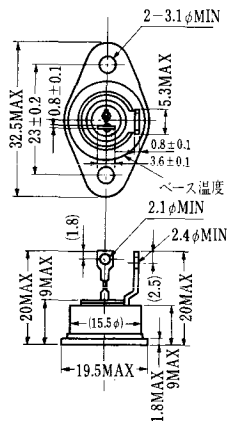


SAT-1



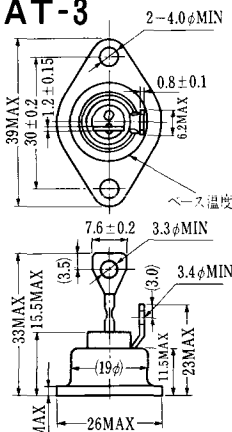
T1端子: ファストン 250 (T=6.35, t=0.8, φ=1.65)
 T2端子: ファストン 250 (T=6.35, t=0.8, φ=1.65)
 G 端子: ファストン 187 (T=4.75, t=0.5, φ=1.3)

SAT-2

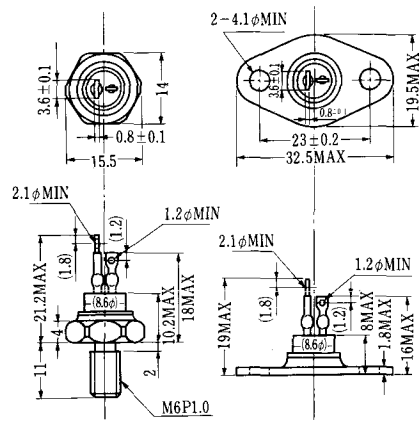


スペース留め

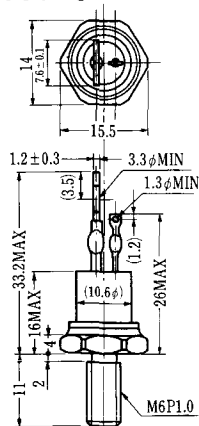
SAT-3



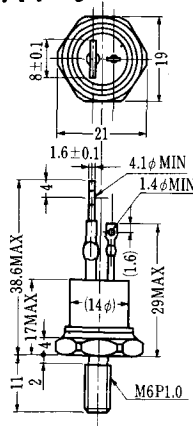
SAT-4



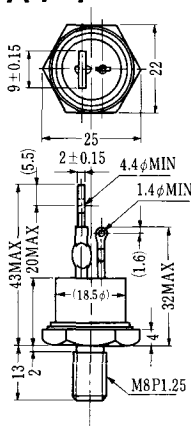
SAT-5



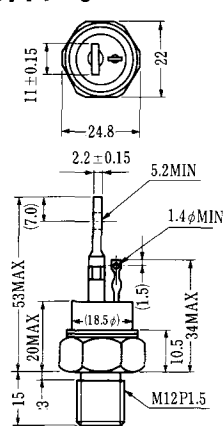
SAT-6



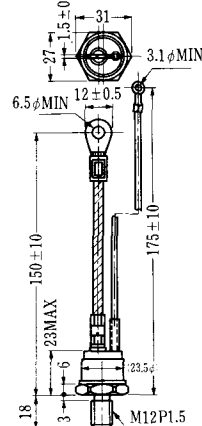
SAT-7



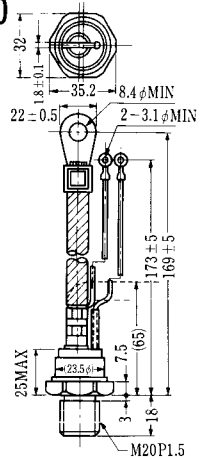
SAT-8



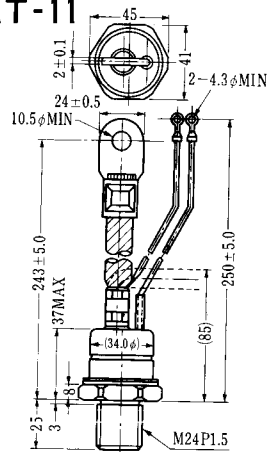
SAT-9



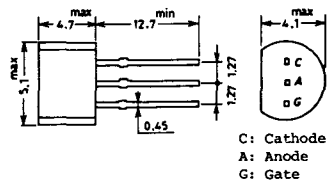
SAT-10



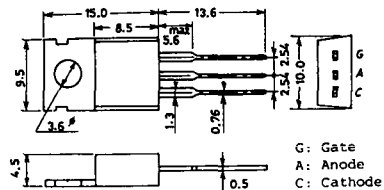
SAT-11



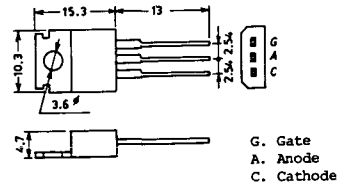
SY-1(1096A)



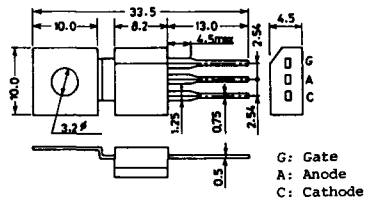
SY-2(1151)



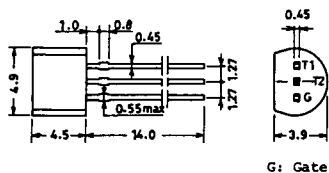
SY-3(1104)



SY-4(1150)

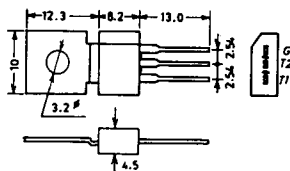


1097A

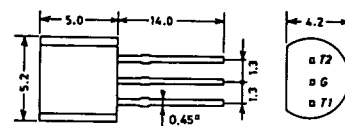


G: Gate

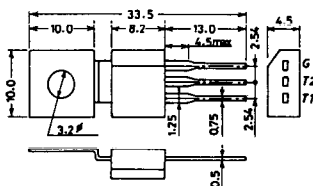
1102



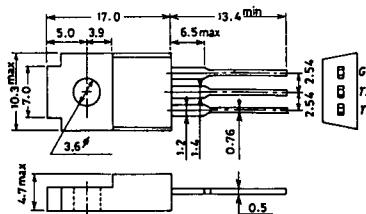
1141



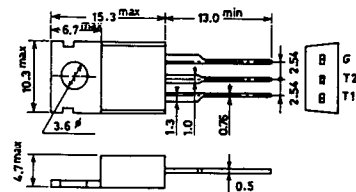
1142



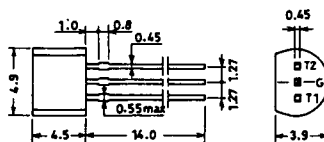
1144



1155

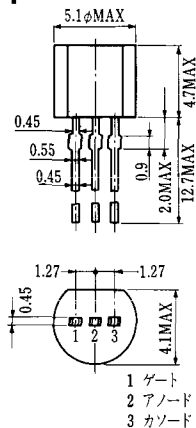


1192A

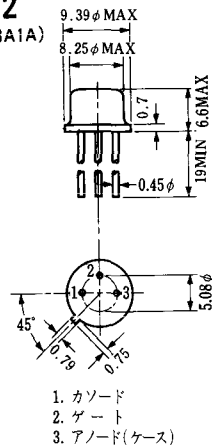


G: Gate

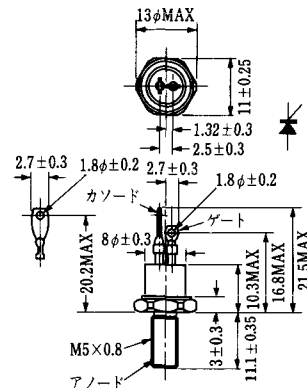
T-1 (13-5A1A)



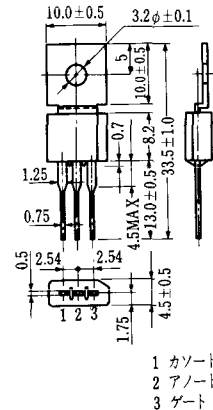
T-2 (13-8A1A)



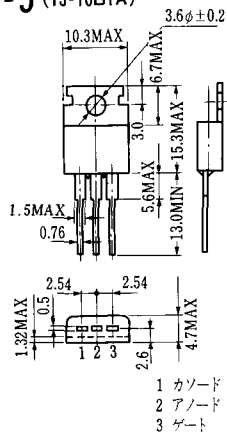
T-3 (13-8C1A)



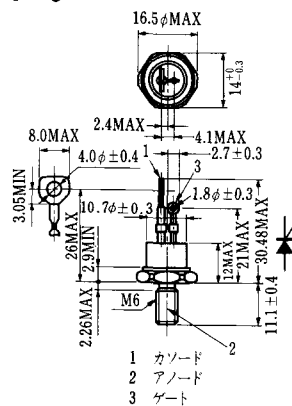
T-4 (13-10A1A)



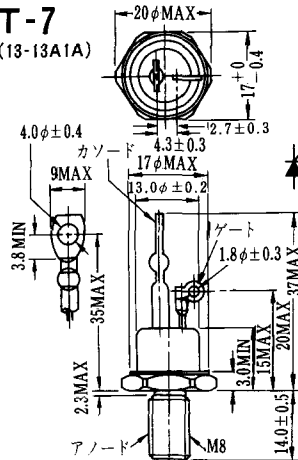
T-5 (13-10B1A)



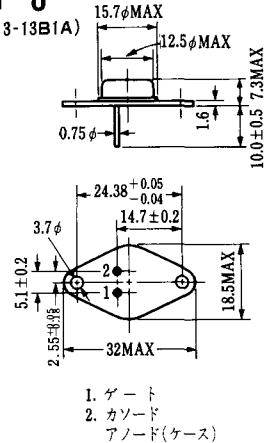
T-6 (13-11D1A)



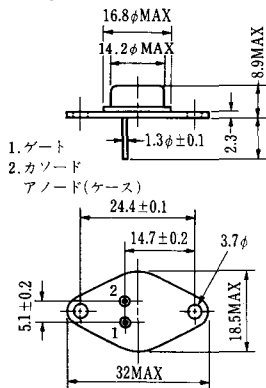
T-7 (13-13A1A)



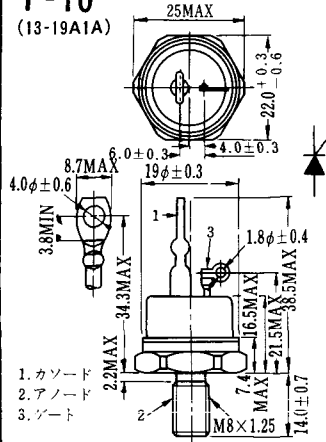
T-8 (13-13B1A)



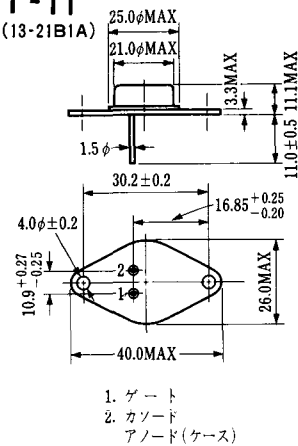
T-9 (13-14A1A)



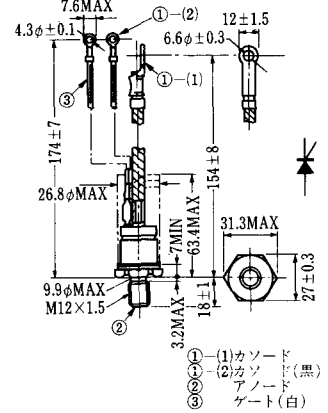
T-10 (13-19A1A)



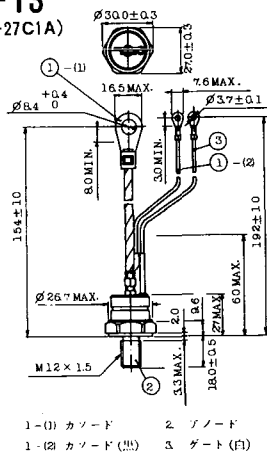
T-11 (13-21B1A)



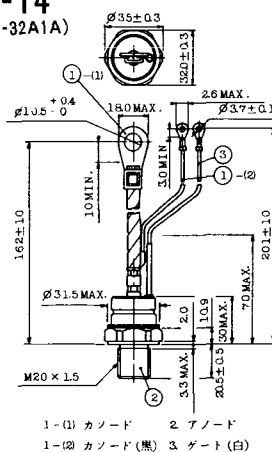
T-12 (13-27B1B)



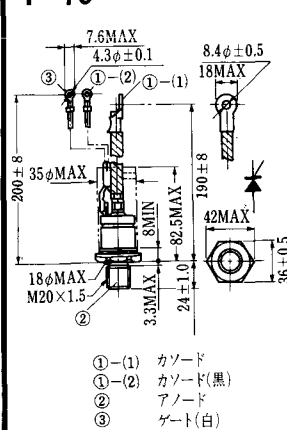
T-13 (13-27C1A)



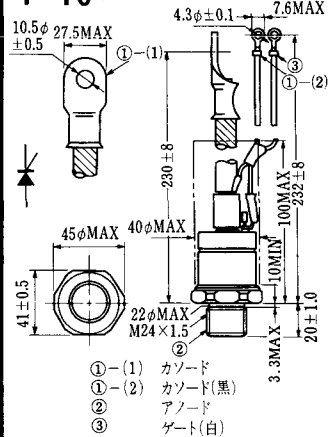
T-14 (13-32A1A)



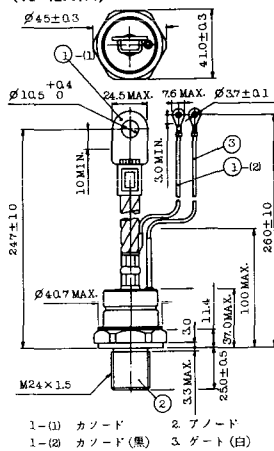
T-15 (13-35C1B)



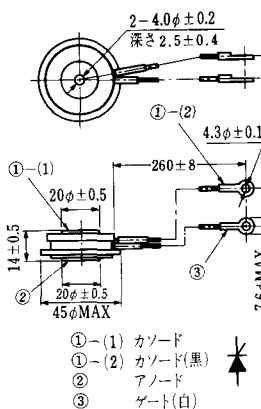
T-16 (13-40B1A)



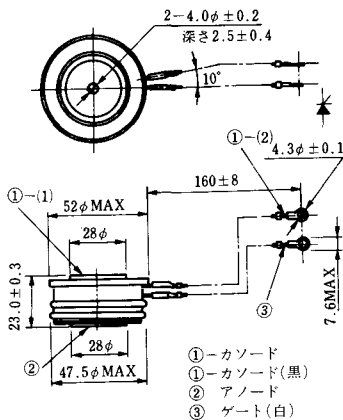
T-17 (13-42A1A)



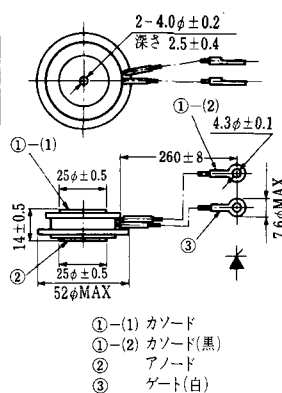
T-18 (13-45D1A)



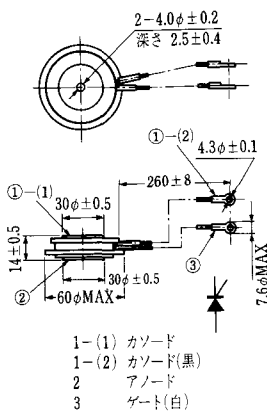
T-19 (13-52B1A)



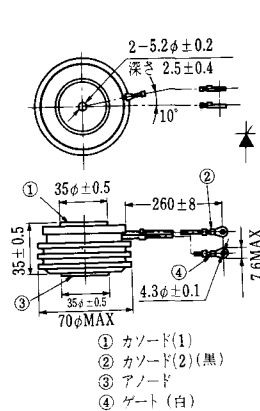
T-20 (13-52C1A)



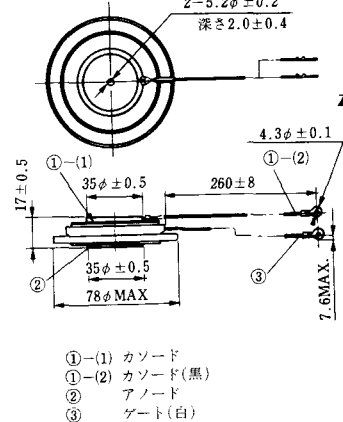
T-21 (13-60A1A)



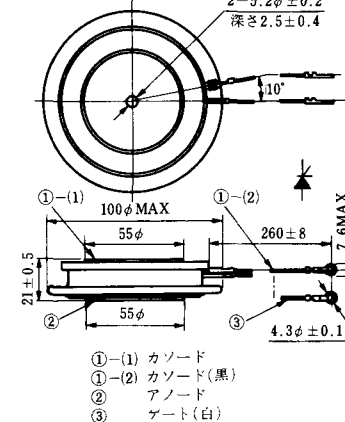
T-22 (13-70C1A)



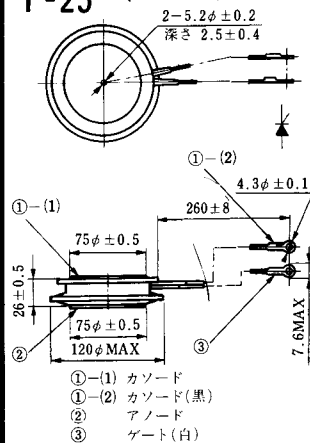
T-23 (13-78A1A)



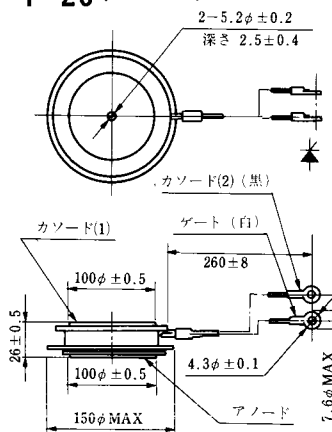
T-24 (13-100C1A)



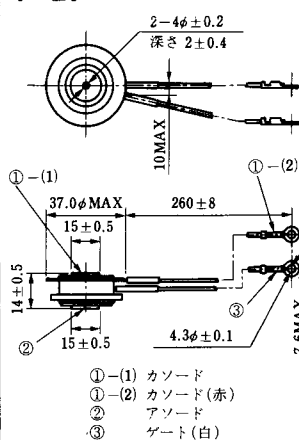
T-25 (13-120A2A)



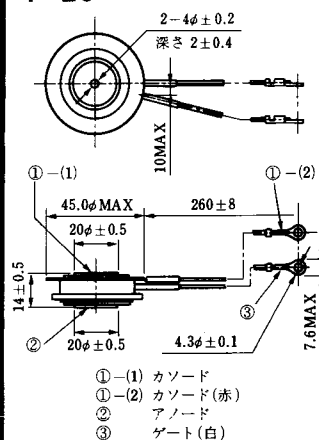
T-26 (13-150A1A)



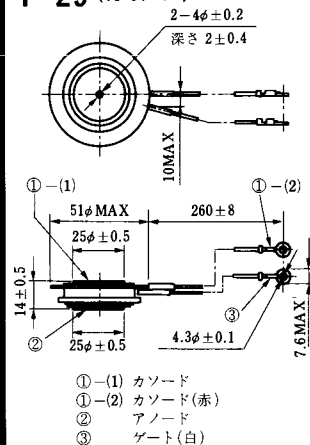
T-27 (13-37A1A)



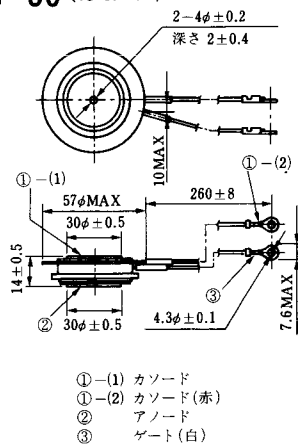
T-28 (13-45E1A)



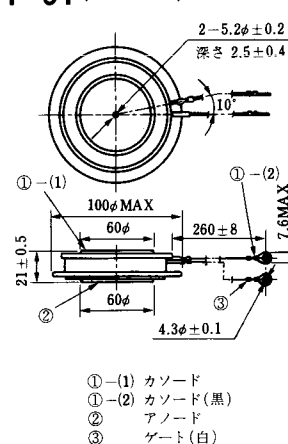
T-29 (13-51A1A)



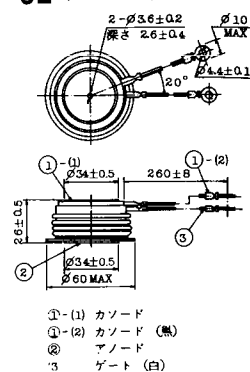
T-30 (13-57A1A)



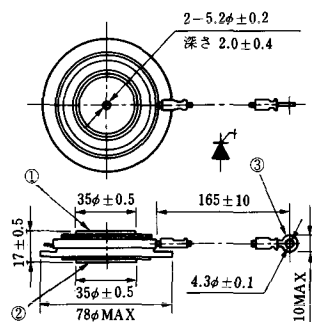
T-31 (13-100E1A)



T-32 (13-60E3A)

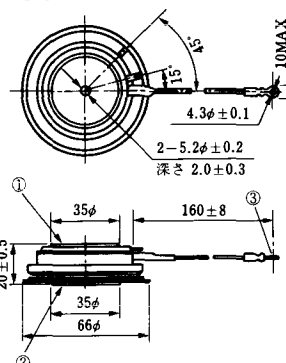


T-33 (13-78B1A)



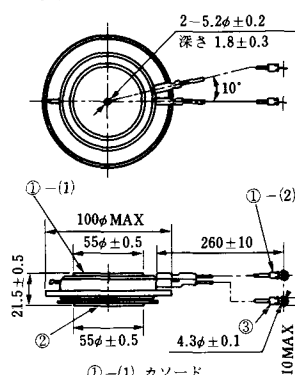
- ① カソード
② アノード
③ ゲート

T-34 (13-66A1A)



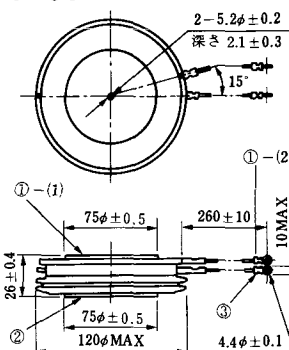
- ① カソード
② アノード
③ ゲート

T-35 (13-100D1A)



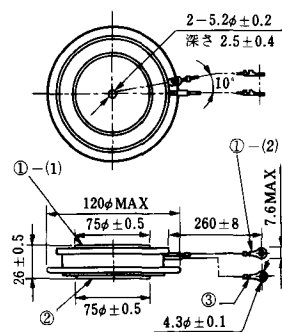
- ①-(1) カソード
①-(2) カソード(黒)
② アノード
③ ゲート(白)

T-36 (13-120E1A)



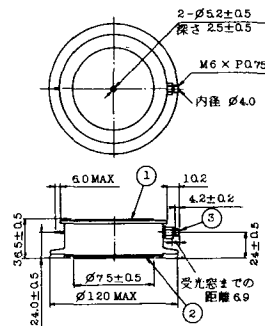
- ①-(1) カソード
①-(2) カソード(黒)
② アノード
③ ゲート(白)

T-37 (13-120A1A)



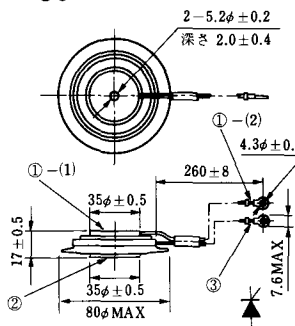
- ①-(1) カソード
①-(2) カソード(黒)
② アノード
③ ゲート(白)

T-38 (13-120C1A)



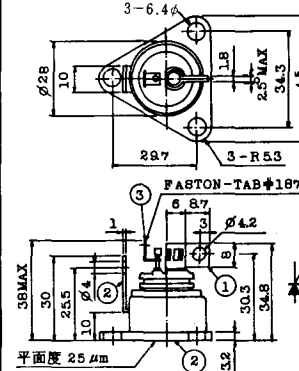
- ① カソード
② アノード
③ ゲート

T-39 (13-80B1A)



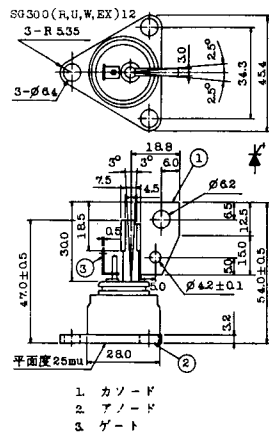
- ①-(1) カソード
①-(2) カソード(黒)
② アノード
③ ゲート(白)

T-40 (13-28A1A)

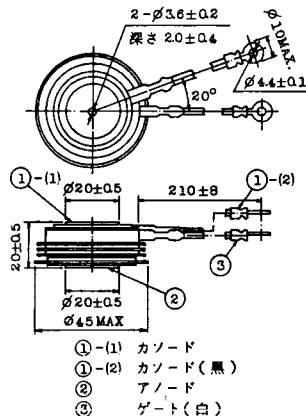


1. カソード
2. アノード
3. ゲート

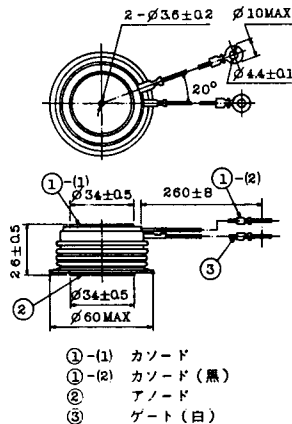
T-41 (13-28A2A)



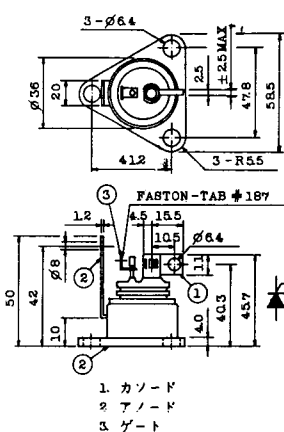
T-42 (13-45F1A)



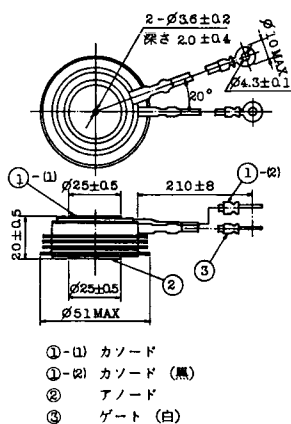
T-43 (13-60E2A)



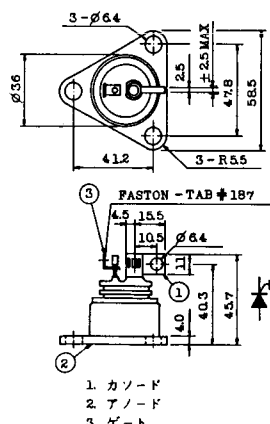
T-44 (13-36A1A)



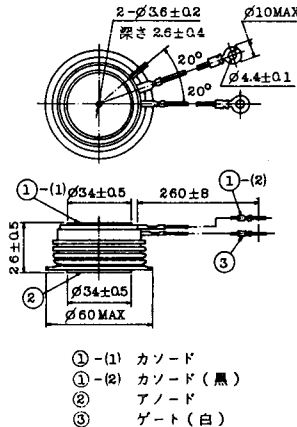
T-45 (13-51B1A)



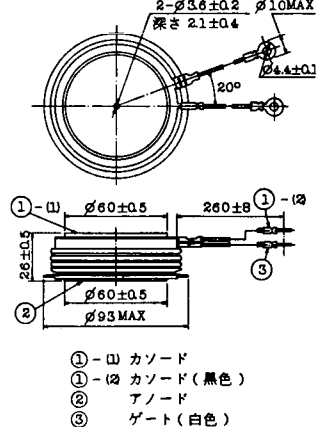
T-46 (13-36B1A)



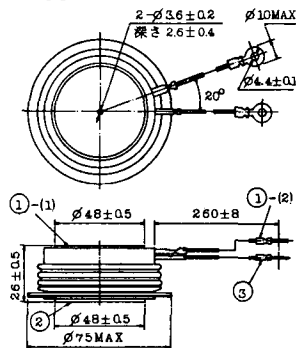
T-47 (13-60E1A)



T-48 (13-93C1A)

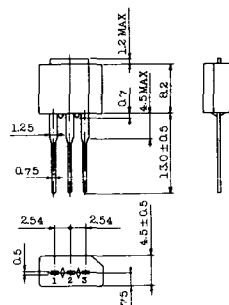


T-49 (13-75A1A)



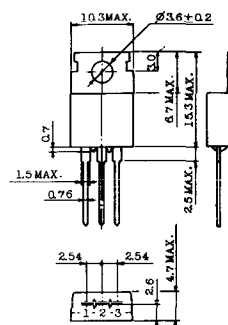
- 1 ①-(1) カソード
1 ①-(2) カソード (黒)
2 アノード
3 ゲート (白)

T-50 (13-10A3A)



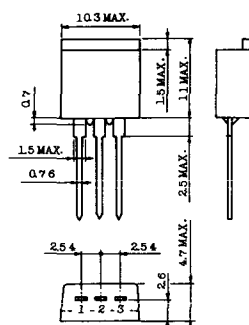
- 1 カソード
2 アノード
3 ゲート

T-51 (13-10D1A)



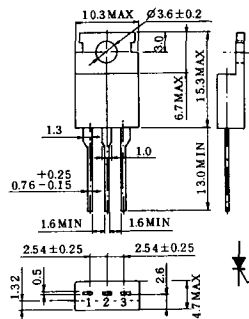
- 1 カソード
2 アノード
3 ゲート

T-52 (13-10D2A)



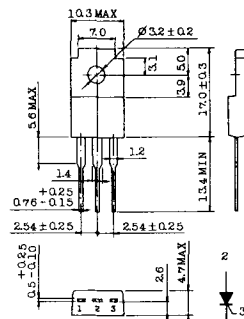
- 1 カソード
2 アノード
3 ゲート

T-53 (13-10E1B)



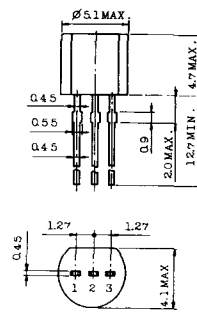
- 1 カソード
2 アノード
3 ゲート

T-54 (13-10F1B)



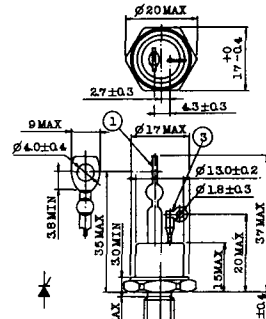
- 1 カソード
2 アノード
3 ゲート

T-55 (13-5A1D)



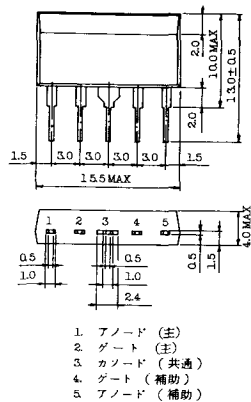
- 1 カソード
2 ゲート
3 アノード

T-56 (13-13C1A)

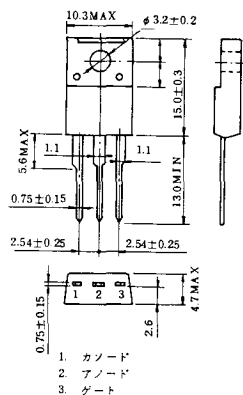


- 1 カソード
2 アノード
3 ゲート

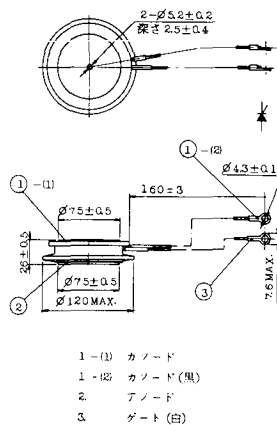
T-57 (12-16C1A)



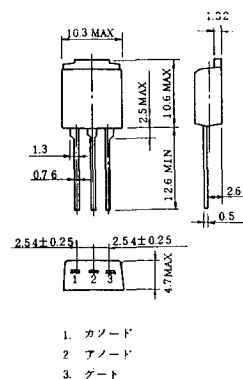
T-58 (13-10H1B)



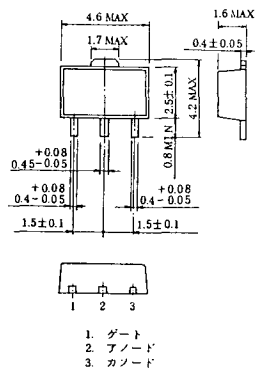
T-59 (13-120A1A)



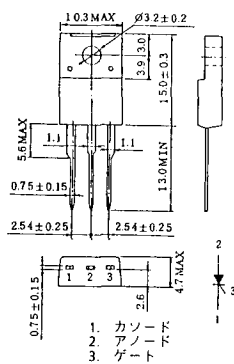
T-60



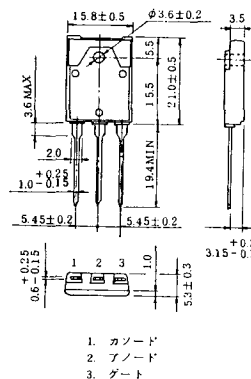
T-61 (13-5B1A)



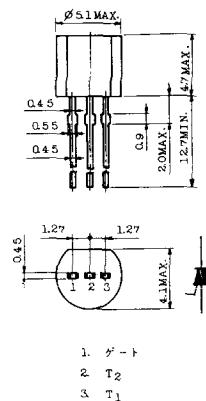
T-62 (13-10H1A)



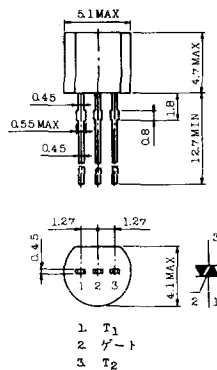
T-63 (13-16A1B)



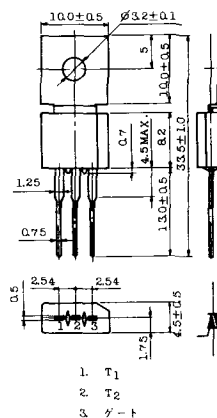
TT-1



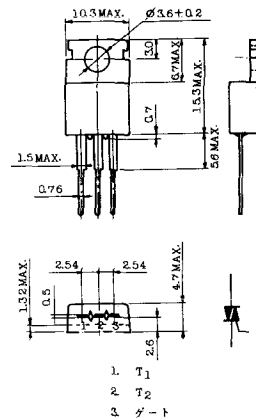
TT-2



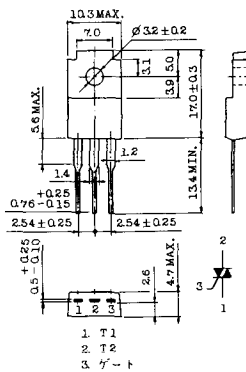
TT-3



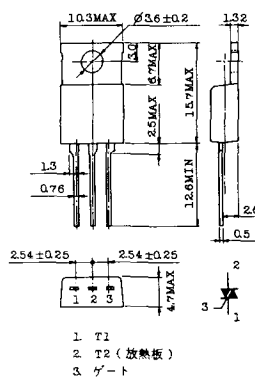
TT-4



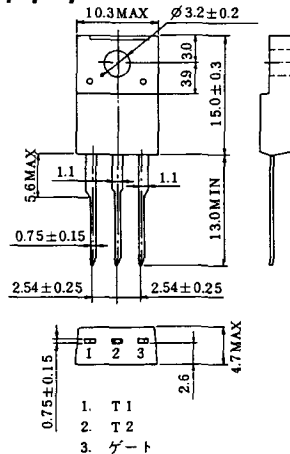
TT-5



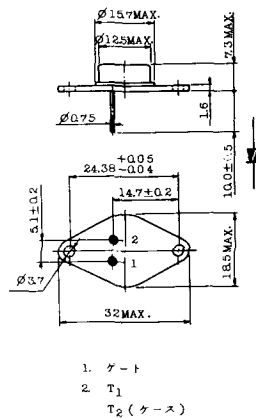
TT-6



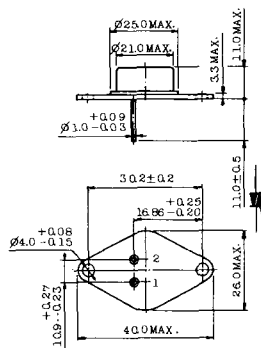
TT-7



TT-8

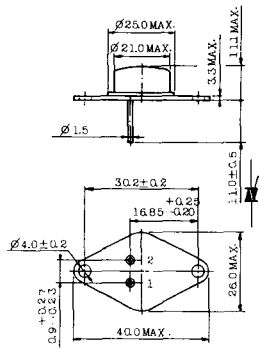


TT-9



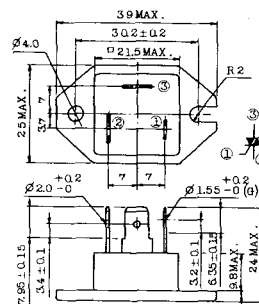
1. ゲート
2. T₁
3. T₂ (ケース)

TT-10



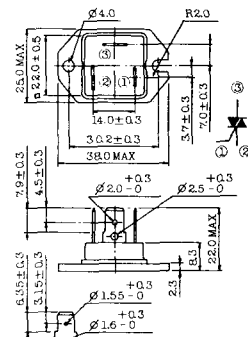
1. ゲート
2. T₁
3. T₂ (ケース)

TT-11



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

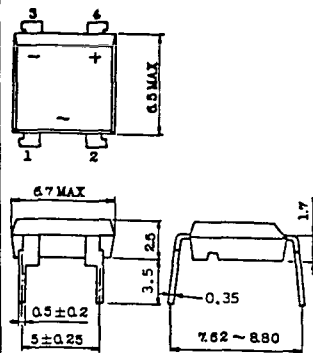
TT-12



ゲート端子詳細

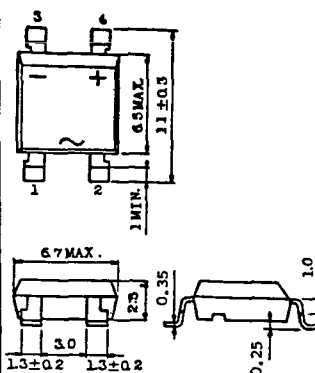
- ① ゲート (ファストン端子 #187)
- ② T₁ (" #250)
- ③ T₂ (" #250)

TT-13



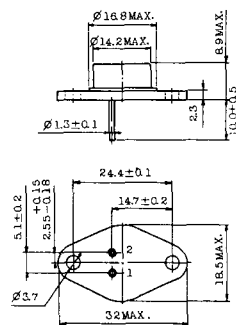
- 1, 2: T₂
- 3: GATE
- 4: T₁

TT-14



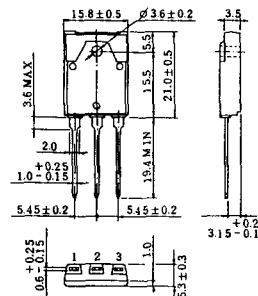
- 1, 2: T₂
- 3: GATE
- 4: T₁

TT-15 (13-14A1B)



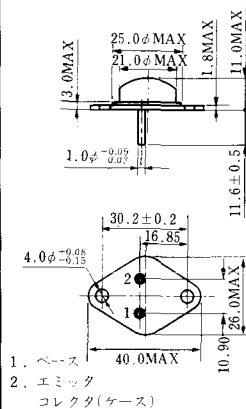
1. ゲート
2. T₁
- T₂ (ケース)

TT-16 (13-16A1A)

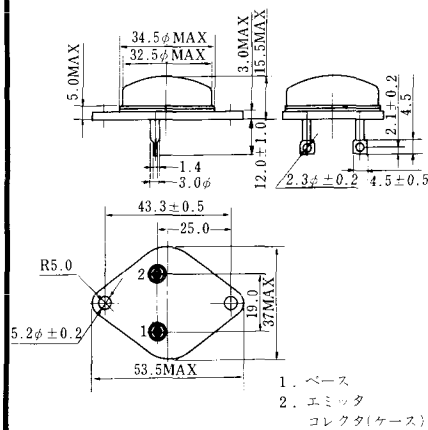


1. T₁
2. T₂
3. ゲート

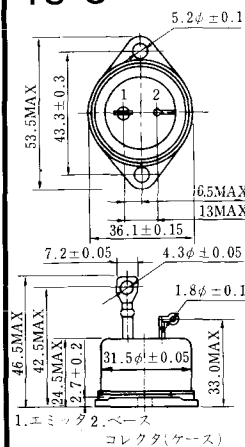
TS-1



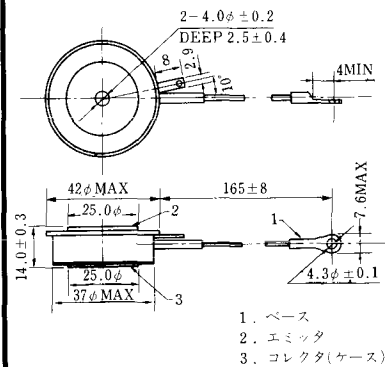
TS-2



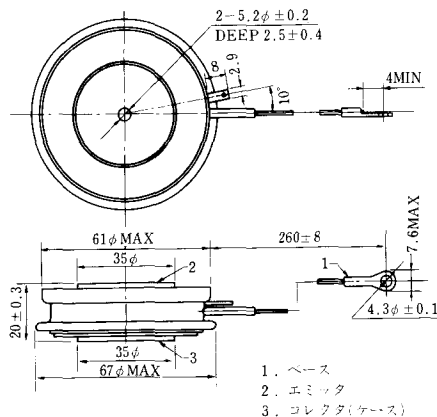
TS-3



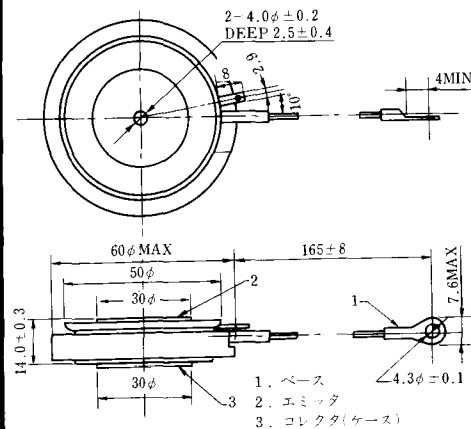
TS-4



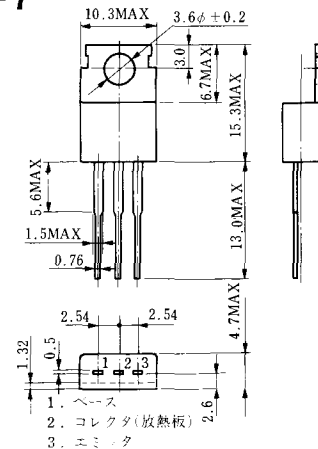
TS-5

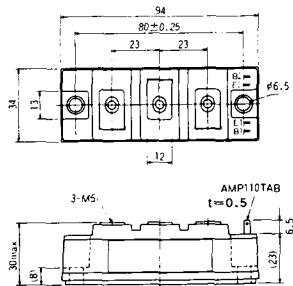
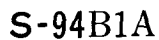
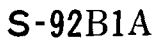
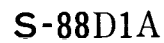
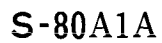


TS-6

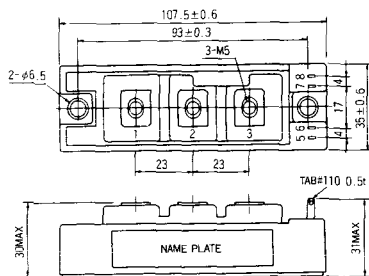


TS-7

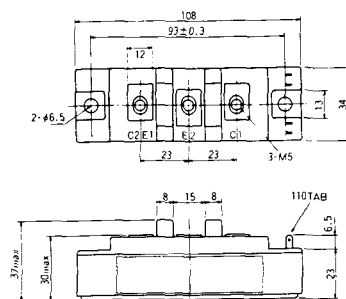




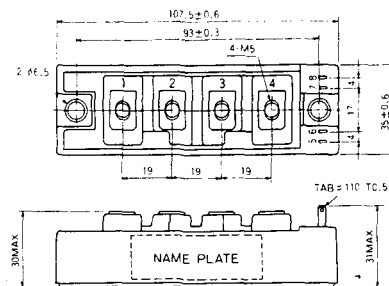
S-108B1A



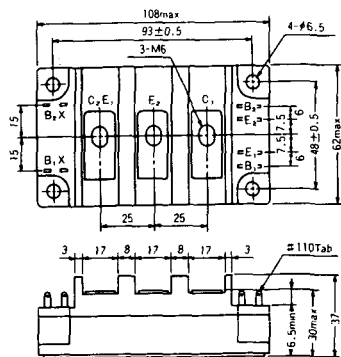
S-108B1B



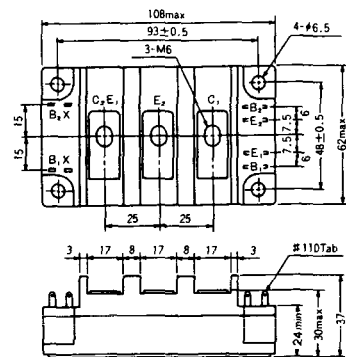
S-108B1C



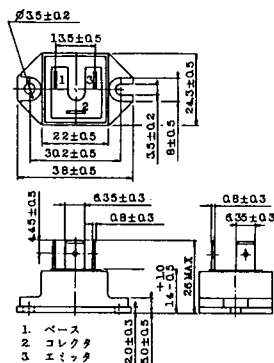
S-108B2A



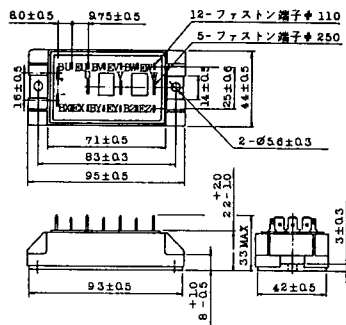
S-108B2B



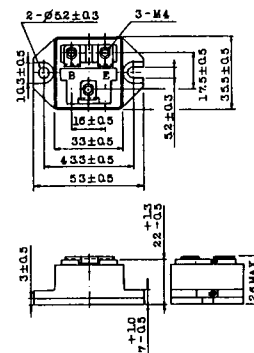
2-22B1A



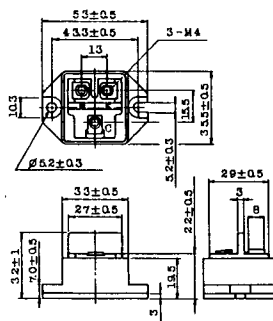
2-27A4A



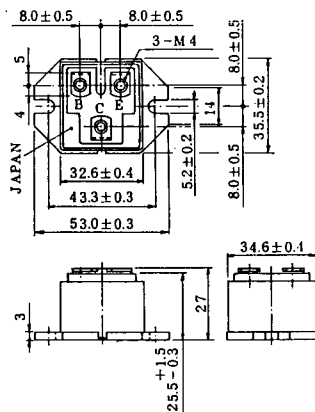
2-33C1A



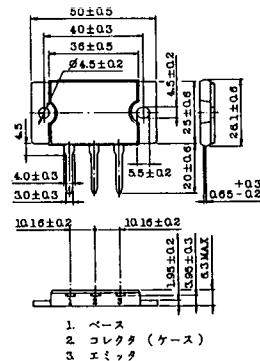
2-33D1A



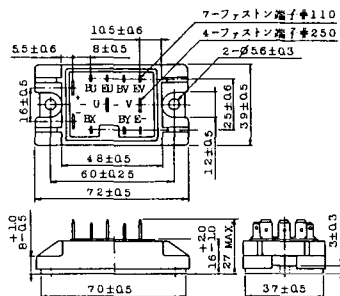
2-33F1A



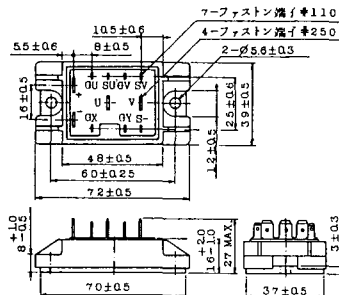
2-37A1A



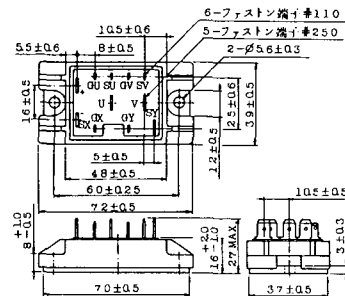
2-48A3A



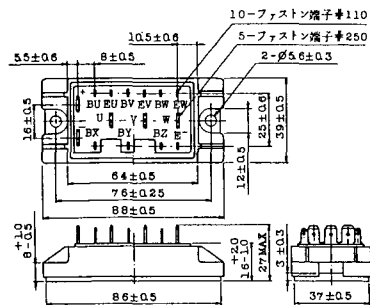
2-48A3B



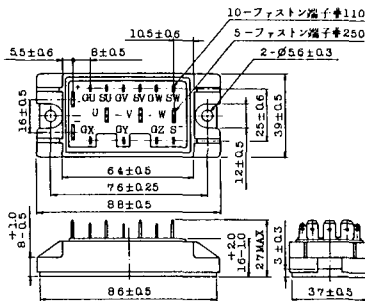
2-48A4A



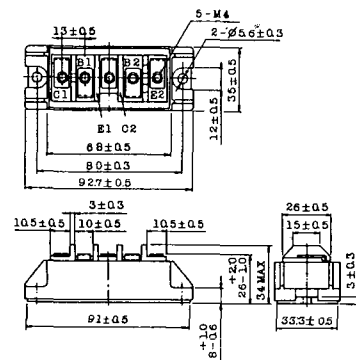
2-64A2A



2-64A2B

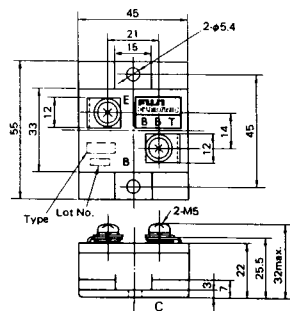


2-68A2A



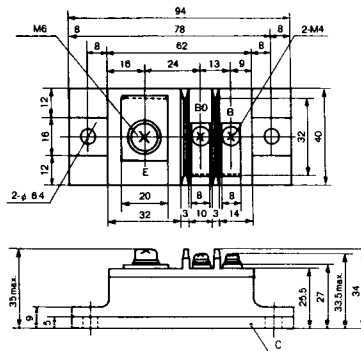
BBT-II

BBTII
1D200A-020



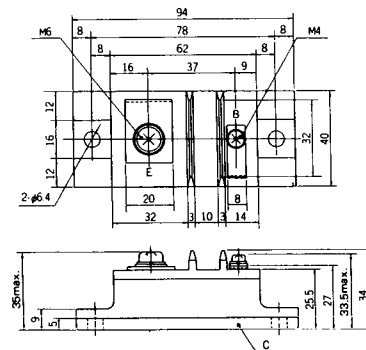
BBT-III

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



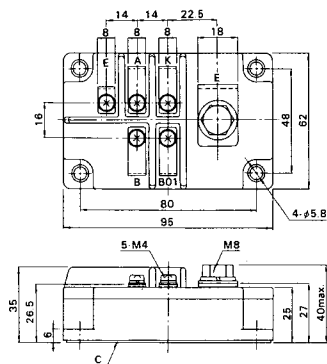
BBT-III

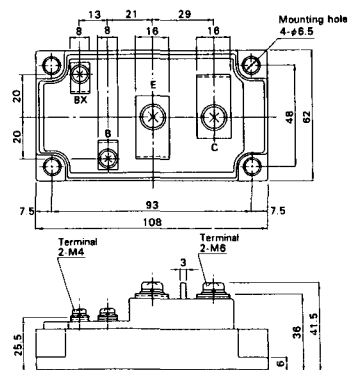
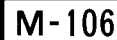
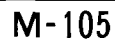
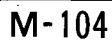
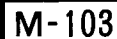
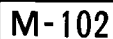
BBTIII
ETN01-055
ET1257



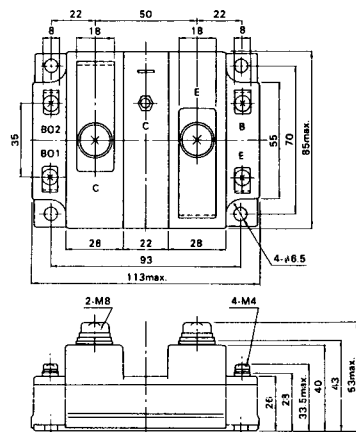
BBT-IV

BBTIV
1D500A-030

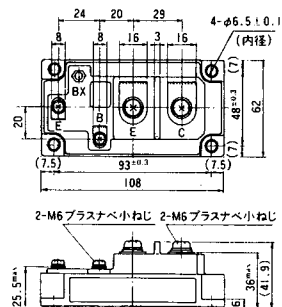




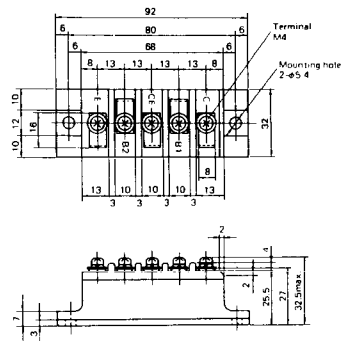
M-107



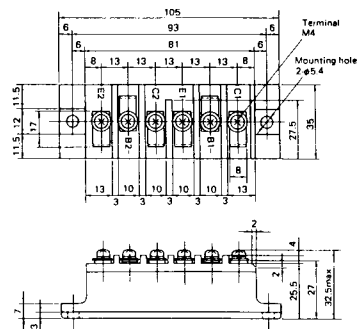
M-116



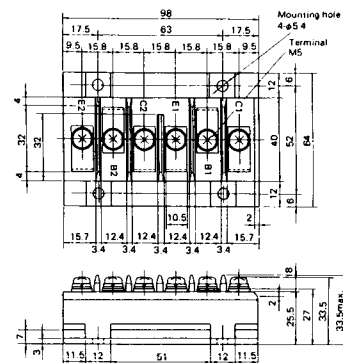
M-201



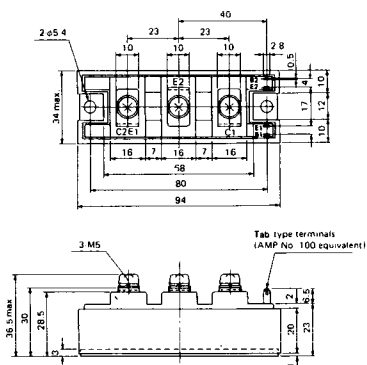
M-202



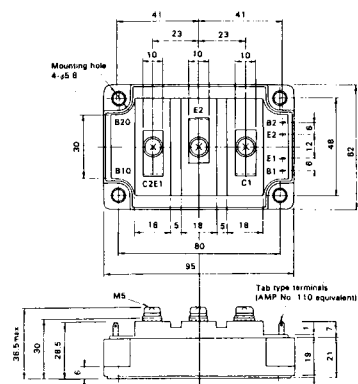
M-203



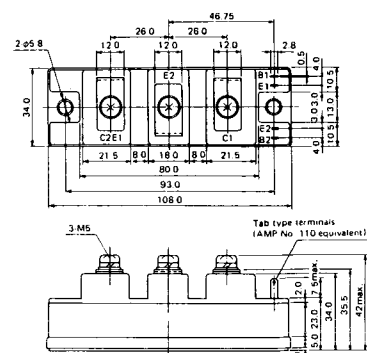
M-204



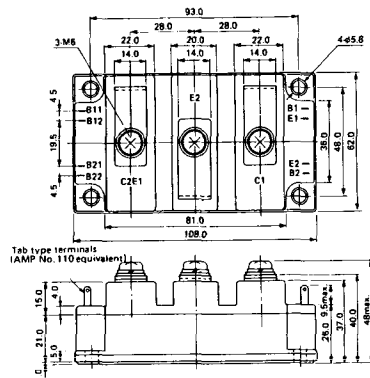
M-205



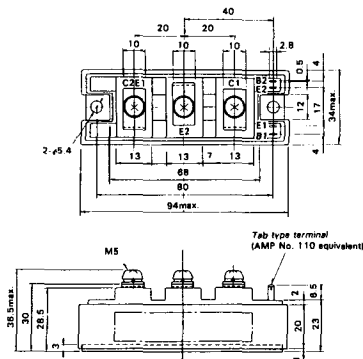
M-206



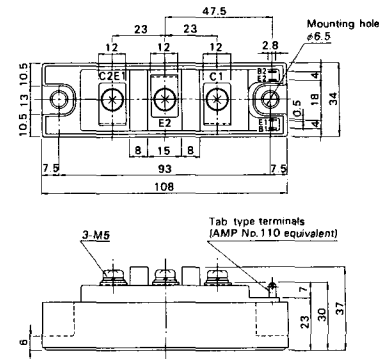
M-207



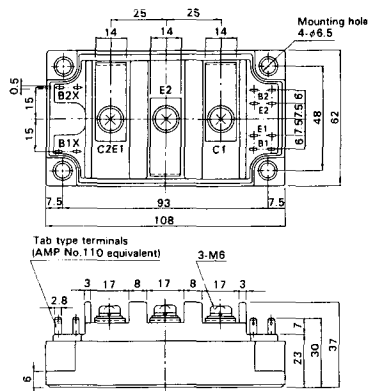
M-208



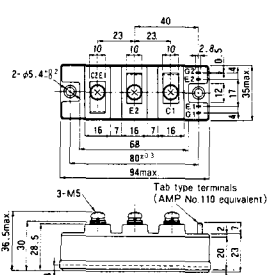
M-209



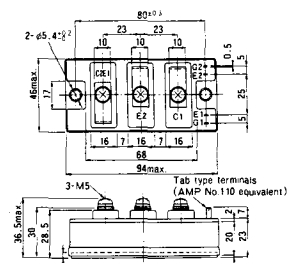
M-210



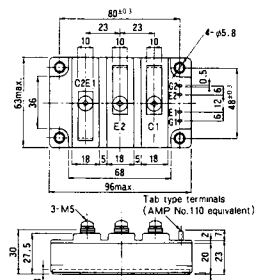
M-211



M-212

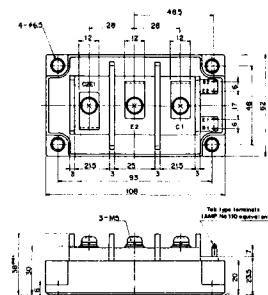


M-213

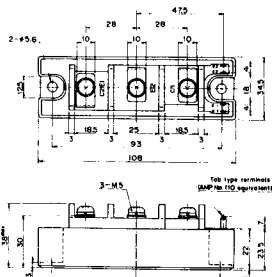


M-214

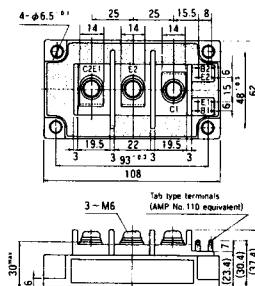
M-215



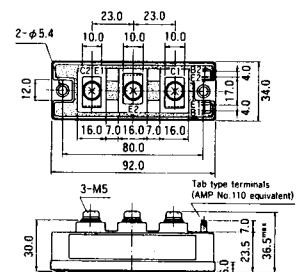
M-216



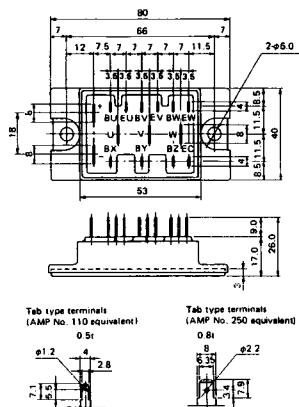
M-217



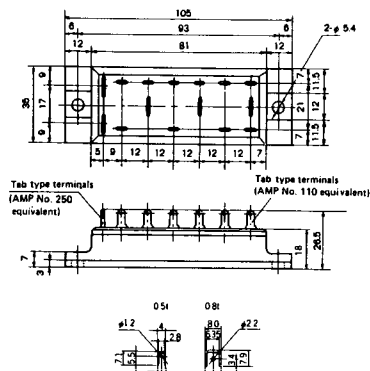
M-218



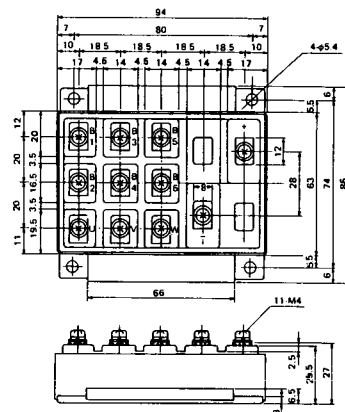
M-601



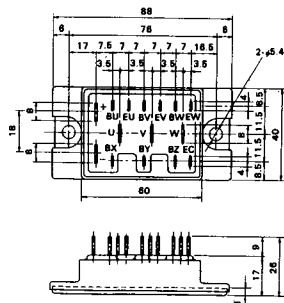
M-602



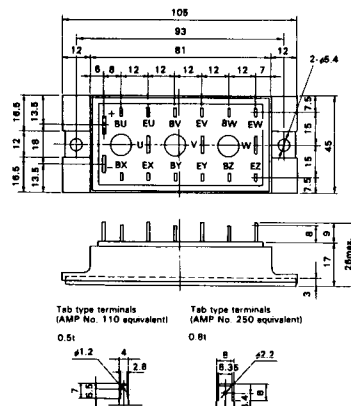
M-603



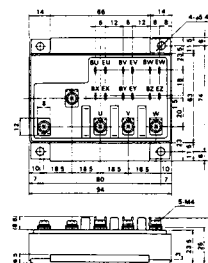
M-604



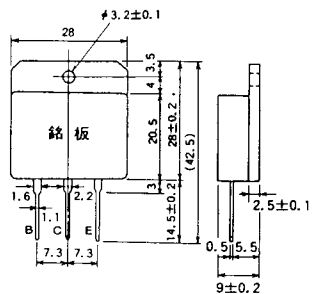
M-605



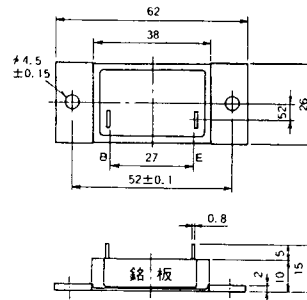
M-606



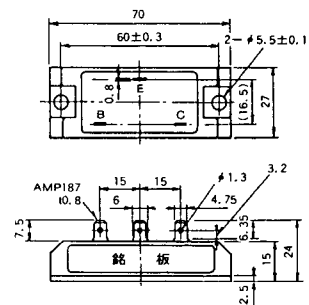
M-1A1A



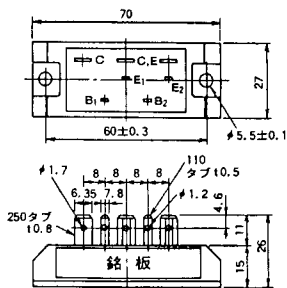
M-2A1A



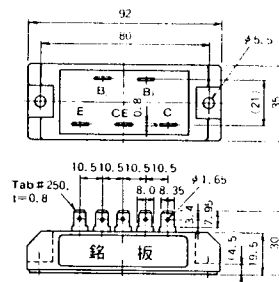
M-2B1A



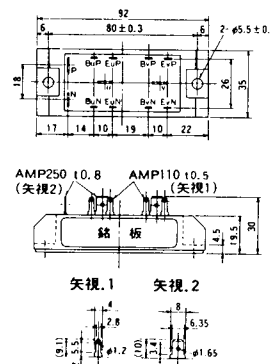
M-2B2A



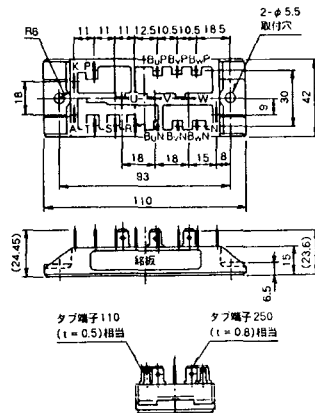
M-2C2A



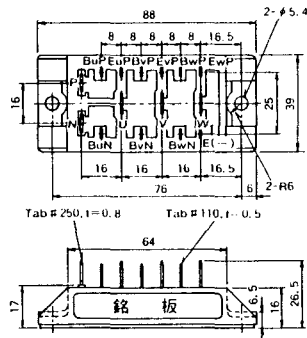
M-2D4A



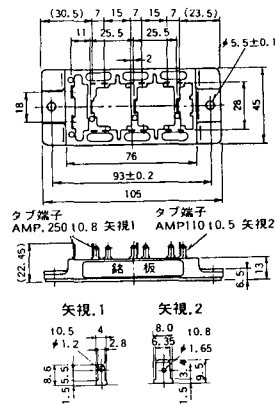
M-2E6A



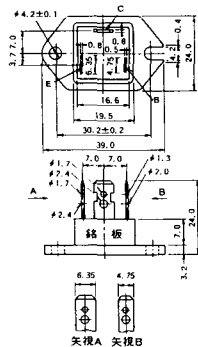
M-2F6A



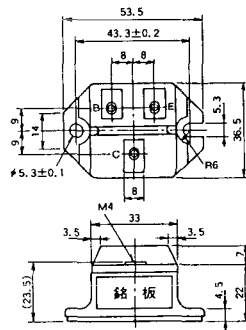
M-2G6A



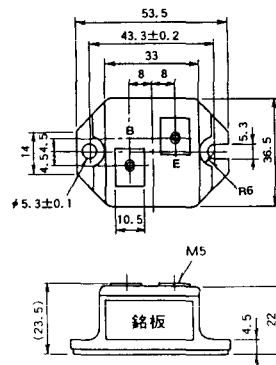
M-3A1A



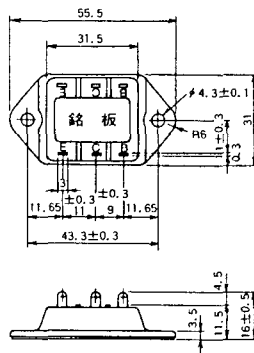
M-3B1A



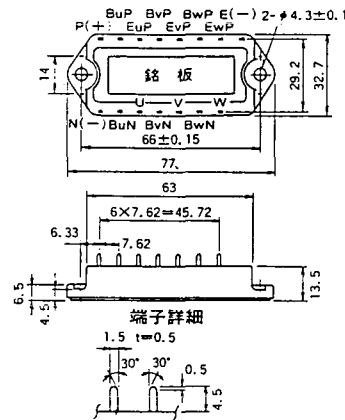
M-3B1B



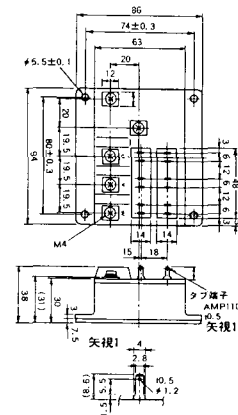
M-3C1A



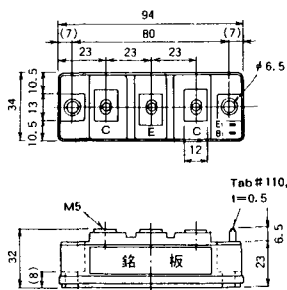
M-3D6A



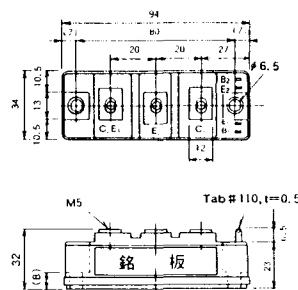
M-3E6A



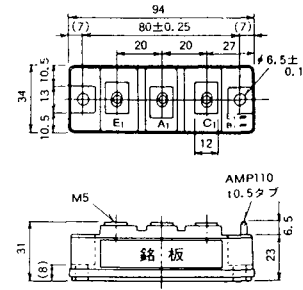
M-4A1A



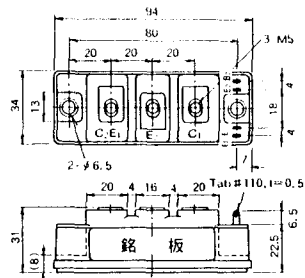
M-4A2A



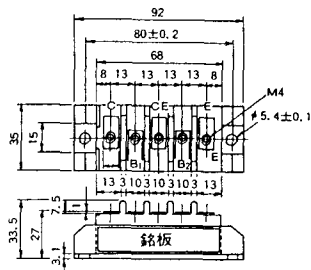
M-4A1B



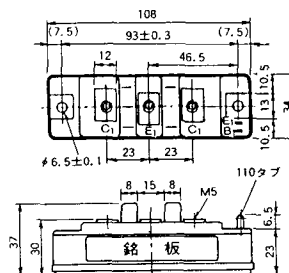
M-4A2B



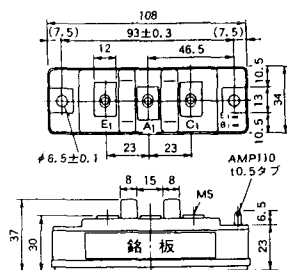
M-4B2A



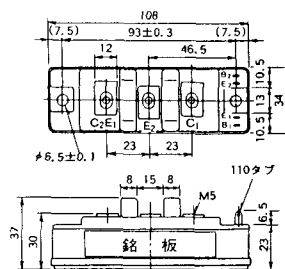
M-5A1A



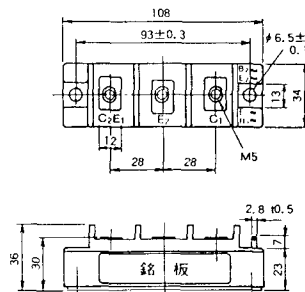
M-5A1B



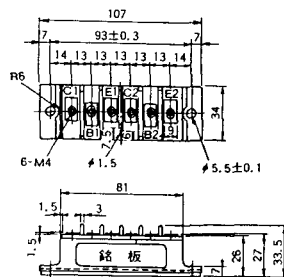
M-5A2A



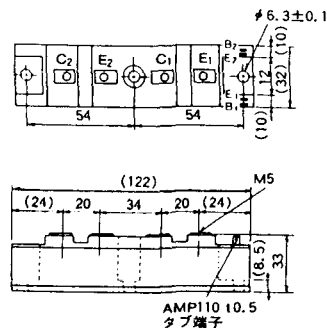
M-5B2A



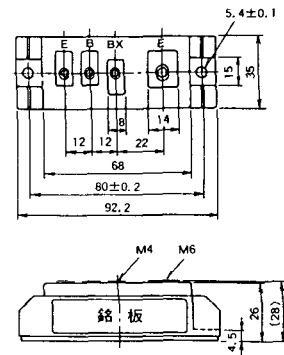
M-5C2A



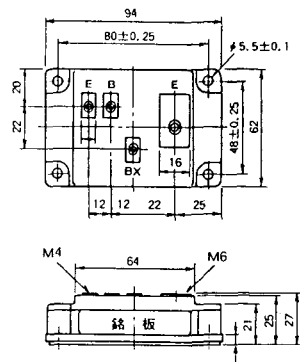
M-5D2A



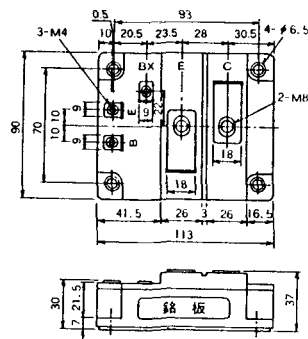
M-6A1A



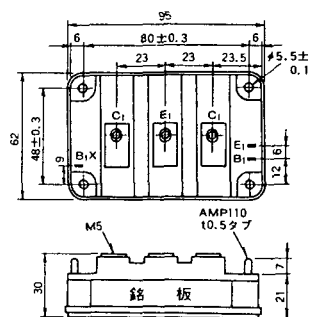
M-7A1A



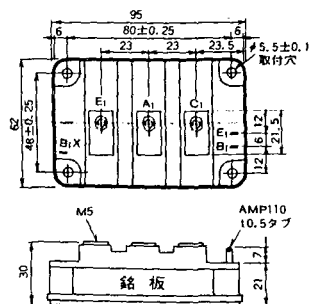
M-7B1A



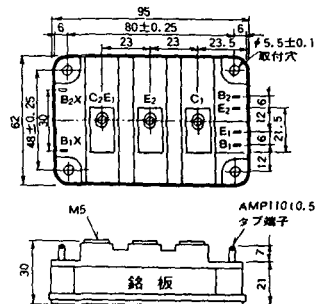
M-8A1A



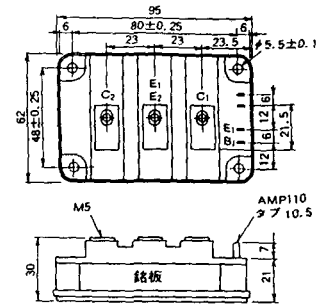
M-8A1B



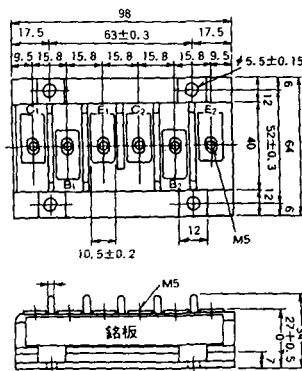
M-8A2A



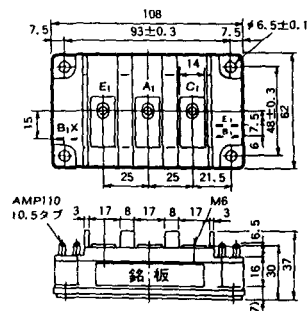
M-8A2B



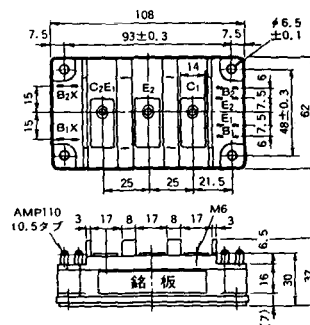
M-8B2A



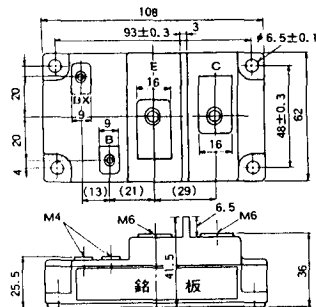
M-9A1A



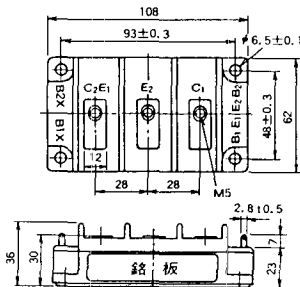
M-9A2A



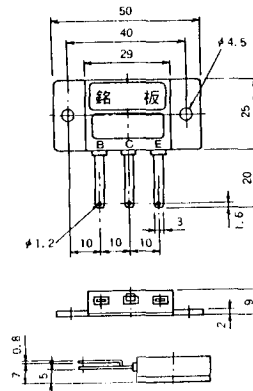
M-9B1A



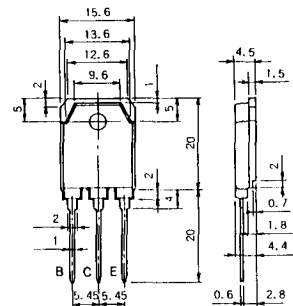
M-9C2A



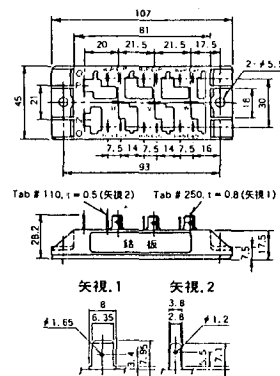
M-1A1B



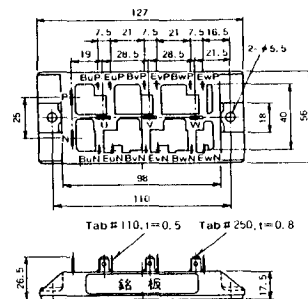
M-1A1C



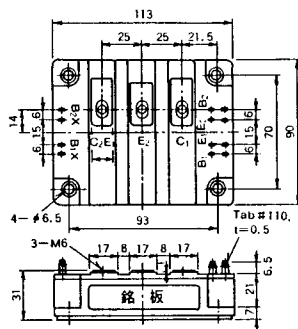
M-2E6B



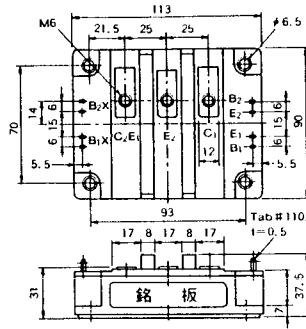
M-2E6C



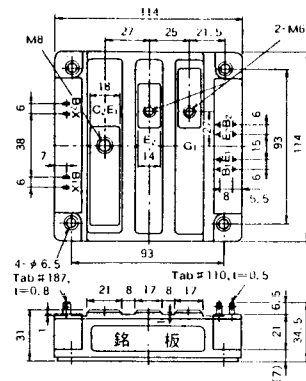
M-10A2A



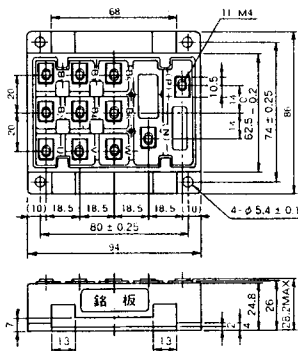
M-10A2B



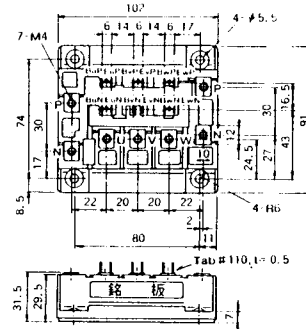
M-11A2A



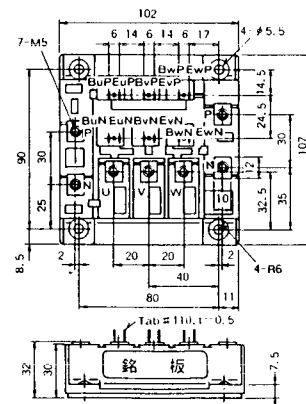
M-12A6A



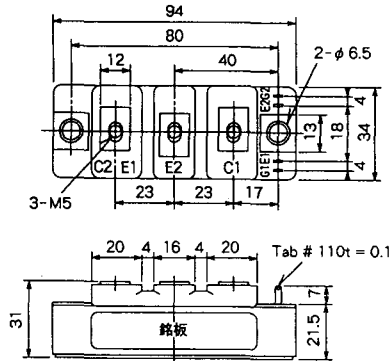
M-12B6A



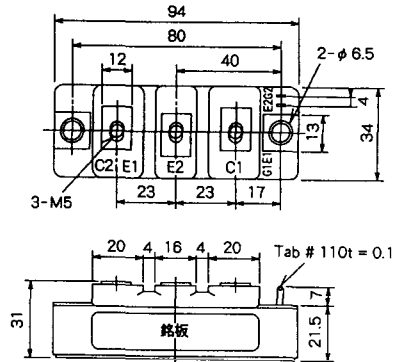
M-12B6B



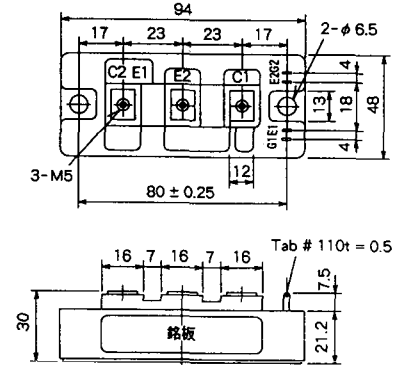
M-4A2D



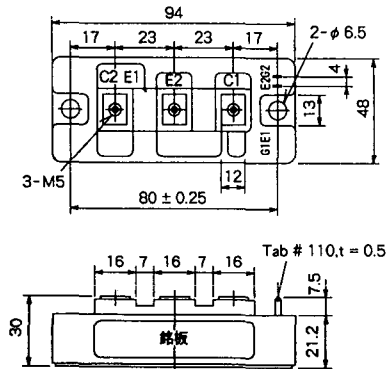
M-4A2E



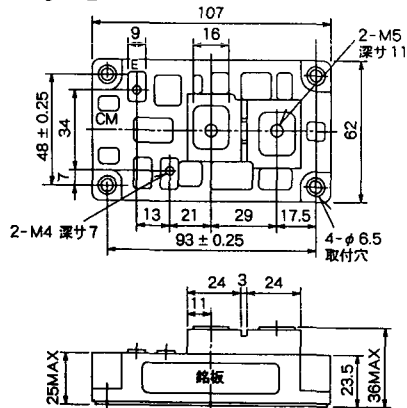
M-4C2A



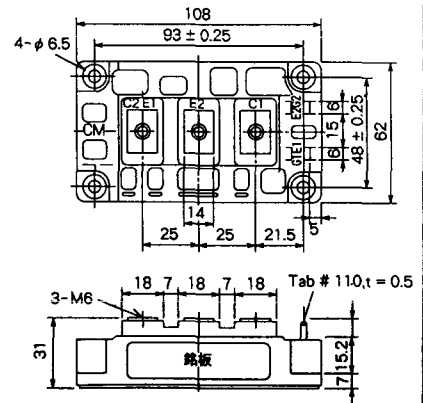
M-4C2B



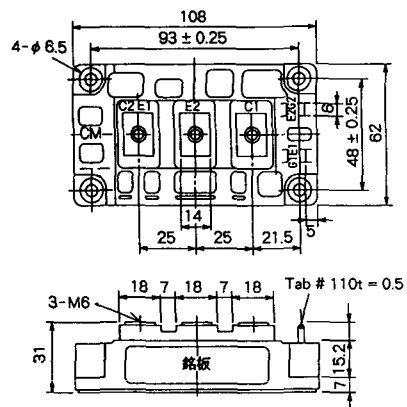
M-9B1C



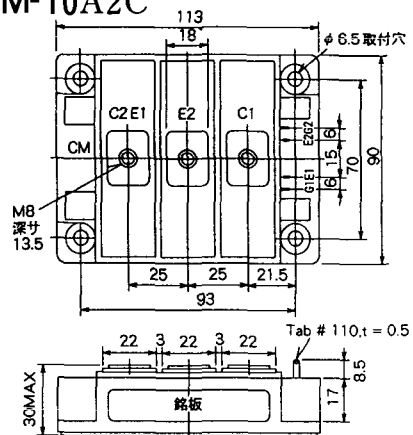
M-9D2A



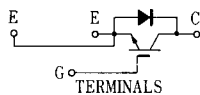
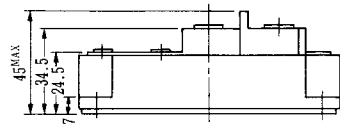
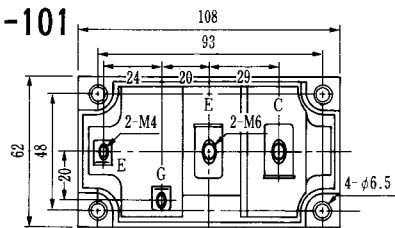
M-9D2B



M-10A2C



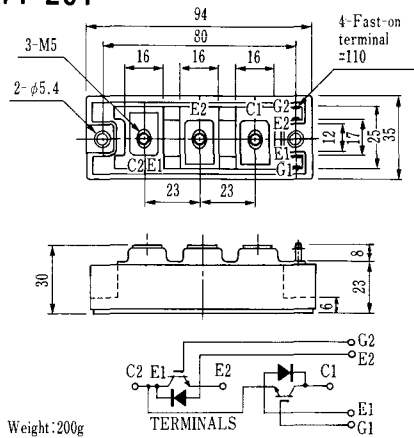
H-101



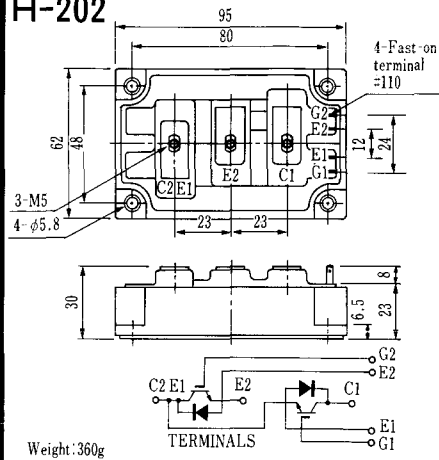
Weight :480g

TERMINALS

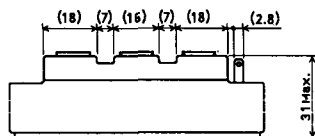
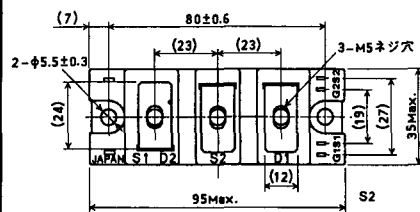
H-201



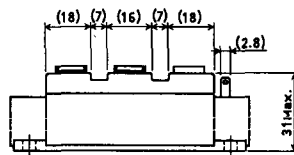
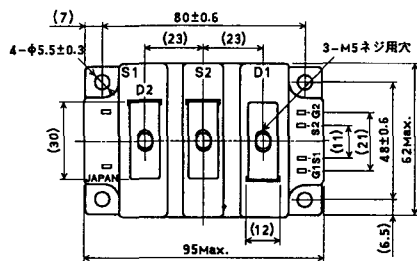
H-202



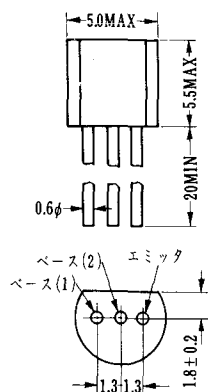
LF-J



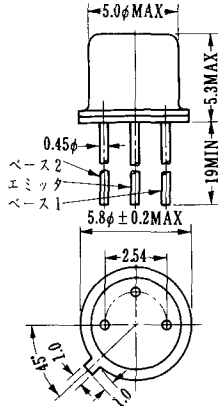
LF-K



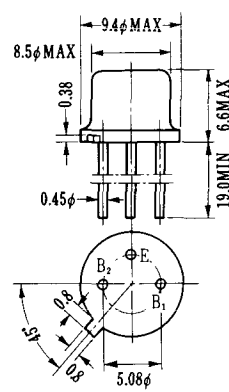
U-1



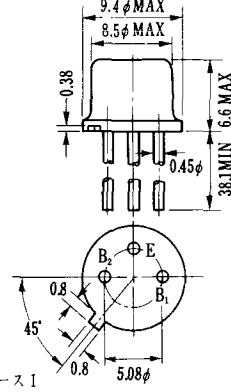
U-2



U-3



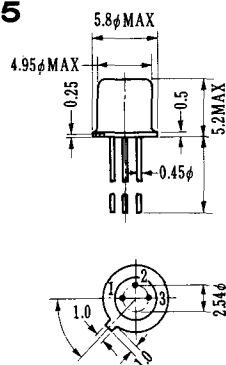
U-4



電極接続

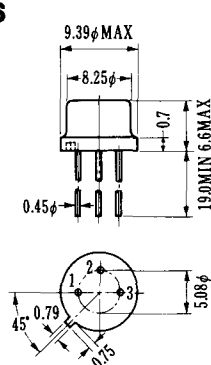
B₁: ベース1
B₂: ベース2
E: エミッタ

U-5



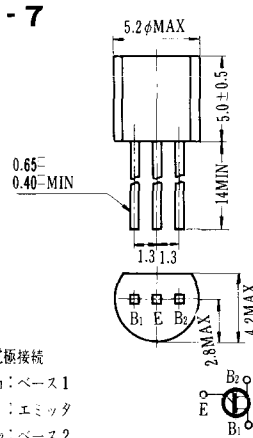
1. BASE1
2. EMITTER
3. BASE2 (CASE)

U-6



1. BASE(2)
2. EMITTER
3. BASE(1)

U-7



電極接続

B₁: ベース1
E: エミッタ
B₂: ベース2

U-8

