

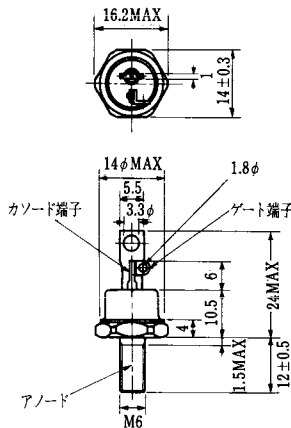
SG700 ^o R, U, W, EX ₂ 22 ○チョップパ、インバータ用 ○200A, 1300V-2500V					■外形図番号 T-45 (13-51B1A)						
■最大定格					■電気的特性						
記号	SG700R22	SG700U22	SG700W22	SG700EX22	単位	記号	測定条件	Min	Typ	Max	単位
V_{RRM}	15				V	I_{RRM}	$T_j=125^{\circ}\text{C}, V_D=V_{RRM}$			10	mA
V_{DRM}	1300	1600	1800	2500		I_{DRM}	$T_j=125^{\circ}\text{C}, V_D=V_{DRM}, R_{GK}=20\Omega$			10	mA
I_{TRM}	700 ($V_D=\frac{1}{2}V_{DRM}, V_{DM}=\frac{3}{5}V_{DRM}, C_s=2\mu\text{F}, R_s=20\Omega, T_j=125^{\circ}\text{C}$)					V_{TM}	$T_c=25^{\circ}\text{C}, I_{TM}=700\text{A}$			2.7	V
I_{TRMS}	200 ($T_j=70^{\circ}\text{C}$)				A	V_{GT}	$T_c=25^{\circ}\text{C}, V_D=12\text{V}$	0.75	1.0	1.0	V
I_{TSM}	4000/4400 (50Hz/60Hz, 正弦半波1サイクル)					I_{GT}	$R_L=0.5\Omega$	350	700	700	mA
$I^2 \cdot t$					A ² S	V_{GD}	$T_c=125^{\circ}\text{C}, V_D=\frac{1}{2}V_{DRM}$	0.3			V
di/dt	200 ($I_{CP}=12\text{A}, t_r=1\mu\text{s}, V_D=\frac{1}{2}V_{DRM}, I_{TM}=700\text{A}, f=50\text{Hz}, T_j=125^{\circ}\text{C}$)				A/ μs	I_{GD}	$T_c=25^{\circ}\text{C}, V_D=\frac{1}{2}V_{DRM}, I_{CP}=12\text{A}$	5		2.0	mA
I_{GFM}	30 (パルス幅: max. 20 μs , duty: max. 20%)				A	t_d	$T_c=25^{\circ}\text{C}, V_D=\frac{1}{2}V_{DRM}, I_{CP}=12\text{A}$			6.0	μs
$P_{GFI(AV)}$	6				W	dv/dt	$T_j=125^{\circ}\text{C}, V_D=\frac{3}{5}V_{DRM}, V_{GK}=-2\text{V}$	600			V/ μs
$I_{GR(RMS)}$	35				A	I_H	$T_c=25^{\circ}\text{C}, R_L=0.5\Omega$		20		A
P_{GRM}	4000 (パルス幅: max. 20 μs , duty: max. 2%)				W	L	$T_c=120^{\circ}\text{C}, I_{TM}=700\text{A}$			14	
V_{GRM}	15				V	t_{eq}	$V_D=\frac{1}{2}V_{DRM}, V_{DM}=\frac{3}{5}V_{DRM}$			16	μs
T_j	125				$^{\circ}\text{C}$	t_{out}	$C_s=2\mu\text{F}, R_s=20\Omega$			76	
T_{Hk}	-40~125				$^{\circ}\text{C}$	I_{GR}	$di/dt=-20\text{A}/\mu\text{s}$		160	190	A
						R_{th}	接合-フィン間, DC			0.085	$^{\circ}\text{C}/\text{W}$

SG800 ^o R, U, W, EX ₁ 11 SG800 ^o R, U, W, EX ₁ 12 ○チョップパ、インバータ用					■外形図番号 SG800 ^o 11: T-44 (13-36A1A) SG800 ^o 12: T-46 (13-36B1A)						
■最大定格					■電気的特性						
記号	SG800R11 SG800R12	SG800U11 SG800U12	SG800W11 SG800W12	SG800EX11 SG800EX12	単位	記号	測定条件	Min	Typ	Max	単位
V_{RRM}	15				V	I_{RRM}	$T_j=125^{\circ}\text{C}, V_D=V_{RRM}$			10	mA
V_{DRM}	1300	1600	1800	2500		I_{DRM}	$T_j=125^{\circ}\text{C}, V_D=V_{DRM}, R_{GK}=20\Omega$			10	mA
I_{TRM}	800 ($V_D=\frac{1}{2}V_{DRM}, V_{DM}=\frac{3}{5}V_{DRM}, C_s=2\mu\text{F}, R_s=20\Omega, T_j=125^{\circ}\text{C}$)					I_{GRM}	$T_j=125^{\circ}\text{C}, V_D=V_{GRM}$			10	mA
I_{TRMS}	300 ($T_j=70^{\circ}\text{C}$)				A	V_{TM}	$T_c=25^{\circ}\text{C}, I_{TM}=800\text{A}$			2.4	V
I_{TSM}	5000/5500 (50Hz/60Hz, 正弦半波1サイクル)					V_{GT}	$T_c=25^{\circ}\text{C}, V_D=12\text{V}$	0.75	1.0	1.0	V
$I^2 \cdot t$					A ² S	I_{GT}	$R_L=0.5\Omega$	350	700	700	mA
di/dt	200 ($I_{CP}=12\text{A}, t_r=1\mu\text{s}, V_D=\frac{1}{2}V_{DRM}, I_{TM}=800\text{A}, f=50\text{Hz}, T_j=125^{\circ}\text{C}$)				A/ μs	V_{GD}	$T_c=125^{\circ}\text{C}, V_D=\frac{1}{2}V_{DRM}$	0.3			V
I_{GFM}	30 (パルス幅: max. 20 μs , duty: max. 20%)				A	I_{GD}	$T_c=25^{\circ}\text{C}, V_D=\frac{1}{2}V_{DRM}$	4		3.0	mA
$P_{GFI(AV)}$	6				W	t_d	$T_c=25^{\circ}\text{C}, V_D=\frac{1}{2}V_{DRM}$			8.0	μs
$I_{GR(RMS)}$	35				A	t_{st}	$I_{TM}=800\text{A}, di/dt=200\text{A}/\mu\text{s}$ $I_{CP}=12\text{A}, t_r=1\mu\text{s}$				
P_{GRM}	4000 (パルス幅: max. 20 μs , duty: max. 2%)				W	dv/dt	$T_j=125^{\circ}\text{C}, V_D=\frac{3}{5}V_{DRM}$ $V_{GK}=-2\text{V}$	600			V/ μs
V_{GRM}	15				V	I_H	$T_c=25^{\circ}\text{C}, R_L=0.5\Omega$		20		A
T_j	125				$^{\circ}\text{C}$	L	$T_c=120^{\circ}\text{C}, I_{TM}=800\text{A}$			14	
T_{Hk}	-40~125				$^{\circ}\text{C}$	t_{eq}	$V_D=\frac{1}{2}V_{DRM}$ $V_{DM}=\frac{3}{5}V_{DRM}$			16	μs
						t_{out}	$C_s=2\mu\text{F}$ $R_s=20\Omega$			76	
						I_{GR}	$di/dt=-20\text{A}/\mu\text{s}$		170	200	A
						R_{th}	接合-ケース間, DC			0.09	$^{\circ}\text{C}/\text{W}$

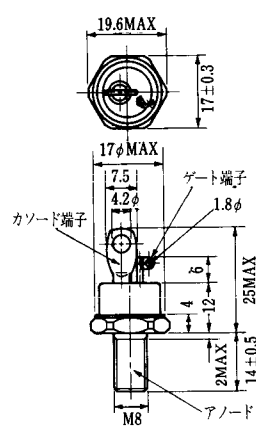
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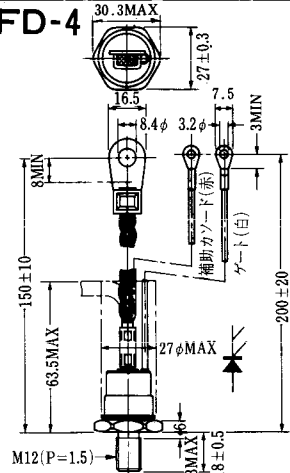
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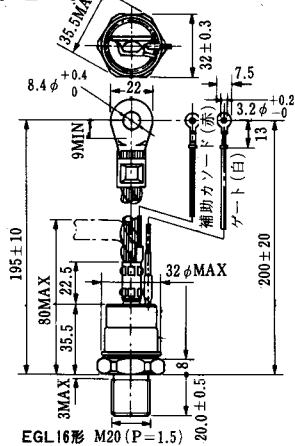
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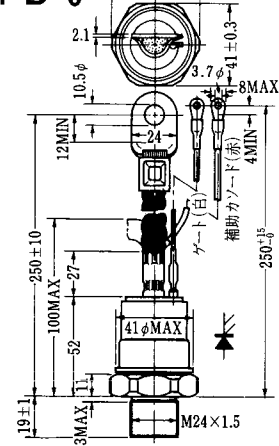
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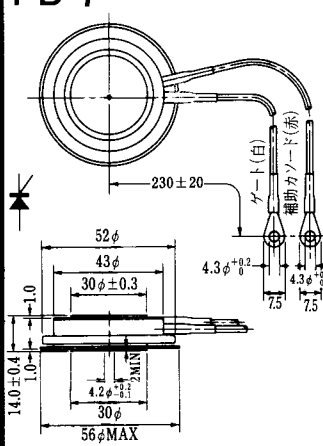
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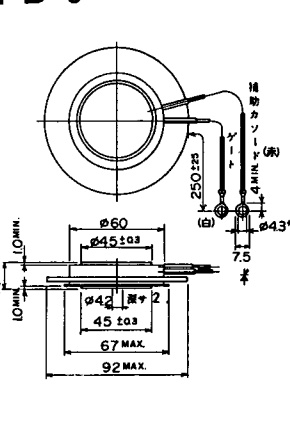
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FD-7



FD-8



FD-9

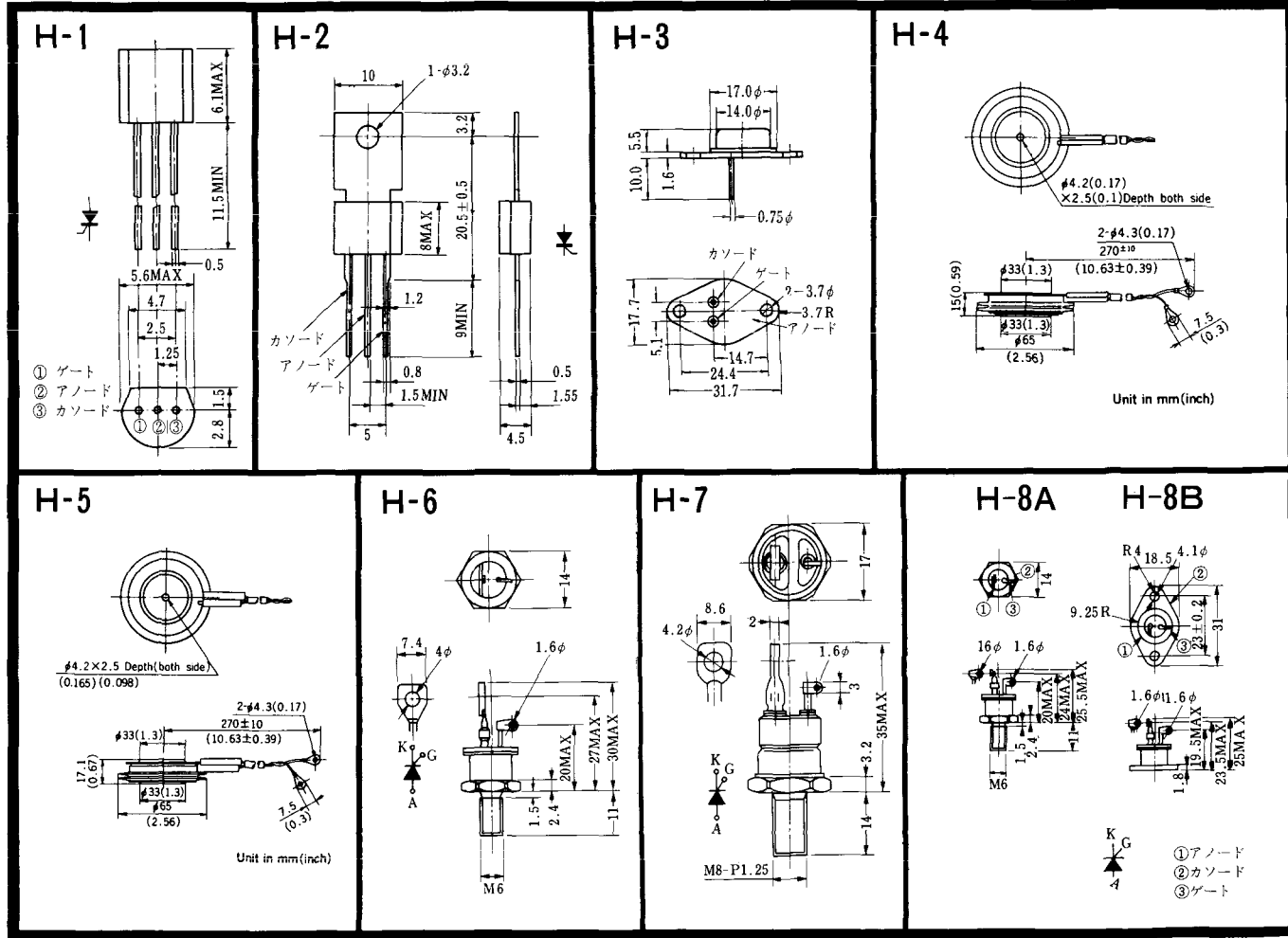


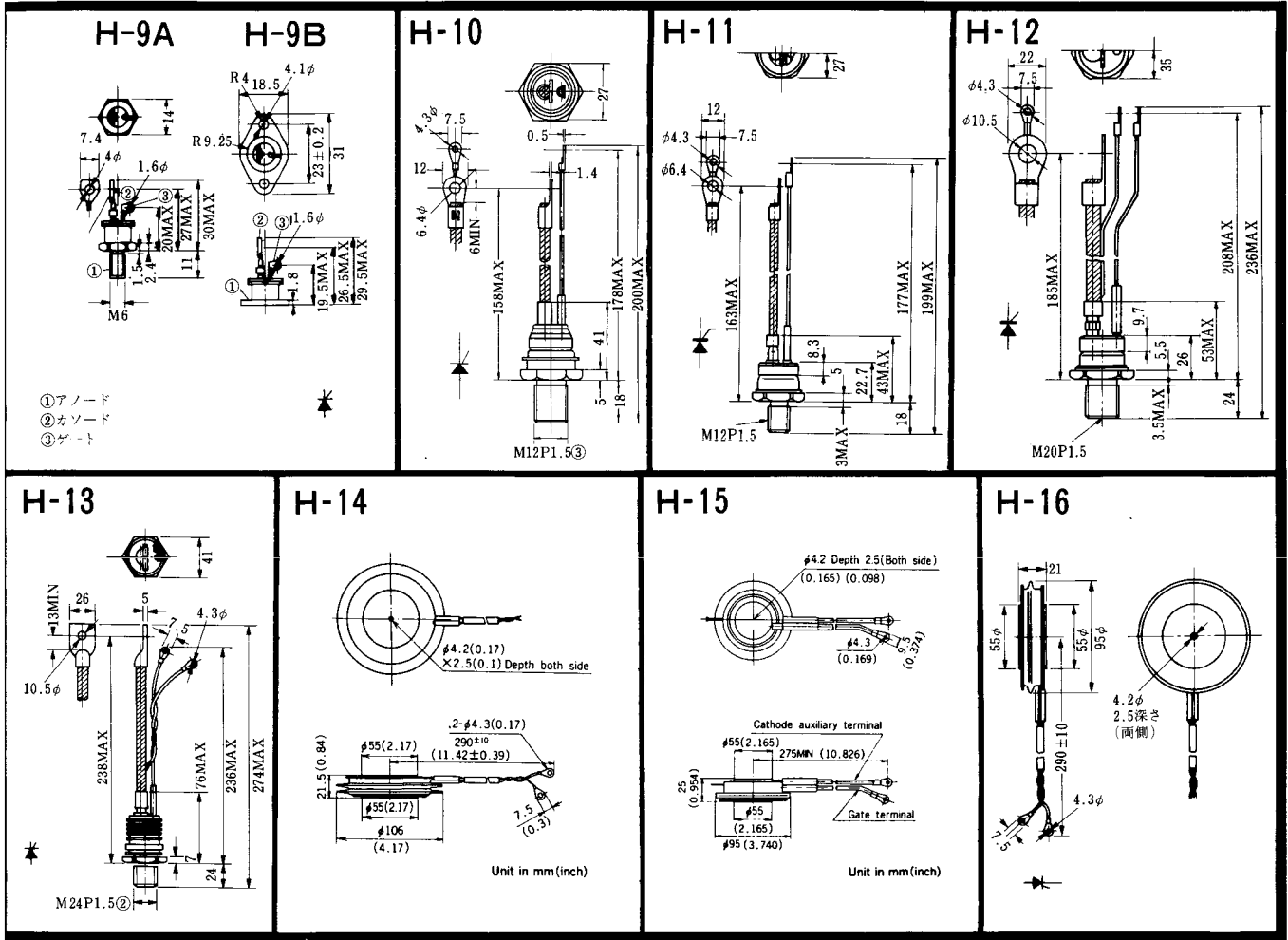
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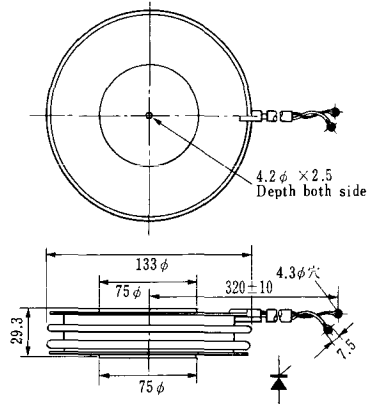
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FD-12

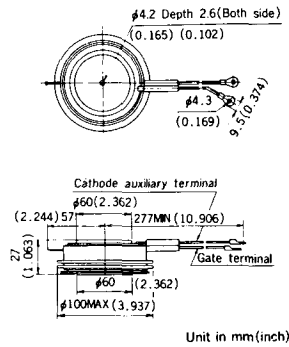




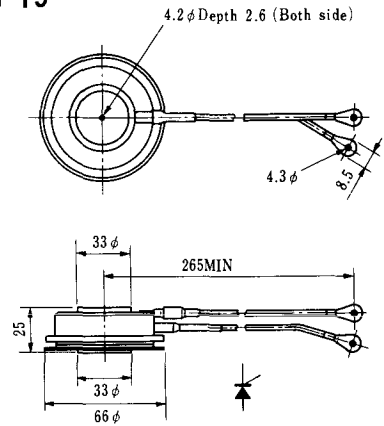
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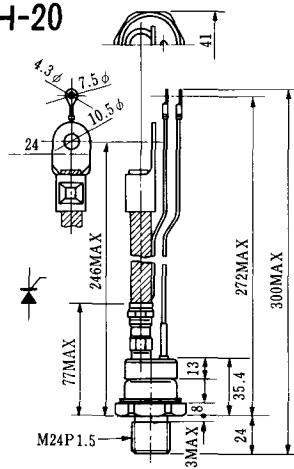
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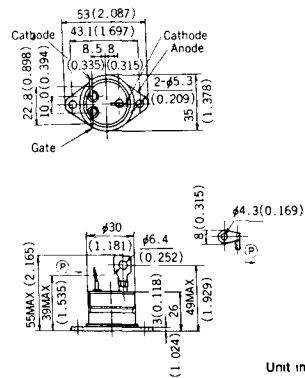
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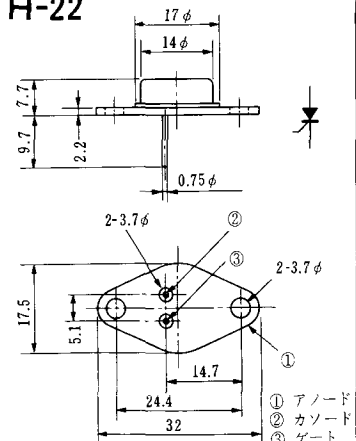
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H-21



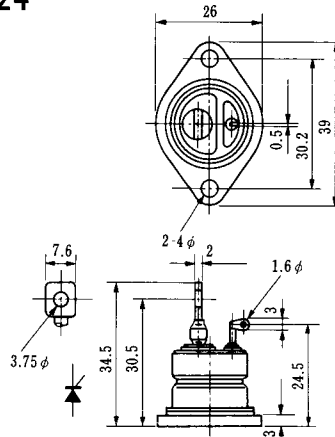
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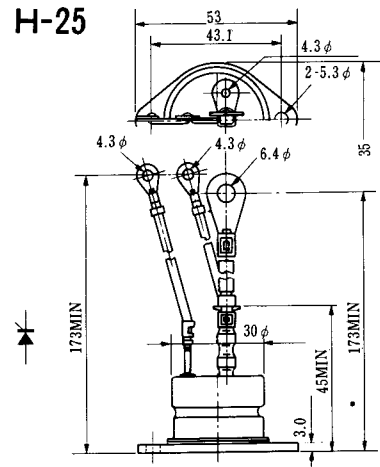
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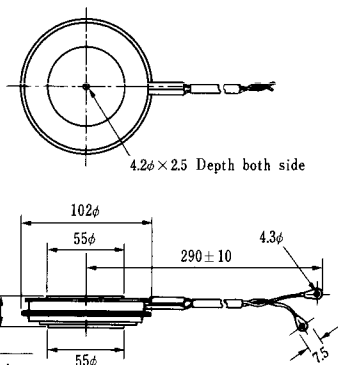
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H-25

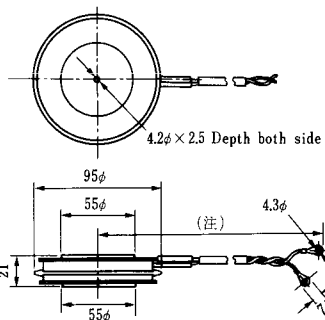


H-26



Type	Direction of polarity
CA12	

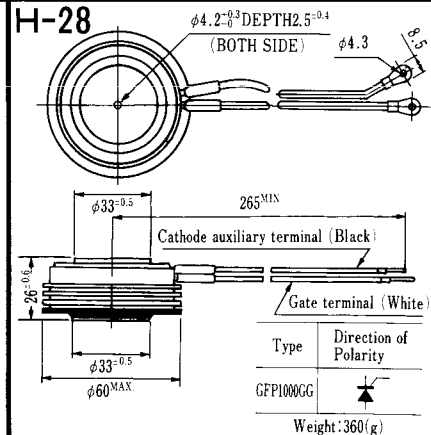
H-27



Type	Direction of polarity
CF11V	

(注) CC11V: 400 ± 10
CF11V: 250 ± 10

H-28



Type	Direction of Polarity
GFP100GG	

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



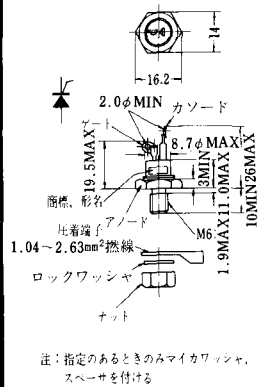
M-3



M-4



M-5



M-6



M-7



M-8



M-9



M-10



M-11



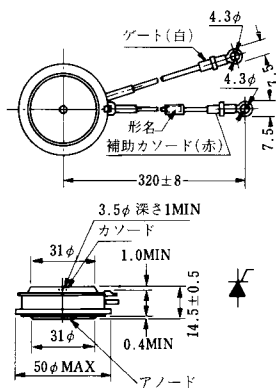
M-12



M-13



M-14



M-15

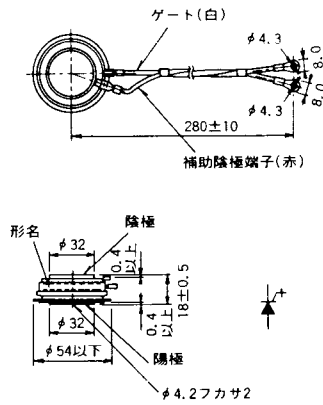


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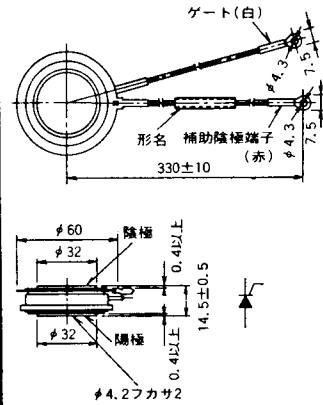




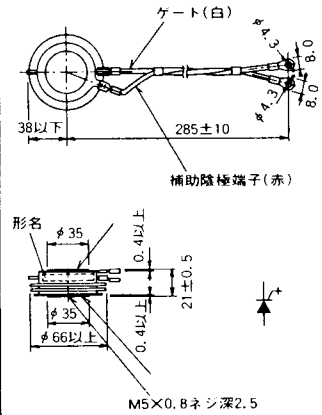
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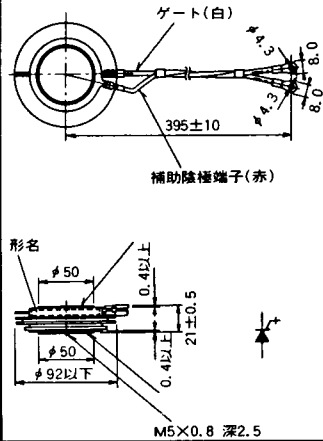
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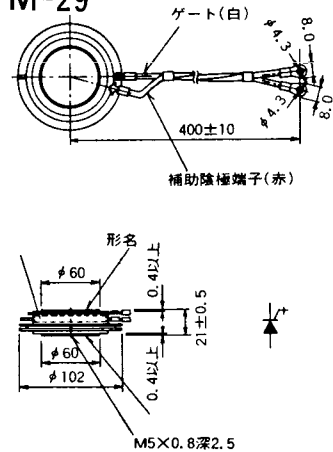
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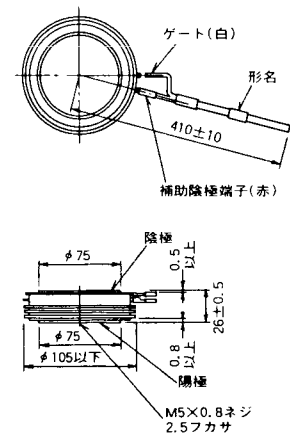
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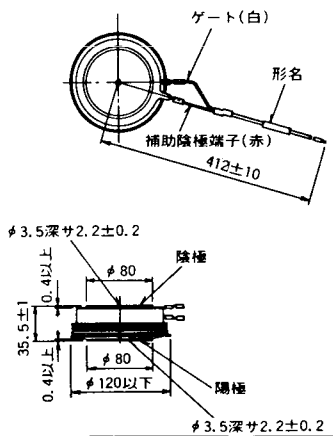
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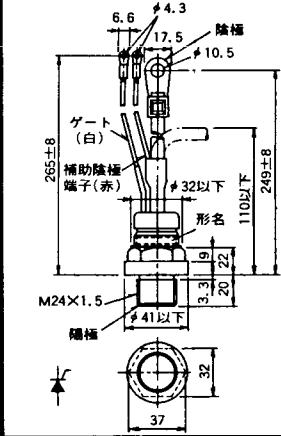
M-30



M-31



M-32



M-33



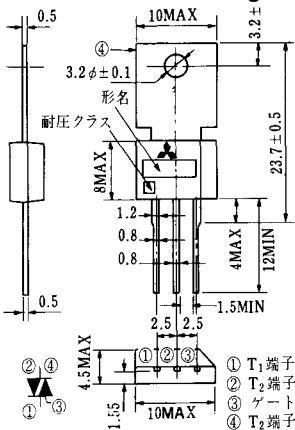
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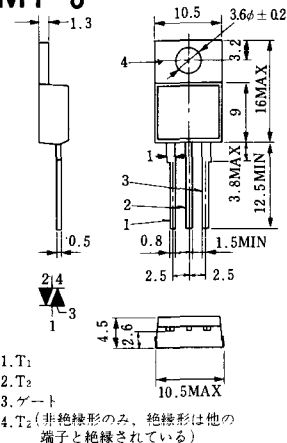
MT-1



MT-2



MT-3



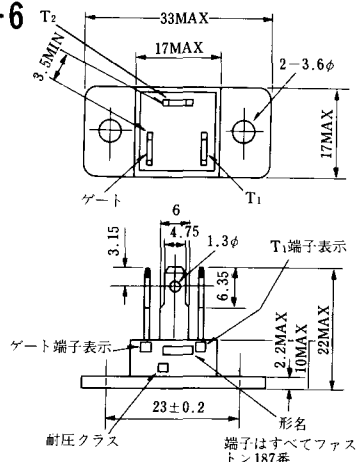
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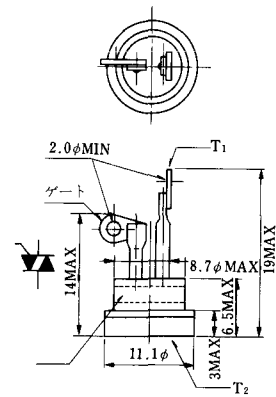
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MT-6



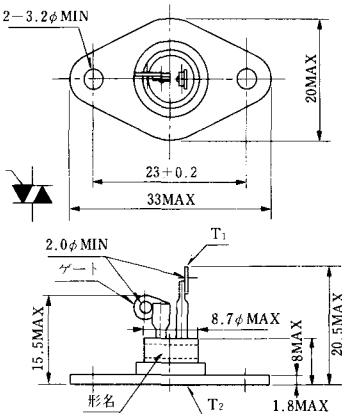
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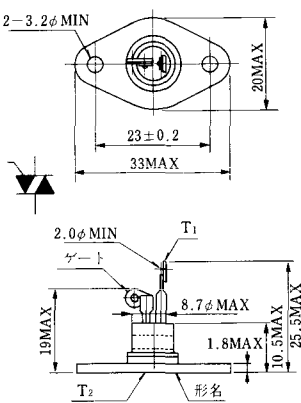
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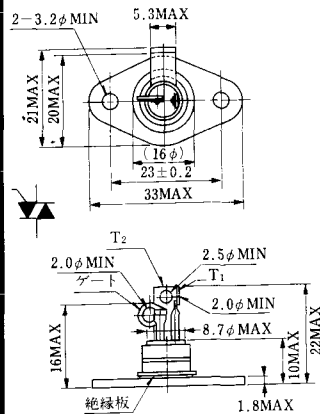
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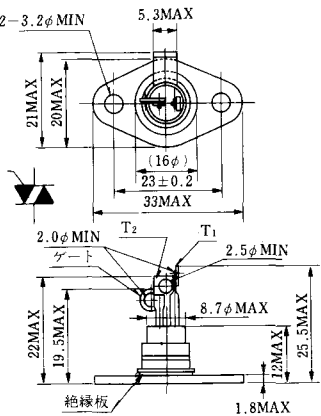
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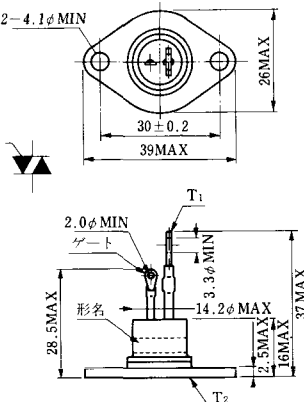
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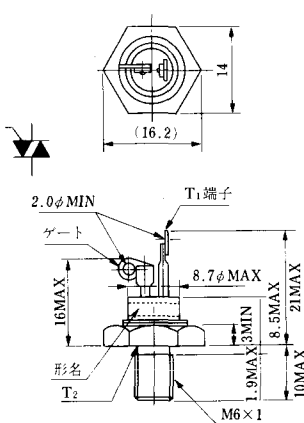
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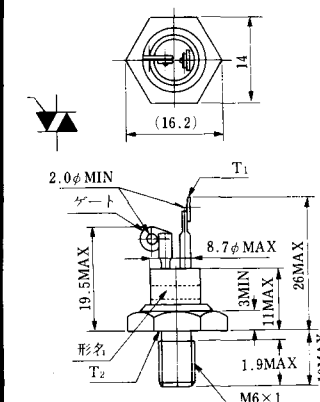
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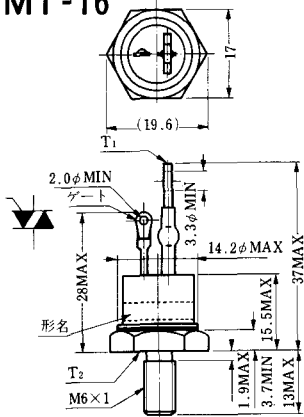
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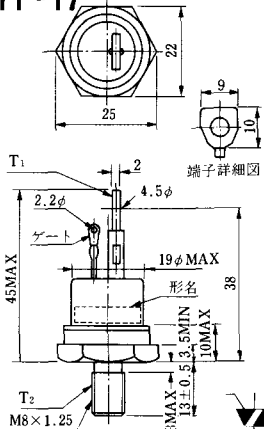
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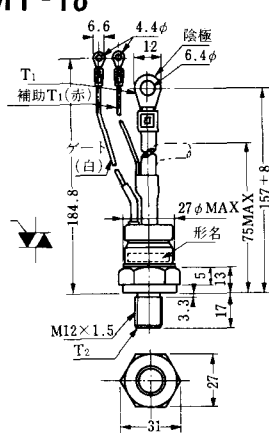
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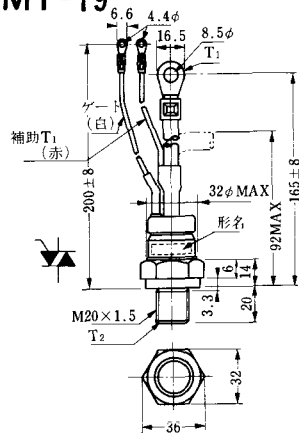
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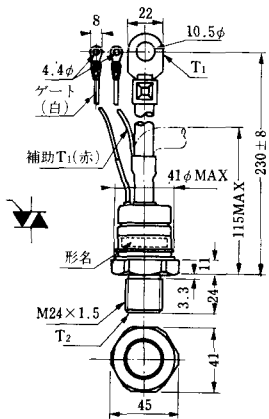
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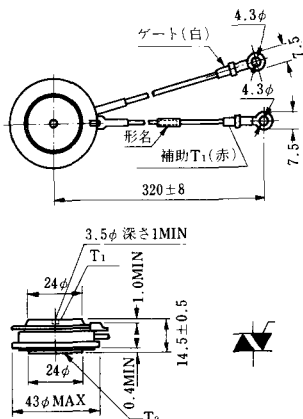
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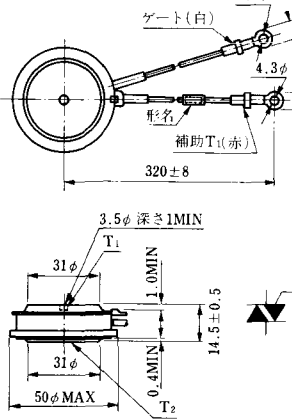
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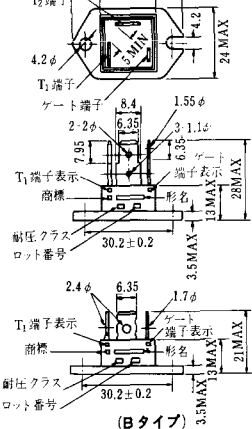
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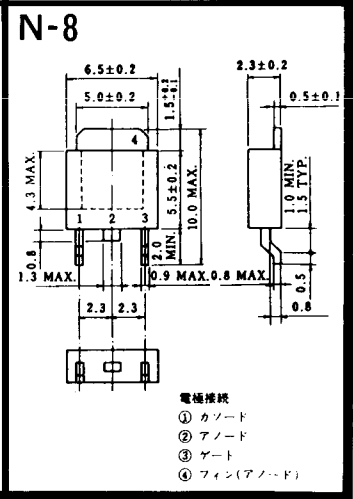
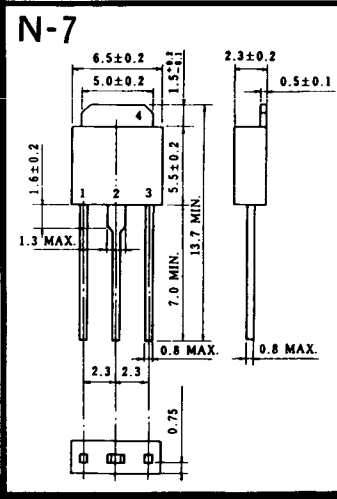
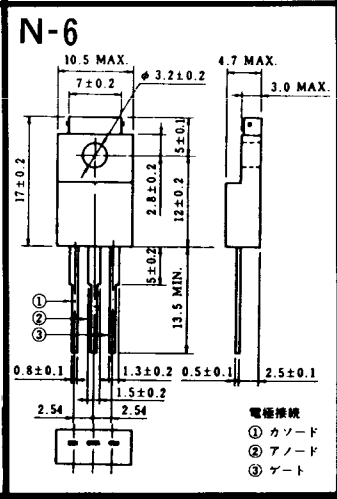
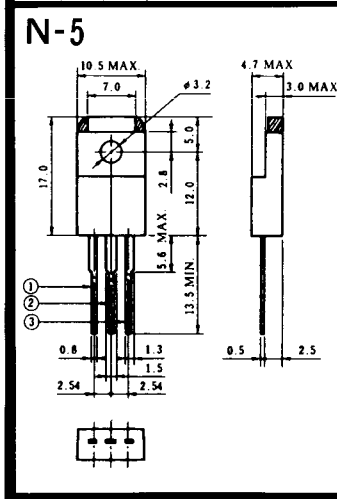
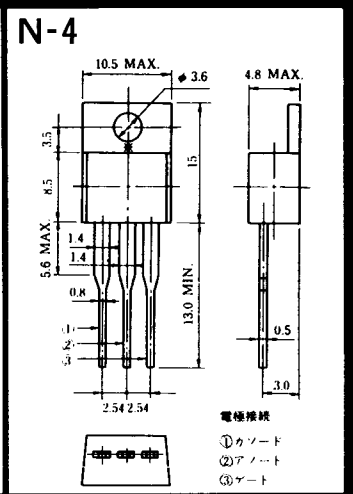
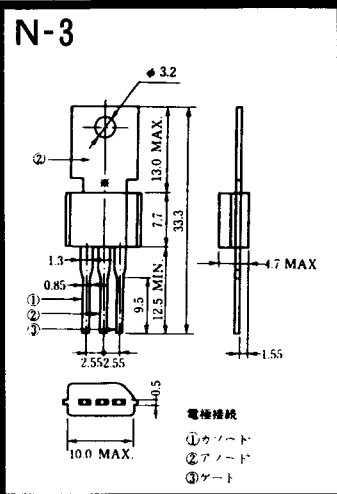
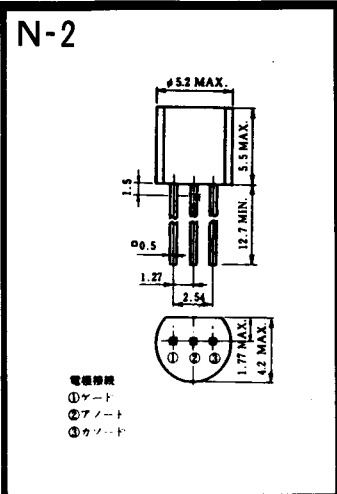
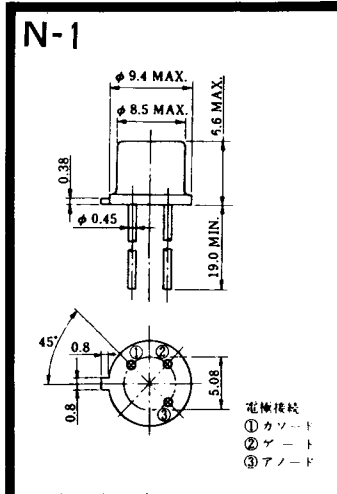


MT-22

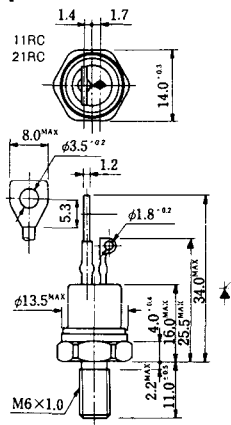


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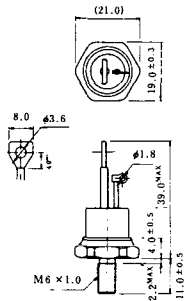


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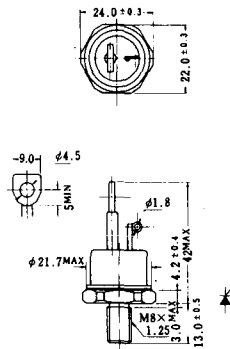
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29RD



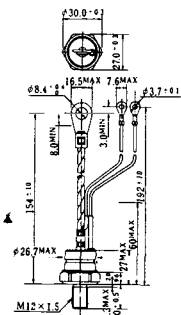
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39RC
59RC
39RF
59RF



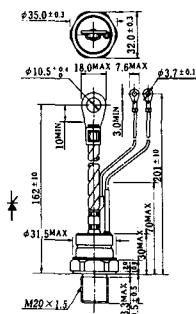
NI-4

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



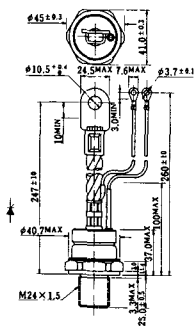
NI-5

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



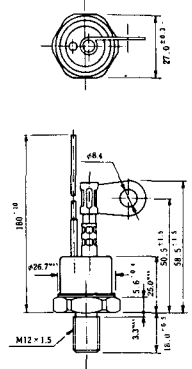
NI-7

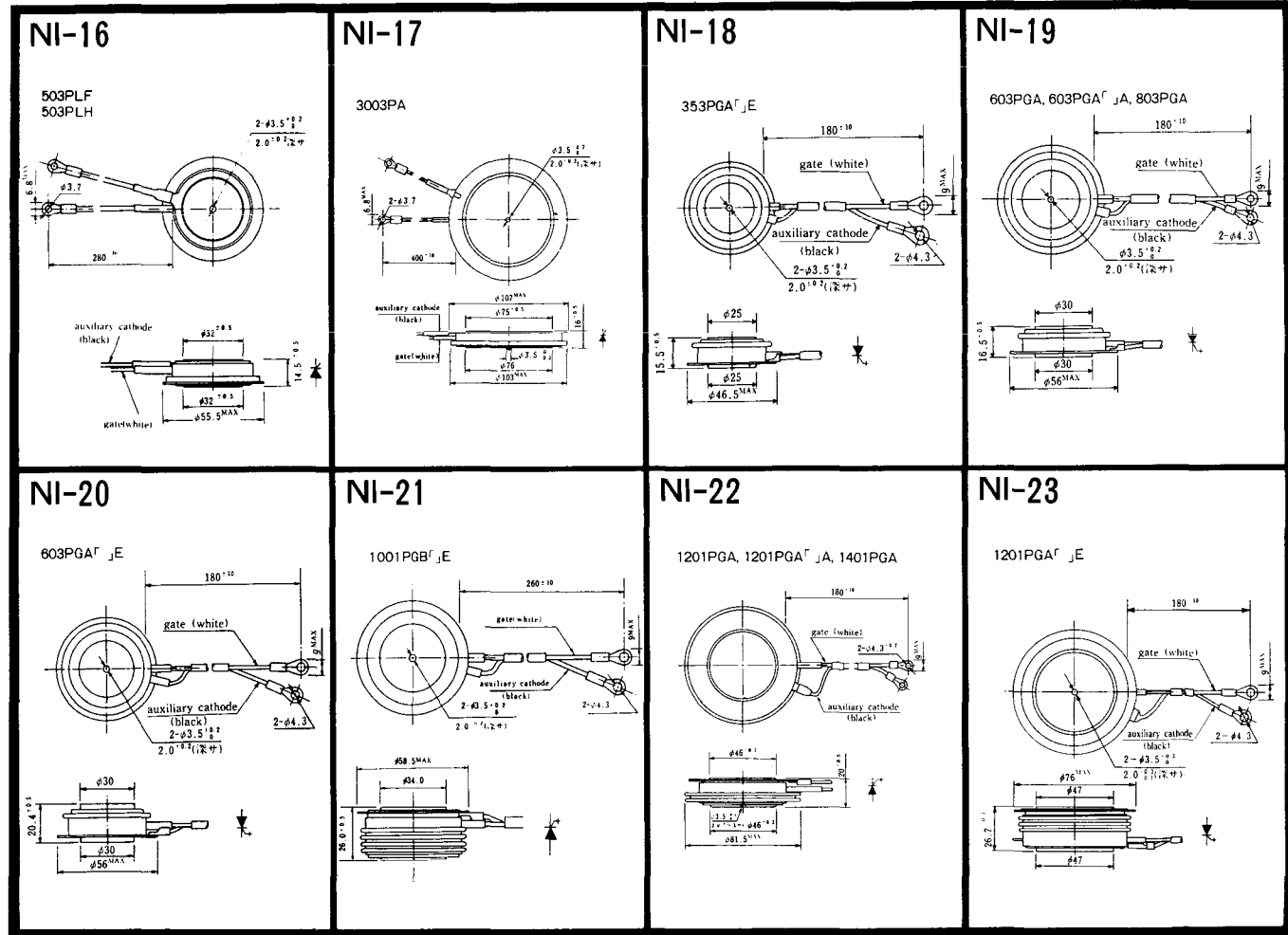
89RW_{JL}
129RW_{JL}



NI-8

89RW
129RW





NI-24

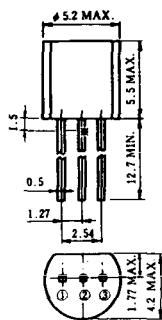
2001PGB^r JE



NI-25

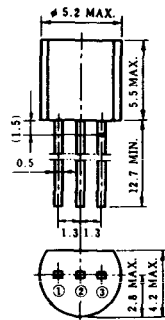
NI-26

NT-1



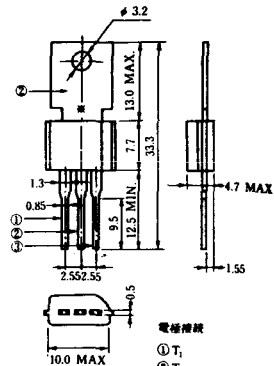
電極接続
① T₁
② ゲート
③ T₂

NT-2



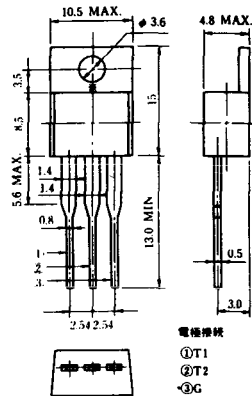
電極接続
① T₁
② ゲート
③ T₂

NT-3



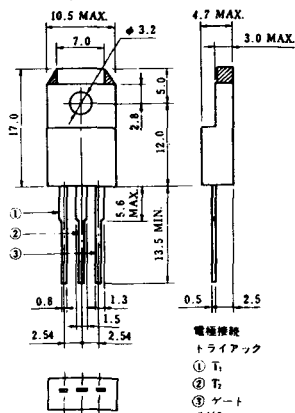
電極接続
① T₁
② T₂
③ ゲート

NT-4



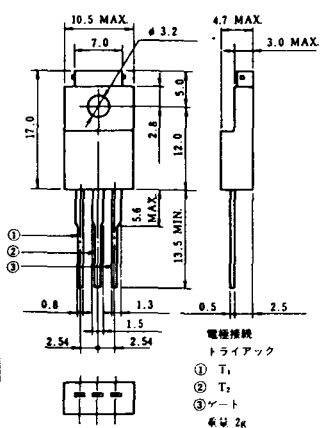
電極接続
① T₁
② T₂
③ G

NT-5



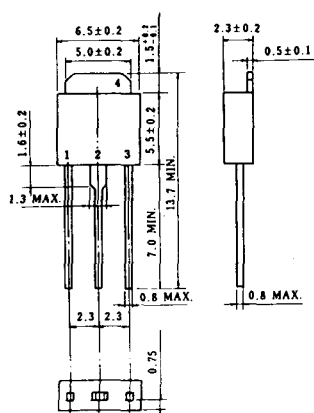
電極接続
トライアック
① T₁
② T₂
③ ゲート
④ G

NT-6

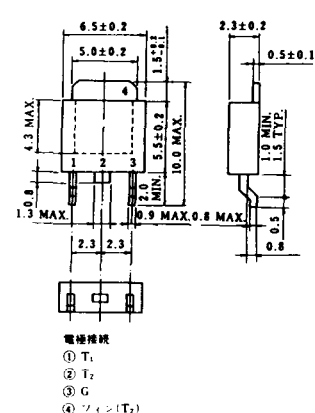


電極接続
トライアック
① T₁
② T₂
③ ゲート
④ G

NT-7

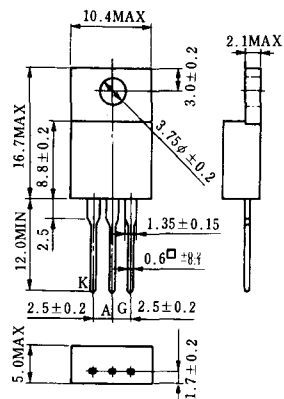


NT-8



電極接続
① T₁
② T₂
③ G
④ ソフト(T₂)

S-1



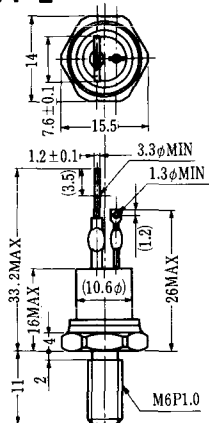
ST-1



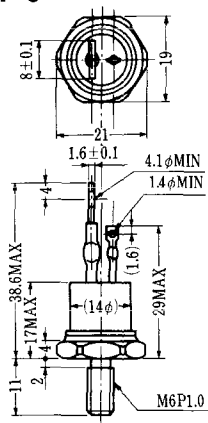
SA-1



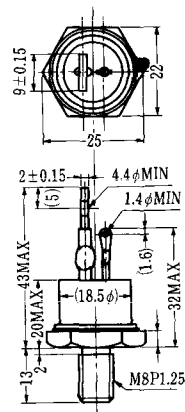
SA-2



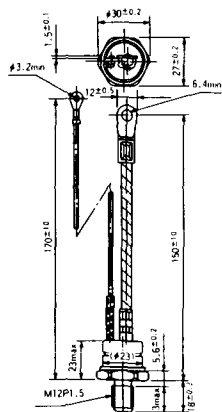
SA-3



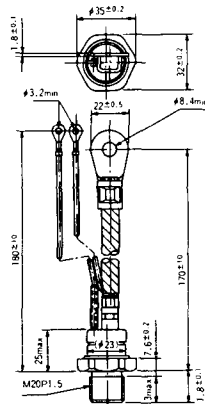
SA-4



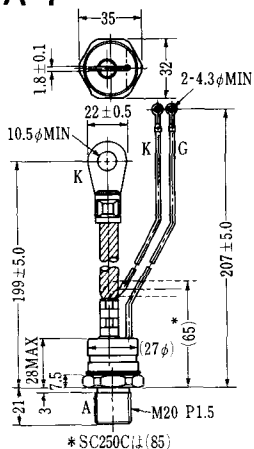
SA-5



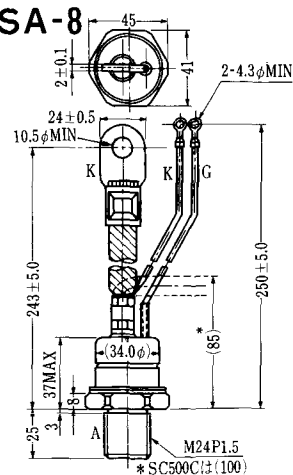
SA-6



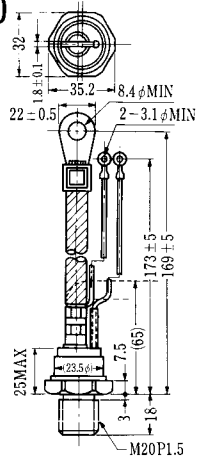
SA-7



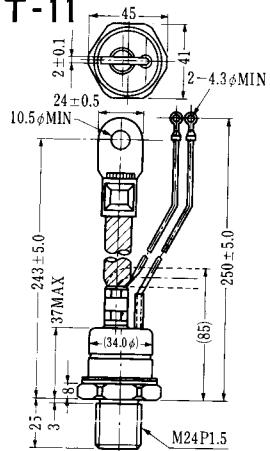
SA-8



SAT-10



SAT-11

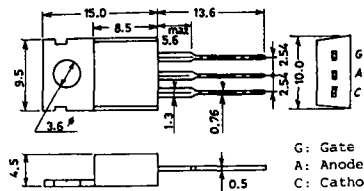


SY-1 (1096A)



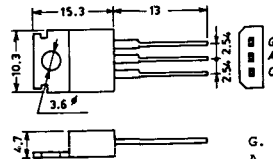
C: Cathode
A: Anode
G: Gate

SY-2 (1151)



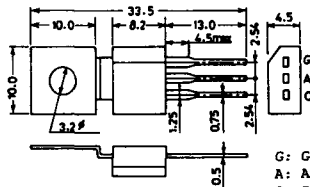
G: Gate
A: Anode
C: Cathode

SY-3 (1104)



G: Gate
A: Anode
C: Cathode

SY-4 (1150)



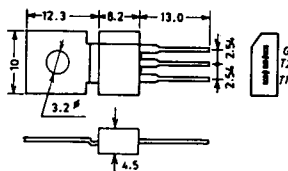
G: Gate
A: Anode
C: Cathode

1097A



G: Gate

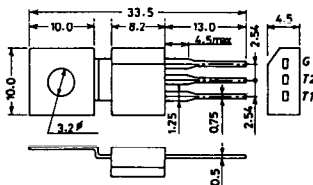
1102



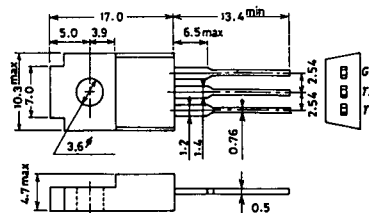
1141



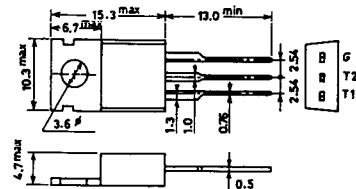
1142



1144



1155

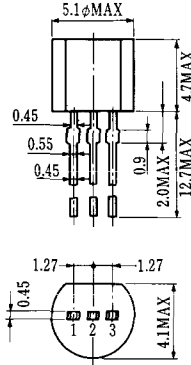


1192A



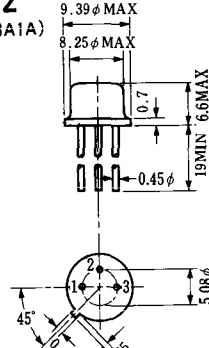
G: Gate

T-1 (13-5A1A)



- 1 ゲート
- 2 アノード
- 3 カソード

T-2 (13-8A1A)



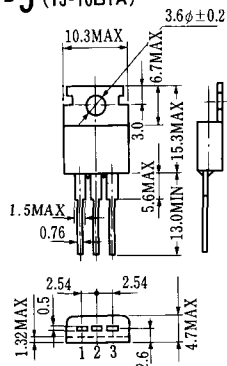
1. カソード
2. ゲート
3. アノード(ケース)

T-3 (13-8C1A)



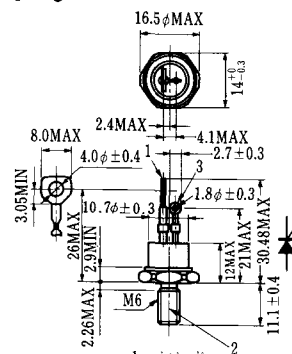
- 1 カソード
- 2 アノード
- 3 ゲート

T-5 (13-10B1A)



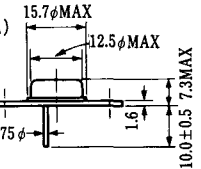
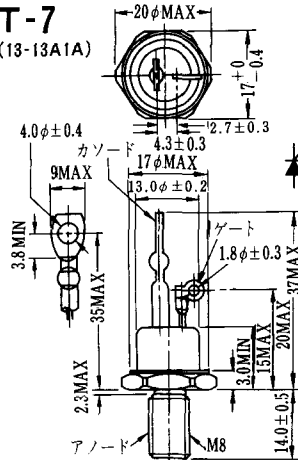
- 1 カソード
- 2 アノード
- 3 ゲート

T-6 (13-11D1A)



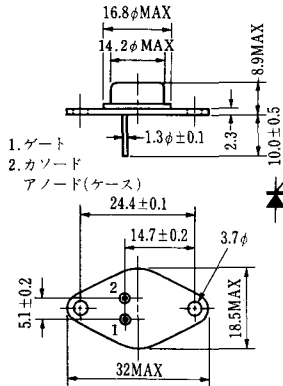
- 1 カソード
- 2 アノード
- 3 ゲート

T-7 (13-13A1A)



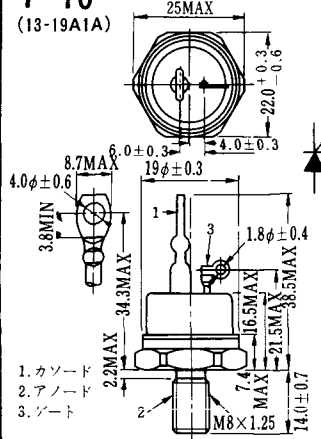
1. ゲート
2. カソード
3. アノード(ケース)

T-9 (13-14A1A)



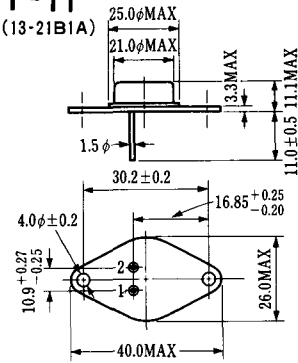
1. ゲート
2. カソード
- アノード(ケース)

T-10 (13-19A1A)



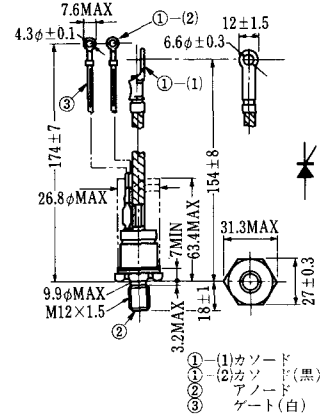
1. カソード
2. アノード
3. ゲート

T-11 (13-21B1A)



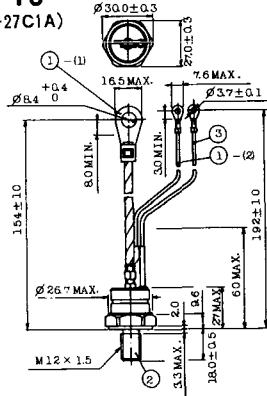
1. ゲート
2. カソード
- アノード(ケース)

T-12 (13-27B1B)



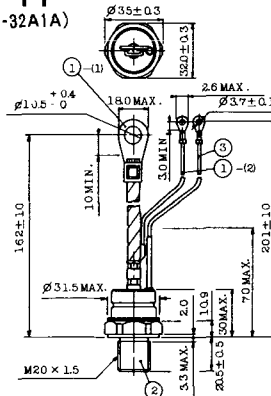
- ① (1) カソード
- ① (2) カソード(黒)
- ② アノード
- ③ ゲート(白)

T-13 (13-27C1A)



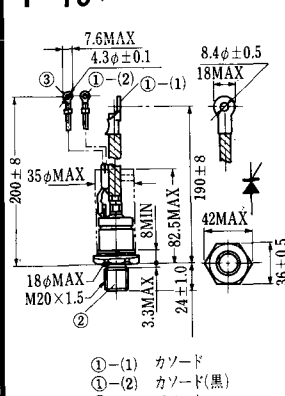
- 1-(1) カソード
- 1-(2) カソード(黒)
- 2 アノード
- 3 ゲート(白)

T-14 (13-32A1A)



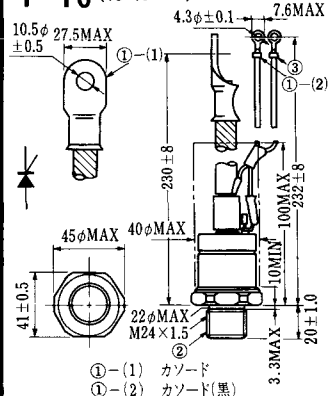
- 1-(1) カソード
- 1-(2) カソード(黒)
- 2 アノード
- 3 ゲート(白)

T-15 (13-35C1B)



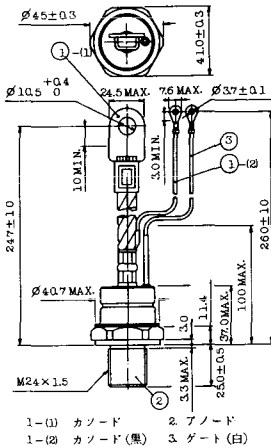
- ① (1) カソード
- ① (2) カソード(黒)
- ② アノード
- ③ ゲート(白)

T-16 (13-40B1A)

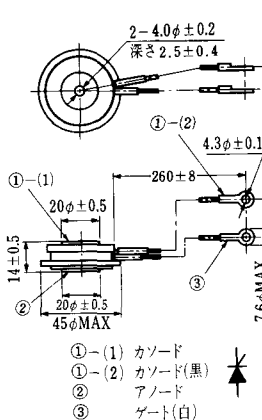


- ① (1) カソード
- ① (2) カソード(黒)
- ② アノード
- ③ ゲート(白)

T-17 (13-42A1A)



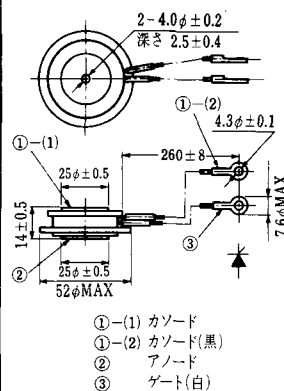
T-18 (13-45D1A)



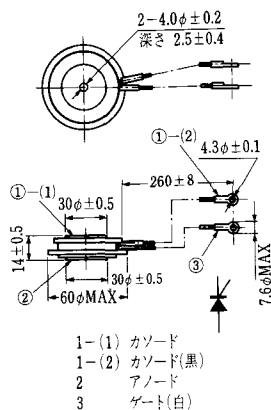
T-19 (13-52B1A)



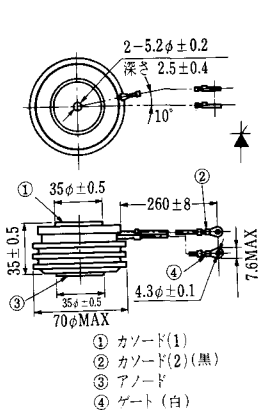
T-20 (13-52C1A)



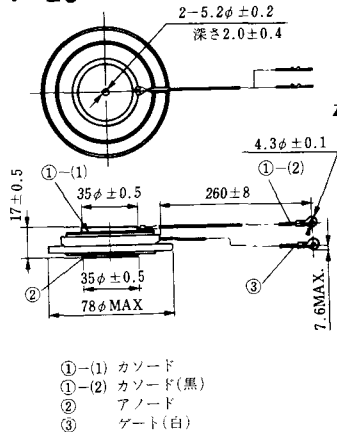
T-21 (13-60A1A)



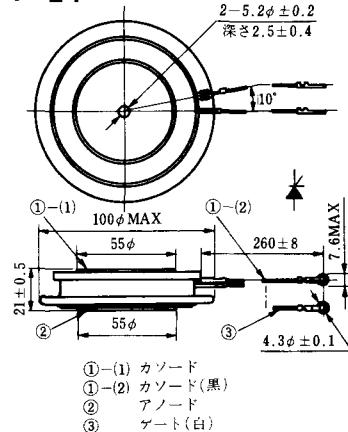
T-22 (13-70C1A)



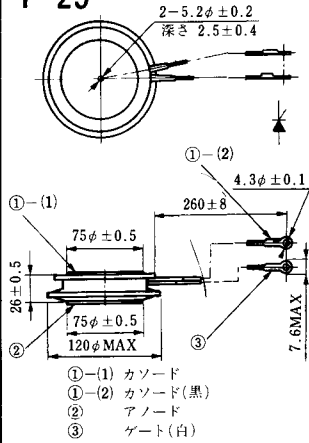
T-23 (13-78A1A)



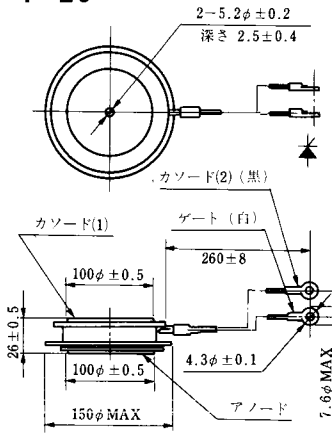
T-24 (13-100C1A)



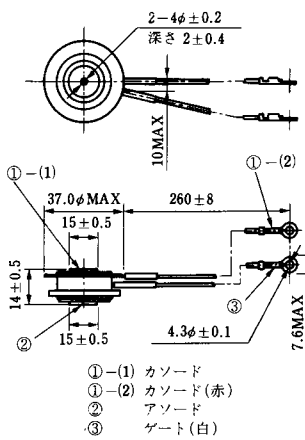
T-25 (13-120A2A)



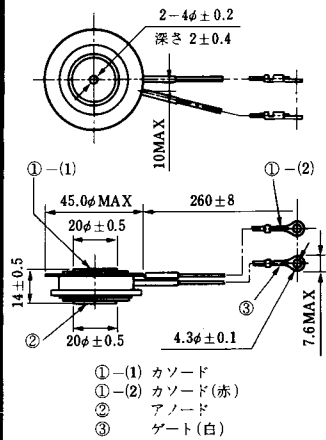
T-26 (13-150A1A)



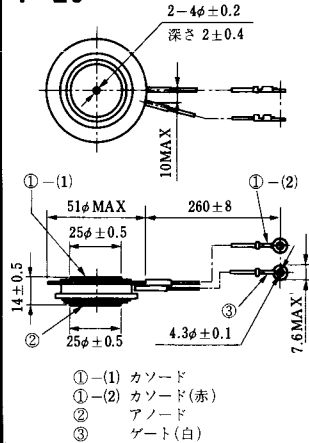
T-27 (13-37A1A)



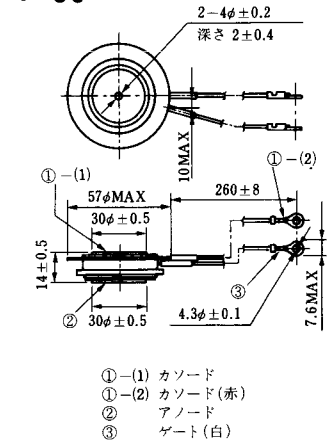
T-28 (13-45E1A)



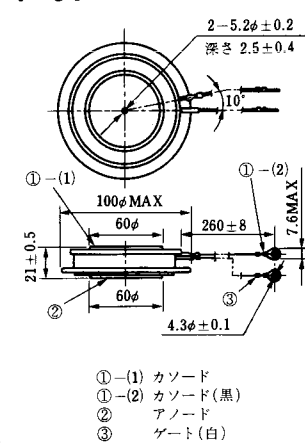
T-29 (13-51A1A)



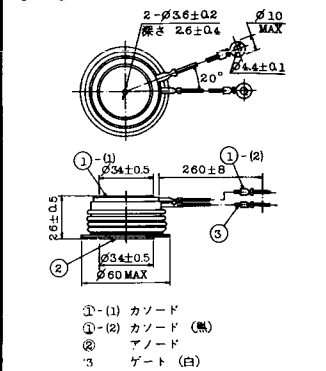
T-30 (13-57A1A)



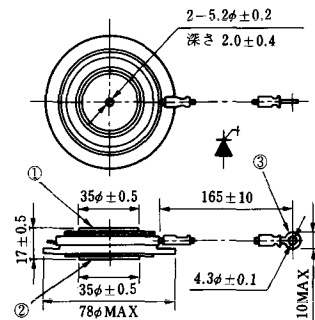
T-31 (13-100E1A)



T-32 (13-60E3A)

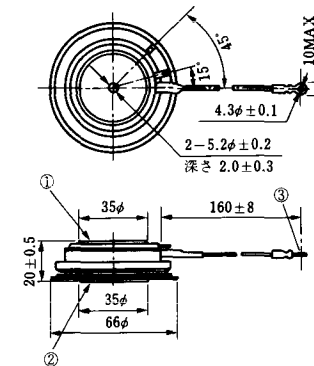


T-33 (13-78B1A)



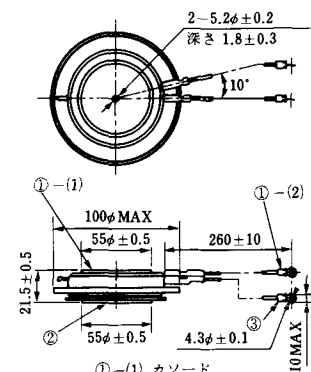
- ① カソード
- ② アノード
- ③ ゲート

T-34 (13-66A1A)



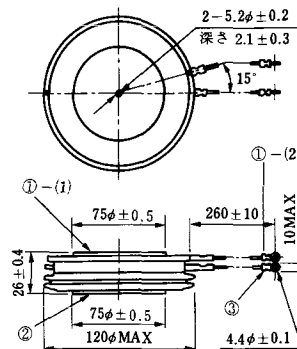
- ① カソード
- ② アノード
- ③ ゲート

T-35 (13-100D1A)



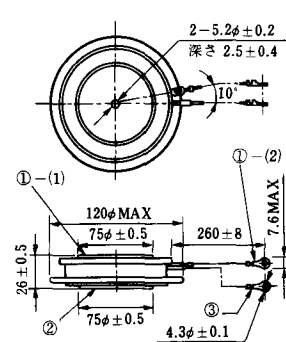
- ①-(1) カソード
- ①-(2) カソード(黒)
- ② アノード
- ③ ゲート(白)

T-36 (13-120E1A)



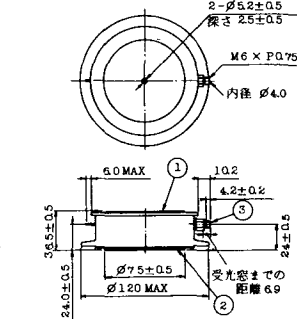
- ①-(1) カソード
- ①-(2) カソード(黒)
- ② アノード
- ③ ゲート(白)

T-37 (13-120A1A)



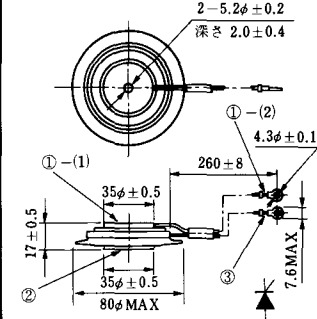
- ①-(1) カソード
- ①-(2) カソード(黒)
- ② アノード
- ③ ゲート(白)

T-38 (13-120C1A)



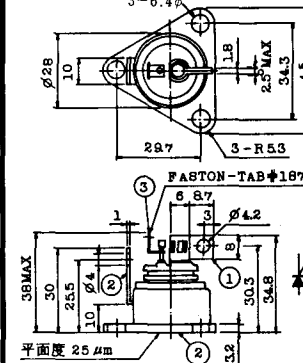
- ① カソード
- ② アノード
- ③ ゲート

T-39 (13-80B1A)



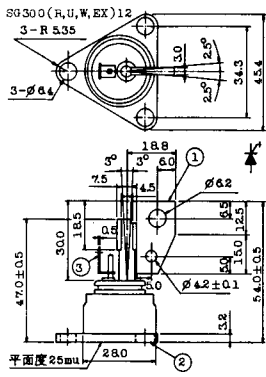
- ①-(1) カソード
- ①-(2) カソード(黒)
- ② アノード
- ③ ゲート(白)

T-40 (13-28A1A)



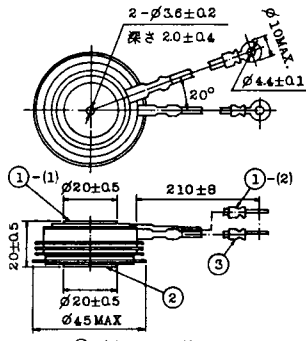
- 1. カソード
- 2. アノード
- 3. ゲート

T-41 (13-28A2A)



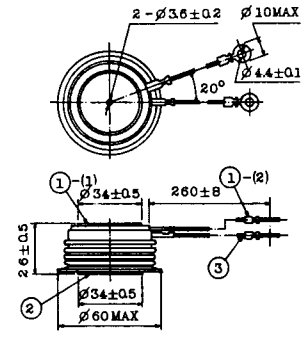
- 1 カソード
- 2 アノード
- 3 ゲート

T-42 (13-45F1A)



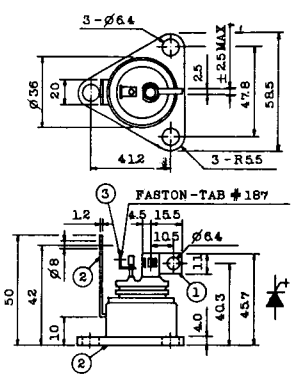
- ①-(1) カソード
- ①-(2) カソード(黒)
- ② アノード
- ③ ゲート(白)

T-43 (13-60E2A)



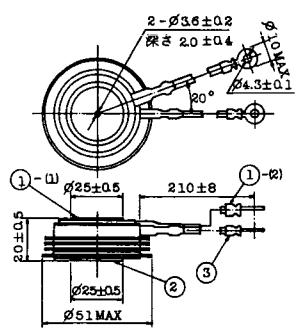
- ①-(1) カソード
- ①-(2) カソード(黒)
- ② アノード
- ③ ゲート(白)

T-44 (13-36A1A)



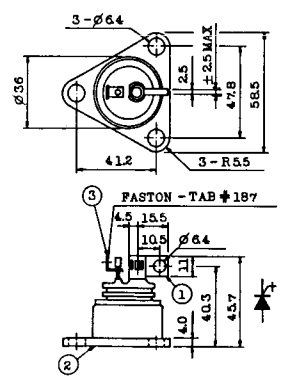
- 1 カソード
- 2 アノード
- 3 ゲート

T-45 (13-51B1A)



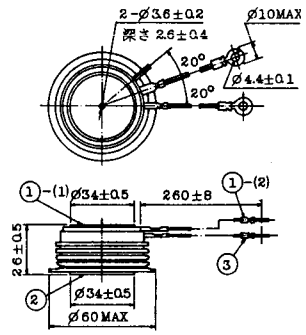
- ①-(1) カソード
- ①-(2) カソード(黒)
- ② アノード
- ③ ゲート(白)

T-46 (13-36B1A)



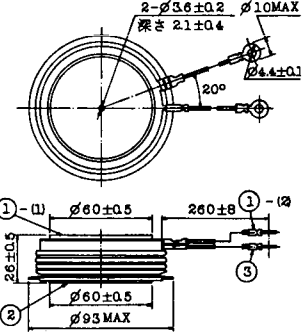
- 1 カソード
- 2 アノード
- 3 ゲート

T-47 (13-60E1A)



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

T-48 (13-93C1A)



- ①-(1) カソード
- ①-(2) カソード(黒色)
- ② アノード
- ③ ゲート(白色)

T-57 (12-16C1A)



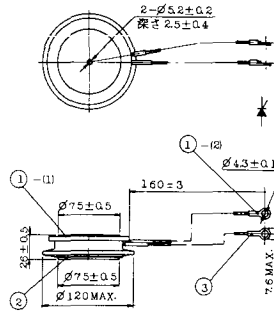
1. アノード (主)
2. ゲート (主)
3. カソード (共通)
4. ゲート (補助)
5. アノード (補助)

T-58 (13-10H1B)



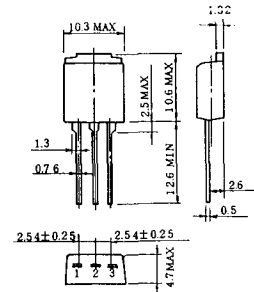
1. カソード
2. アノード
3. ゲート

T-59 (13-120A1A)



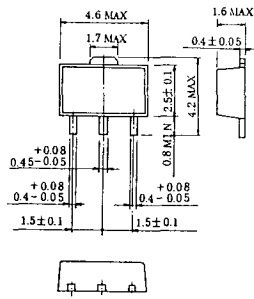
- 1-(1) カソード
- 1-(2) カソード (黒)
2. アノード
3. ゲート (白)

T-60



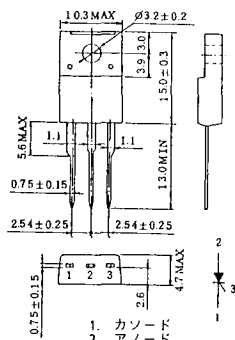
1. カソード
2. アノード
3. ゲート

T-61 (13-5B1A)



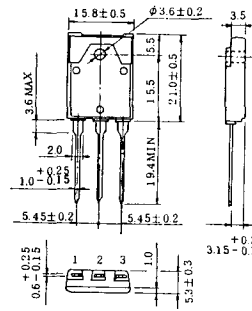
1. ゲート
2. アノード
3. カソード

T-62 (13-10H1A)



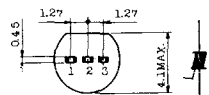
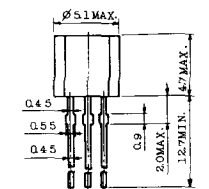
1. カソード
2. アノード
3. ゲート

T-63 (13-16A1B)



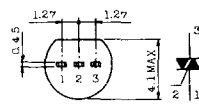
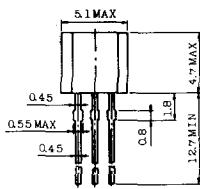
1. カソード
2. アノード
3. ゲート

TT-1



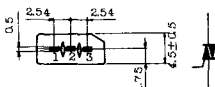
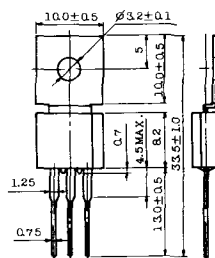
- 1 ゲート
- 2 T₂
- 3 T₁

TT-2



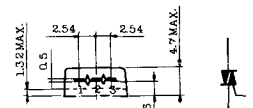
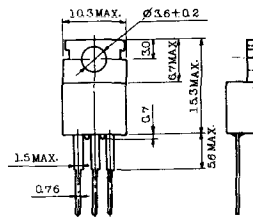
- 1 T₁
- 2 ゲート
- 3 T₂

TT-3



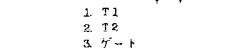
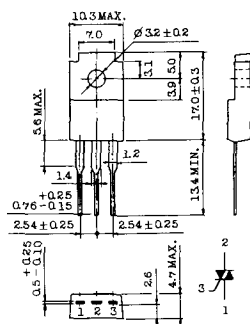
- 1 T₁
- 2 T₂
- 3 ゲート

TT-4



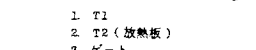
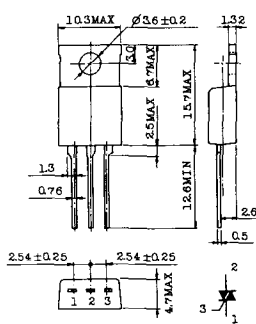
- 1 T₁
- 2 T₂
- 3 ゲート

TT-5



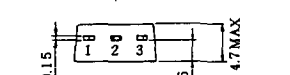
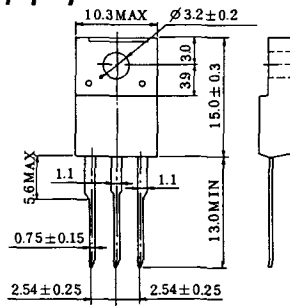
- 1 T₁
- 2 T₂
- 3 ゲート

TT-6



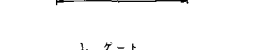
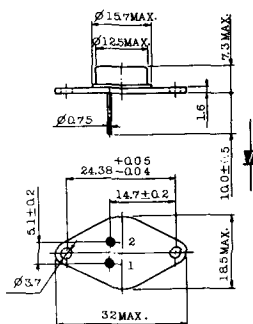
- 1 T₁
- 2 T₂ (放熱板)
- 3 ゲート

TT-7



- 1 T₁
- 2 T₂
- 3 ゲート

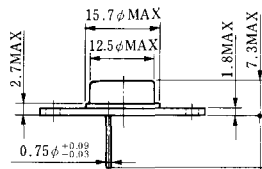
TT-8



- 1 ゲート
- 2 T₁
- T₂ (ケース)

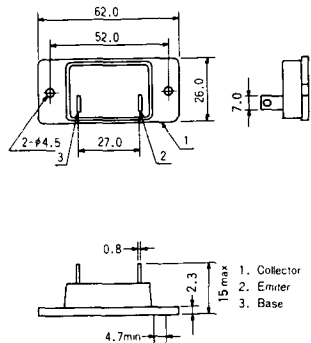


TS-8

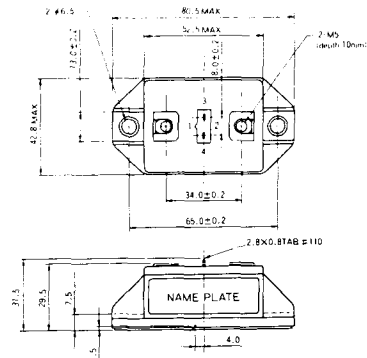


- 1. ベース
- 2. エミッタ
コレクタ
(ケース)

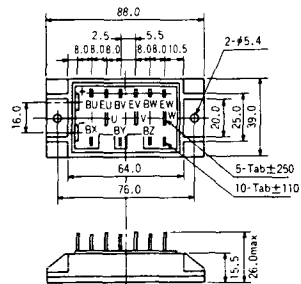
S-62A1A



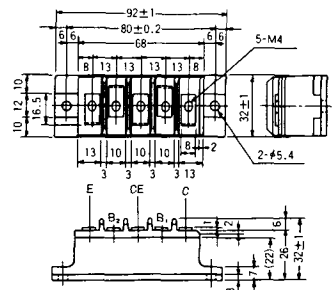
S-80A1A



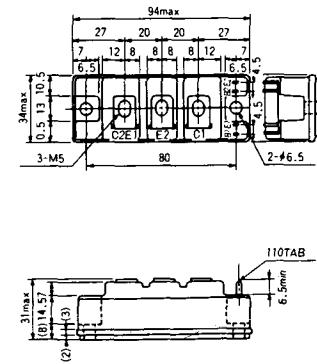
S-88D1A



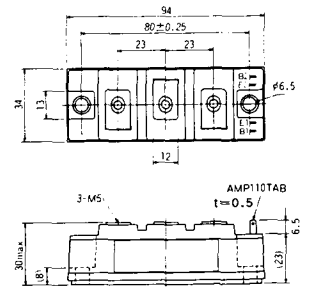
S-92B1A



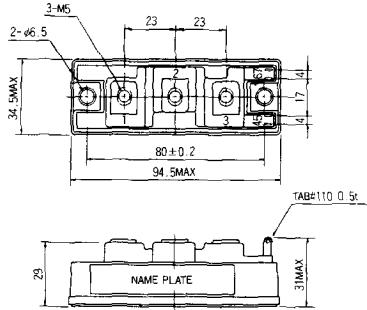
S-94B1A



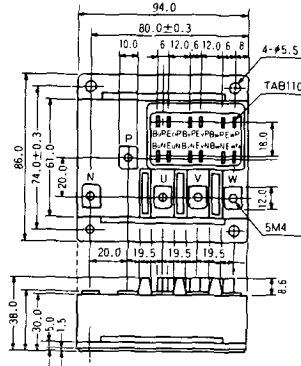
S-94B1B



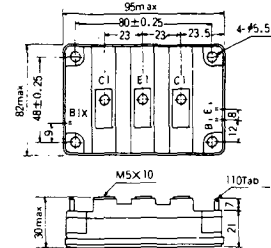
S-94B2A



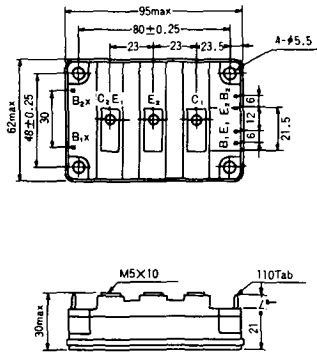
S-94D1A



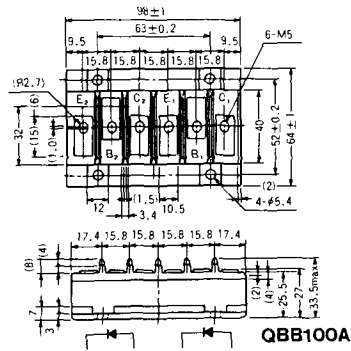
S-95A1A



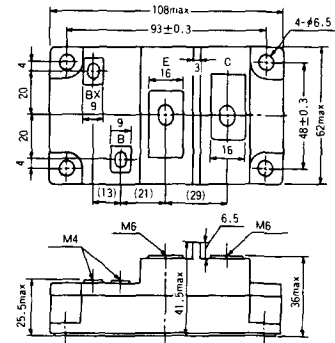
S-95B1A



S-98B1B



S-108A2A



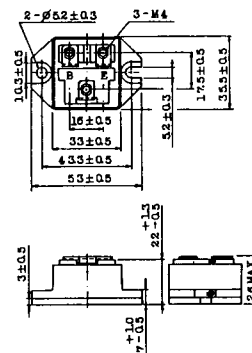
2-22B1A



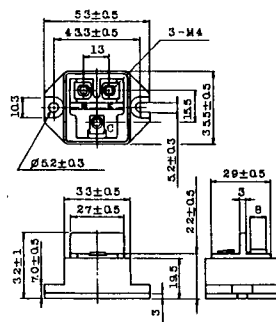
2-27A4A



2-33C1A



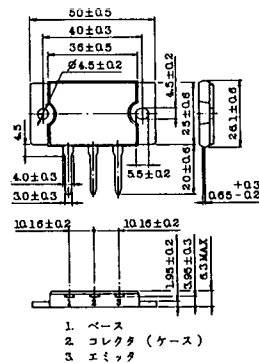
2-33D1A



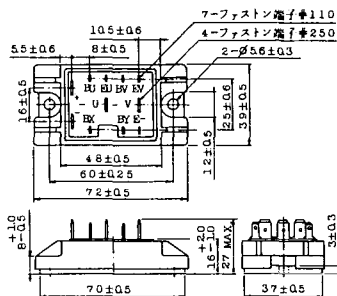
2-33F1A



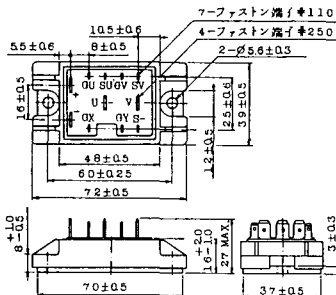
2-37A1A



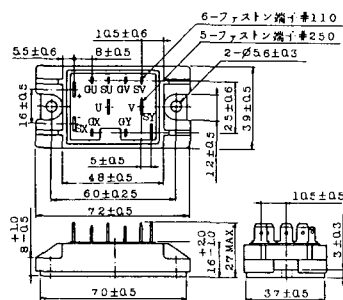
2-48A3A



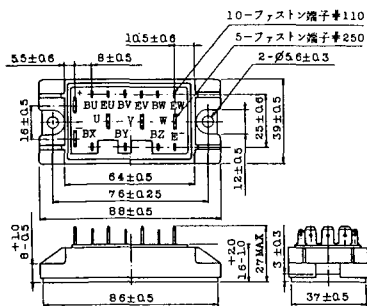
2-48A3B



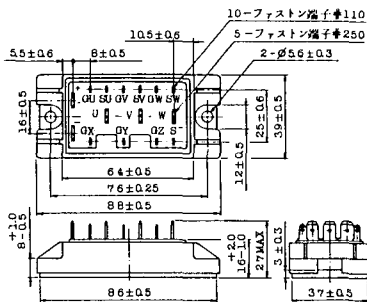
2-48A4A



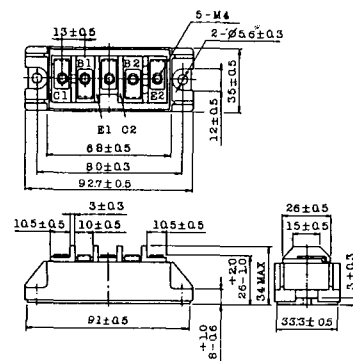
2-64A2A



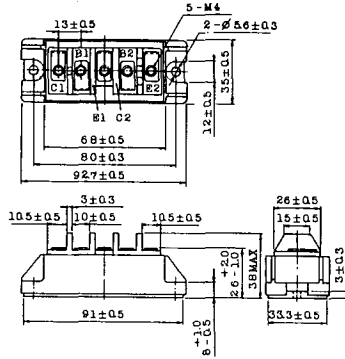
2-64A2B



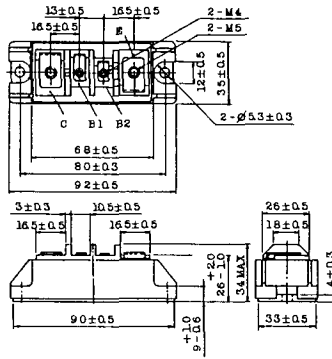
2-68A2A



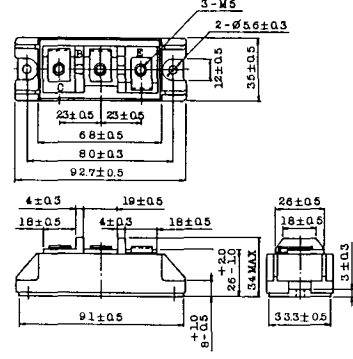
2-68B2A



2-68C1A



2-68D2A



2-72A3A



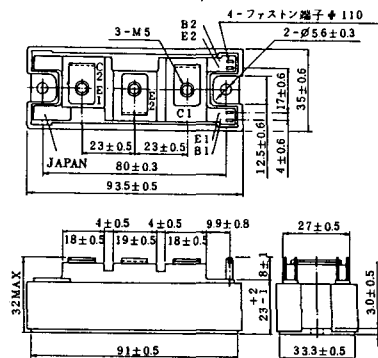
2-80A1A



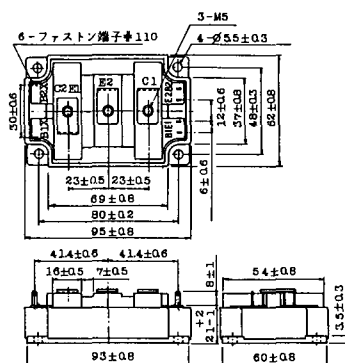
2-80B1A



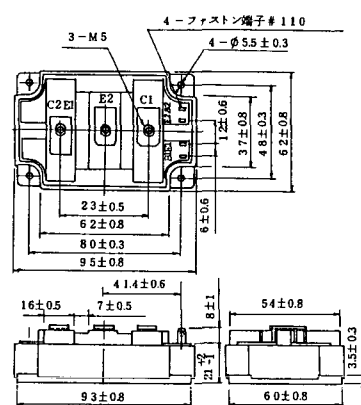
2-94D1A



2-96A3A



2-96A4A



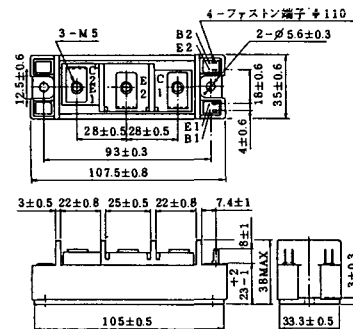
2-98B1A



2-98C2A



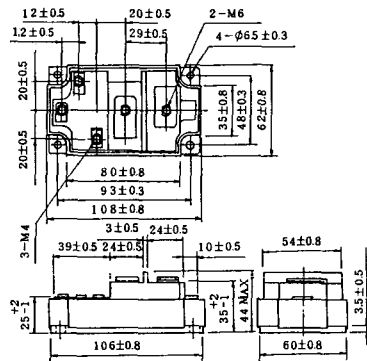
2-108A2A



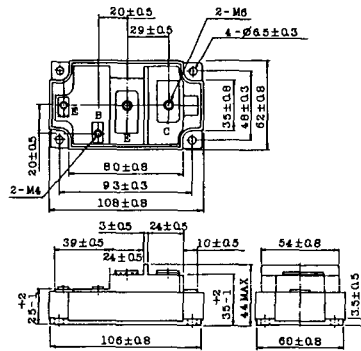
2-108B1A



2-109A3A



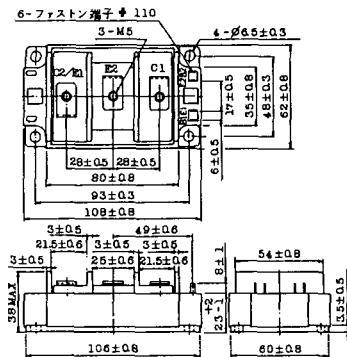
2-109A4A



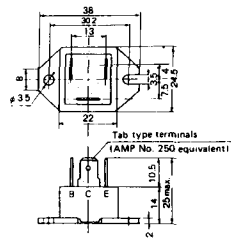
2-109B3A



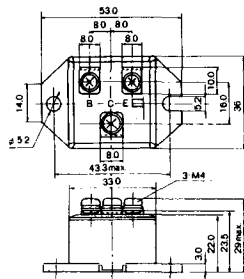
2-109B4A



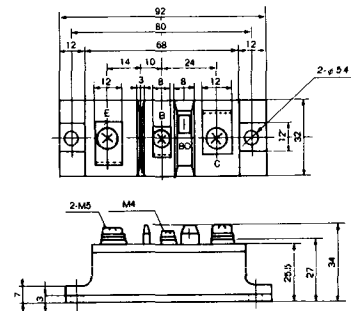
M-101



M-102



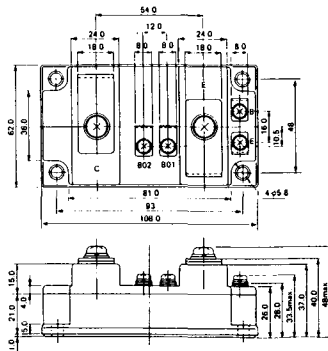
M-103



M-104



M-105



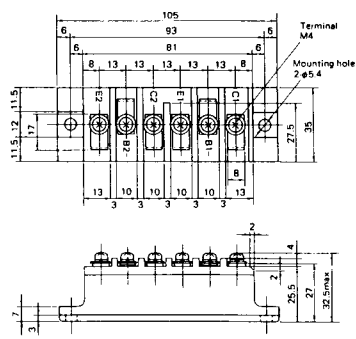
M-106



M-201



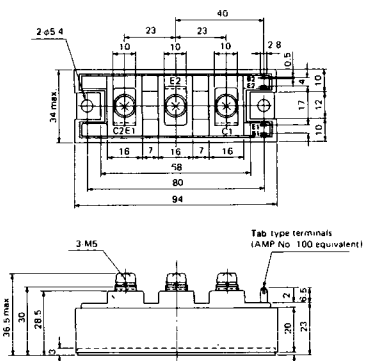
M-202



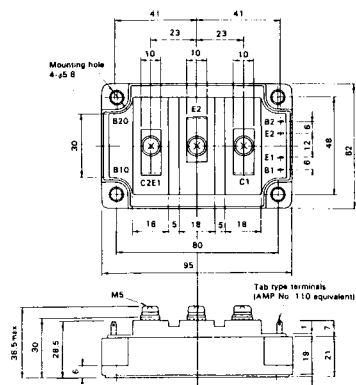
M-203



M-204



M-205



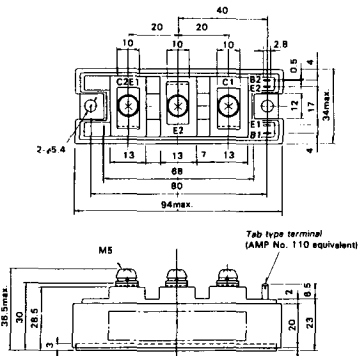
M-206



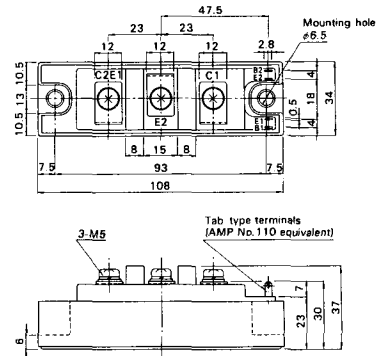
M-207



M-208



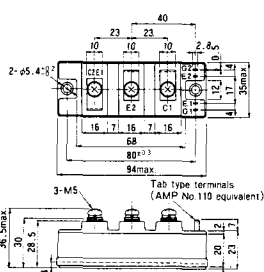
M-209



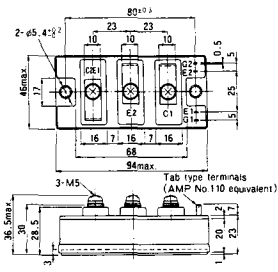
M-210



M-211



M-212



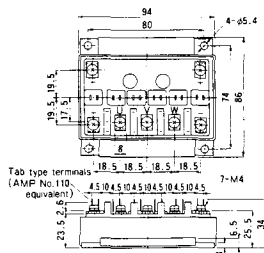
M-219



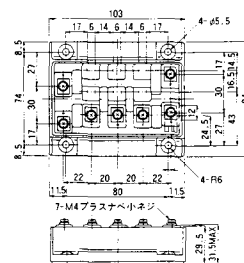
M-607



M-608



M-609



M-610



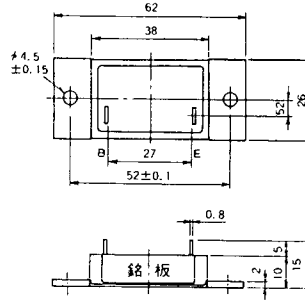
M-616



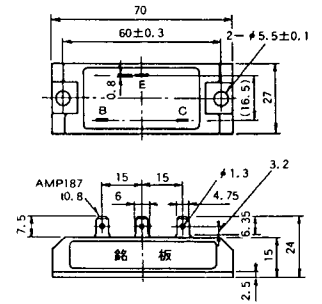
M-1A1A



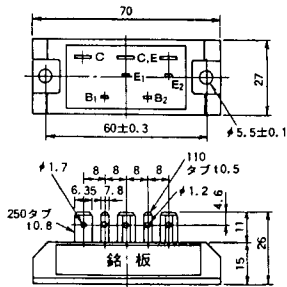
M-2A1A



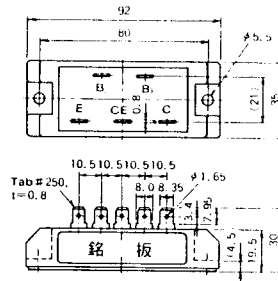
M-2B1A



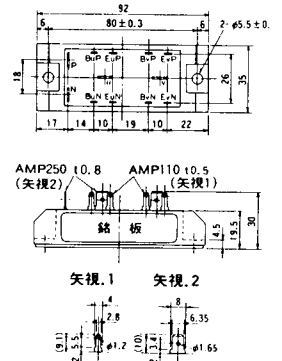
M-2B2A



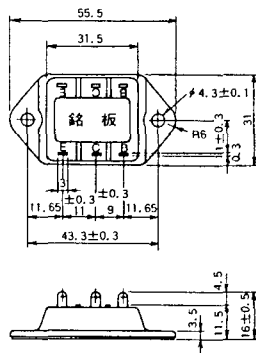
M-2C2A



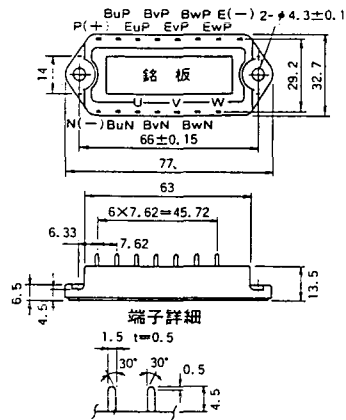
M-2D4A



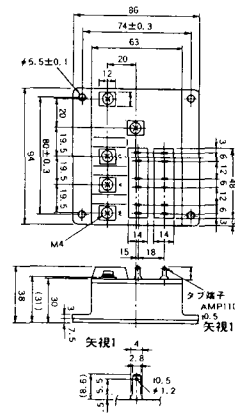
M-3C1A



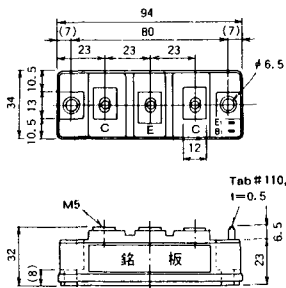
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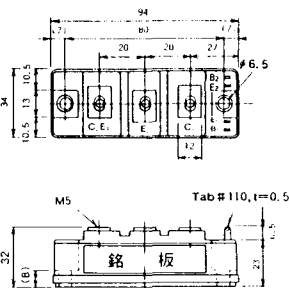
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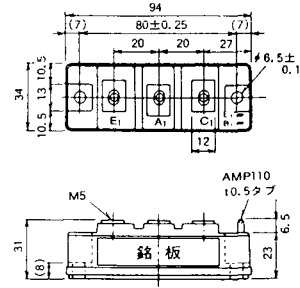
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M-4A2A



M-4A1B



M-4A2B



M-4B2A



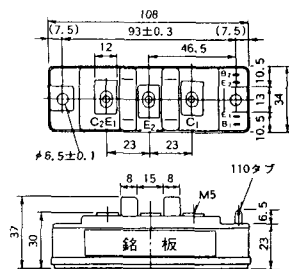
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M-5A1B



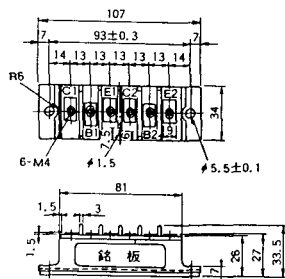
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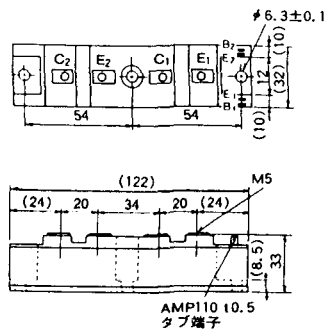
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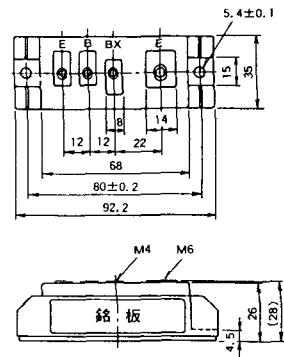
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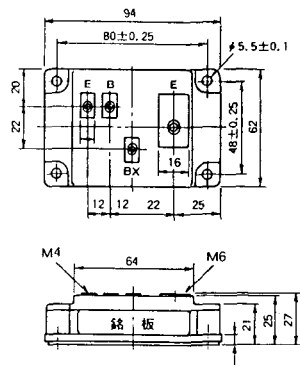
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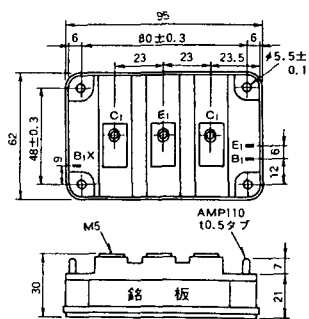
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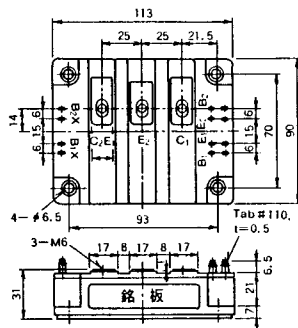
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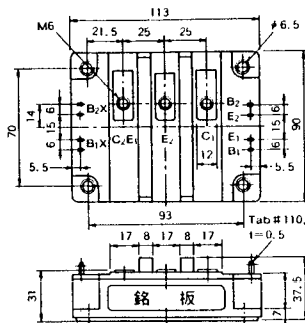
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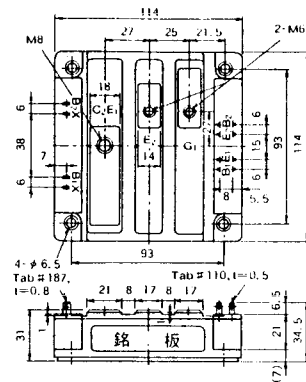
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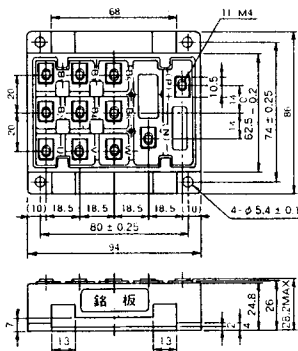
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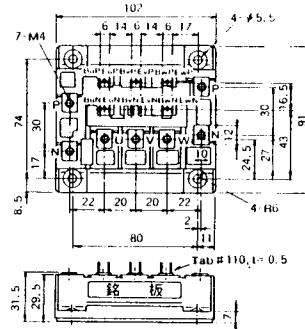
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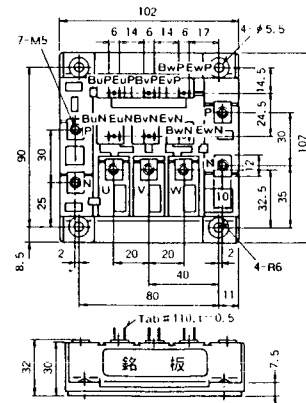
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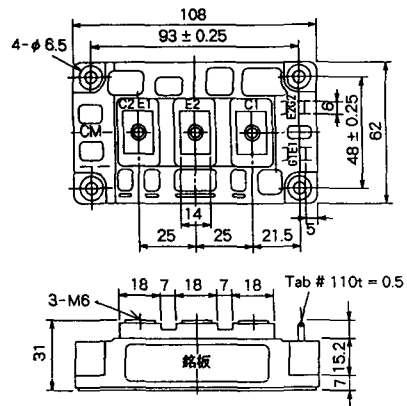
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M-12B6B



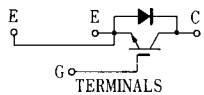
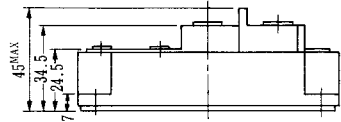
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M-10A2C

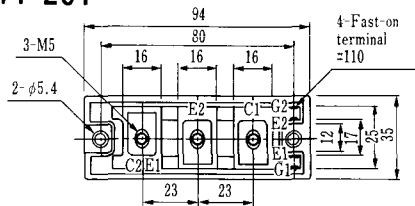


H-101



Weight :480g

H-201



Weight: 200g

H-202



Weight: 360g

LF-J



LF-K



