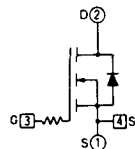


- MOS FETを1個/ 2個内蔵
- 絶縁形
- フリーホイール・ダイオード付
- UL認定品: No. E76102 (M)

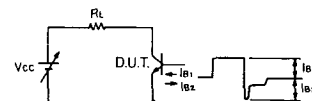
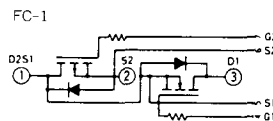
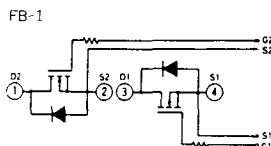
SF-1



注1. \$: duty=75%, #: duty=90%, *: duty=80%。 注2. $T_c = 25^{\circ}\text{C}$ 。 注3. AC, 1分間。

型 名	最 大 定 格 (T _i =25℃)							電 氣 的 特 性 (T _i =25℃)																	
	V _{DSS}	V _{GSS}	I _D	I _{DP}	P _D	T _{ch}	T _{AIR}	V _{ISO}	I _{OSS}	I _{DSS}	V _{(ON) DSS}	V _{GS (OFF)}				Y _{fz}		R _{DS (ON)}		R _{DS (ON)}		R _{DS (ON)}			
	(V)	(V)	(注1) (A)	(ImS) (A)	(W)(注2)	(℃)	(℃)	(注3) (V)	(nA) 最 大			V _{GS} (V)	(mA) 最 大	V _{DS} (V)	(V) 最 小	I _D (mA)	(V) 最 小	最 大	(V) 最 小	I _D (mA)	(V) 最 小	I _D (mA)	(V) 最 小	I _D (mA)	(V) 最 小
SF100AA20	200	±20	±100	360	500	150	-40~125	2500	±500	±20	1.0	200	200	1.0	2.0	4.0	V _{GS}	15	45 *	10	50	0.025	15	50	
SF100AA50	500	±20	±100*	200	780	150	-40~125	2500	±1000	±20	2.0	500	500	1.0	1.5	4.0	V _{GS}	15	50 *	10	50	0.050	15	50	
SF150AA20	200	±20	±150*	500	700	150	-40~125	2500	±750	±20	1.0	200	200	1.0	2.0	4.0	V _{GS}	15	65 *	10	75	0.017	15	75	
SF200AA10	100	±20	±200*	700	500	150	-40~125	2500	±750	±20	1.0	100	100	1.0	2.0	4.0	V _{GS}	15	100 *	10	100	0.008	15	100	
FBA50AA45	450	±20	±50	100	400	150	-40~125	2500	±500	±20	1.0	450	450	1.0	1.5	4.0	V _{GS}	10	25 *	10	25	0.1	15	25	
FBA50AA50	500	±20	±50	100	400	150	-40~125	2500	±500	±20	1.0	500	500	1.0	1.5	4.0	V _{GS}	10	25 *	10	25	0.1	15	25	
FBA75AA45	450	±20	±75	150	690	150	-40~125	2500	±500	±20	1.0	450	450	1.0	1.5	4.0	V _{GS}	10	40 *	10	40	0.1	15	40	
FBA75AA50	500	±20	±75	150	690	150	-40~125	2500	±500	±20	1.0	500	500	1.0	1.5	4.0	V _{GS}	10	40 *	10	40	0.1	15	40	
FCA50AA45	450	±20	±50	100	300	150	-40~125	2500	±500	±20	1.0	450	450	1.0	1.5	4.0	V _{GS}	10	25 *	10	25	0.1	15	25	
FCA50AA50	500	±20	±50	100	300	150	-40~125	2500	±500	±20	1.0	500	500	1.0	1.5	4.0	V _{GS}	10	25 *	10	25	0.1	15	25	
FCA50AB45	450	±20	±50	100	300	150	-40~125	2500	±500	±20	1.0	450	450	1.0	1.5	4.0	V _{GS}	10	25 *	10	25	0.1	15	25	
FCA50AB50	500	±20	±50	100	300	150	-40~125	2500	±500	±20	1.0	500	500	1.0	1.5	4.0	V _{GS}	10	25 *	10	25	0.1	15	25	
FCA50AC45	450	±20	±50	100	400	150	-40~125	2500	±500	±20	1.0	450	450	1.0	1.5	4.0	V _{GS}	10	25 *	10	25	0.1	15	25	
FCA50AC50	500	±20	±50	100	400	150	-40~125	2500	±500	±20	1.0	500	500	1.0	1.5	4.0	V _{GS}	10	25 *	10	25	0.1	15	25	

■スイッチング時間測定回路



注4. スイッチング時間の * 印はtyp. 値。

C _{iss} (f = 1 MHz)														スイッチング時間 (ns)				V _{DSF}				t _{rr}				熱抵抗	等価回路	外形図	記	事	型	名
最大		V _{DS} (V)	V _{GS} (V)	t _r	t _{on}	t _d	t _{off}	R _G	R _L	I _D	V _{DSF} (V)	I _D (A)	t _{rr} (ns)	I _D (A)	V _{GS} (V)	di/dt (A/μs)	R _{th (JA)} (°C/W)	最大														
最大				最大	最大	最大	最大	(Ω)	(Ω)	(A)	最大			標準																		
10700	25	0		130 *	80 *	120 *	650 *	10	2.0	50	1.5	-50					0.25	SF-1	S-80A1A	1 個内蔵。専用コネクタ有り	SF100AA20											
24000	25	0		110 *	90 *	250 *	1100 *	10	6.0	50	1.5	-50	300	-50		100	0.16	SF-1	S-80A1A	1 個内蔵。専用コネクタ有り	SF100AA50											
16000	25	0		240 *	80 *	330 *	1300 *	10	1.3	75	1.5	-75					0.18	SF-1	S-80A1A	1 個内蔵。専用コネクタ有り	SF150AA20											
18000	25	0									1.8	-100					0.25	SF-1	S-80A1A	1 個内蔵。専用コネクタ有り	SP200AA10											
12000	25	0		100 *	70 *	250 *	1000 *	10	12	25	1.5	-25	300	-25		100	0.31	FB-1	S-108B1C	2 個内蔵 (分離形)。UL 認定品	FBA50AA45											
12000	25	0		100 *	70 *	250 *	1000 *	10	12	25	1.5	-25	300	-25		100	0.31	FB-1	S-108B1C	2 個内蔵 (分離形)。UL 認定品	FBA50AA50											
12000	25	0		110 *	70 *	200 *	800 *	10	7.5	40	1.5	-40	320	-40		100	0.18	FB-1	S-108B1C	2 個内蔵 (分離形)	FBA75AA45											
12000	25	0		110 *	70 *	200 *	800 *	10	7.5	40	1.5	-40	320	-40		100	0.18	FB-1	S-108B1C	2 個内蔵 (分離形)	FBA75AA50											
12000	25	0		100 *	70 *	250 *	1000 *	10	12	25	1.5	-25	300	-25		100	0.41	FC-1	S-94B2A	2 個直列接続。UL 認定品	PCA50AA45											
12000	25	0		100 *	70 *	250 *	1000 *	10	12	25	1.5	-25	300	-25		100	0.41	FC-1	S-94B2A	2 個直列接続。UL 認定品	PCA50AA50											
12000	25	0		100 *	70 *	250 *	1000 *	10	12	25	1.5	-25	300	-25		100	0.41	FC-1	S-94B2A	2 個直列接続。UL 認定品	PCA50AB45											
12000	25	0		100 *	70 *	250 *	1000 *	10	12	25	1.5	-25	300	-25		100	0.41	FC-1	S-94B2A	2 個直列接続。UL 認定品	PCA50AB50											
12000	25	0		100 *	70 *	250 *	1000 *	10	12	25	1.5	-25	300	-25		100	0.31	FC-1	S-108B1A	2 個直列接続。UL 認定品	PCA50AC45											
12000	25	0		100 *	70 *	250 *	1000 *	10	12	25	1.5	-25	300	-25		100	0.31	FC-1	S-108B1A	2 個直列接続。UL 認定品	PCA50AC50											

FD-1



FD-2



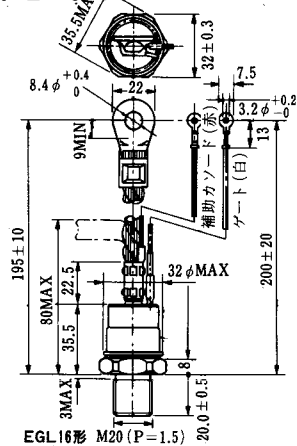
FD-3



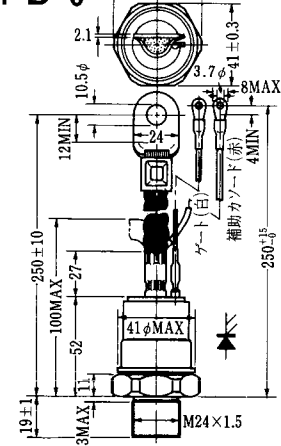
FD-4



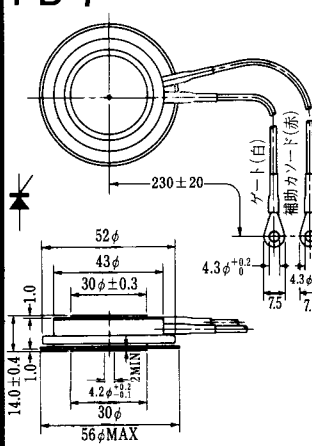
FD-5



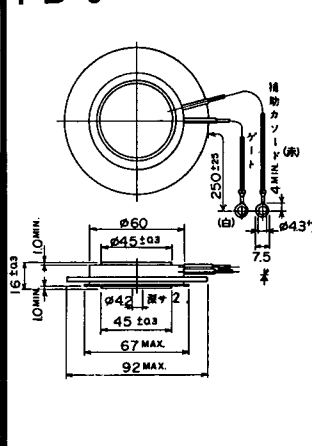
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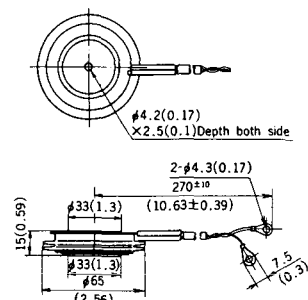
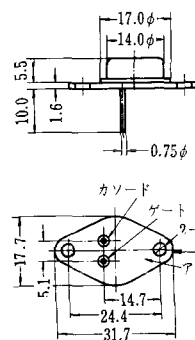
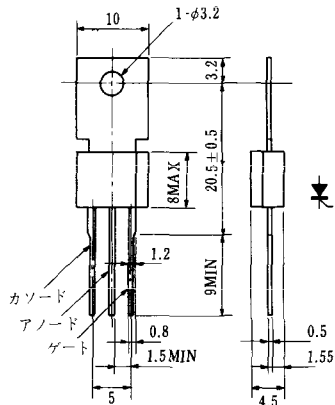


FD-7

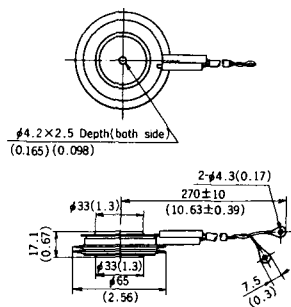


FD-8

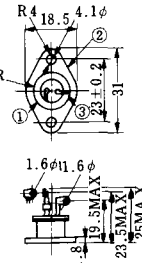
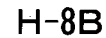
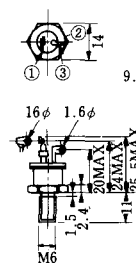
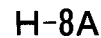
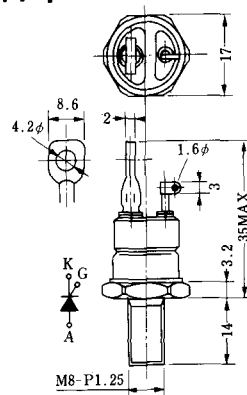
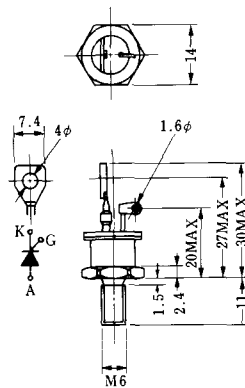




Unit in mm(inch)

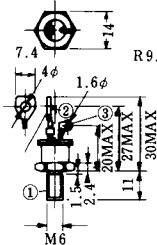


Unit in mm(inch)

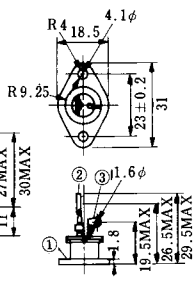


- ①アノード
- ②カソード
- ③ゲート

H-9A



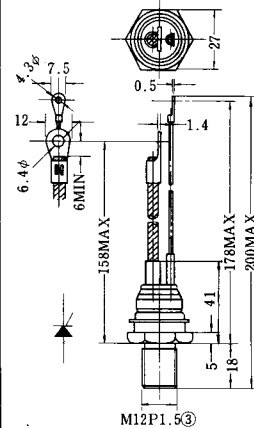
H-9B



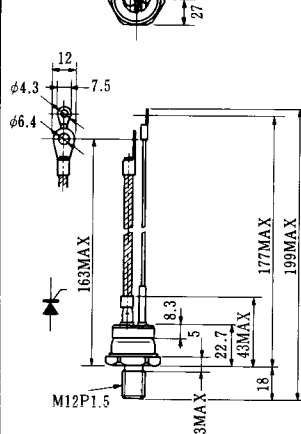
- ①アノード
②カソード
③ゲート



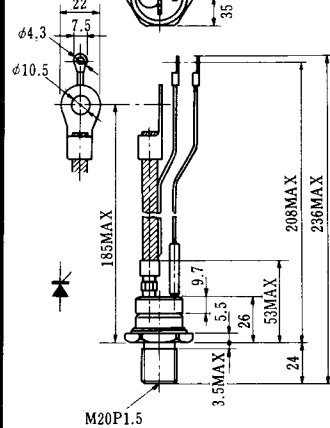
H-10



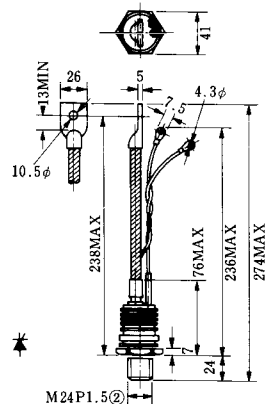
H-11



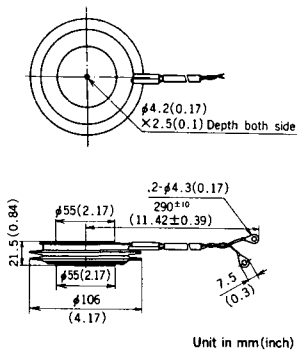
H-12



H-13

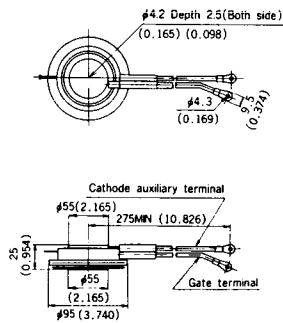


H-14



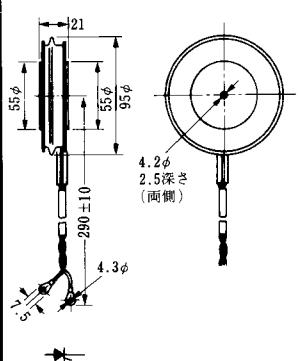
Unit in mm (inch)

H-15

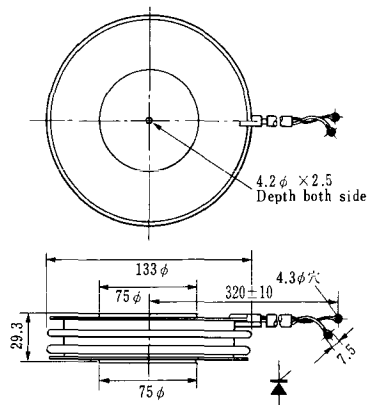


Unit in mm (inch)

H-16



H-17



H-18



H-19



H-20



H-21



H-22



H-23



H-24



H-25



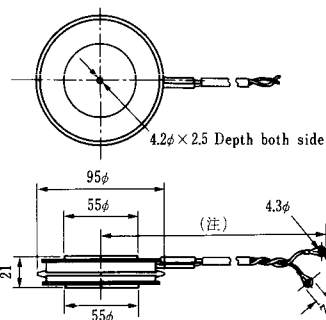
H-26



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

CA12	
------	--

H-27

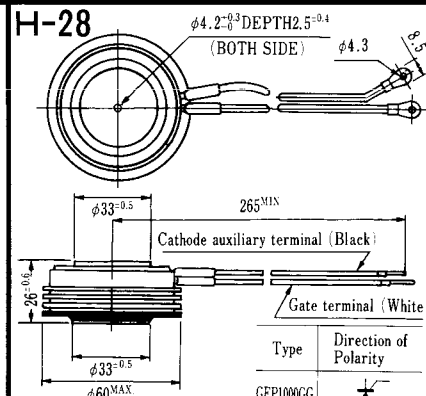


Type	Direction of polarity
------	-----------------------

CF11V	
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(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.

H-29



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

H-30



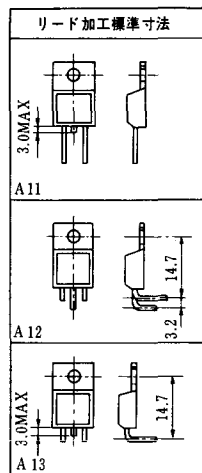
Note : The thickness is a dimension in press at the rated mounting force. Weight: 1,460(g)

HT-1

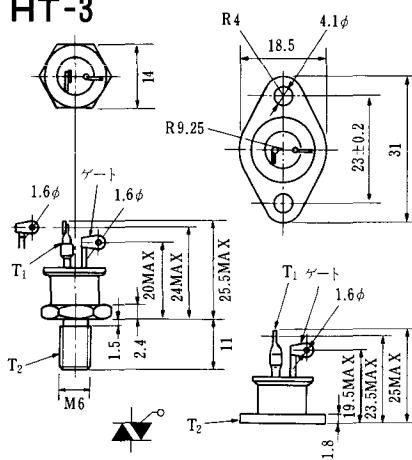


Unit in mm (inch)

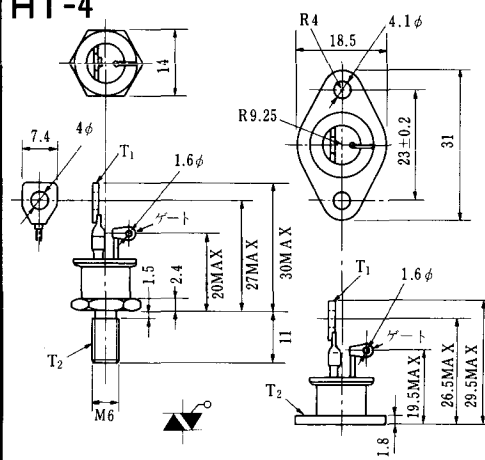
HT-2



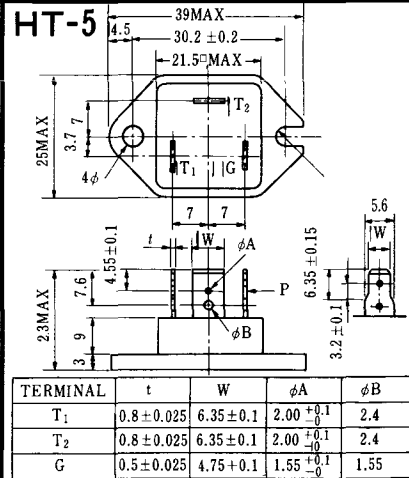
HT-3



HT-4



HT-5



《寸法図単位：mm》

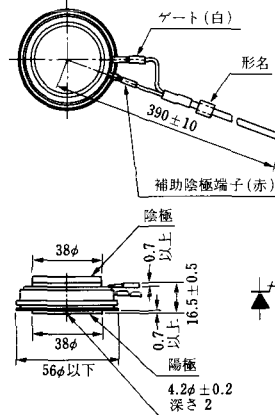
M-1



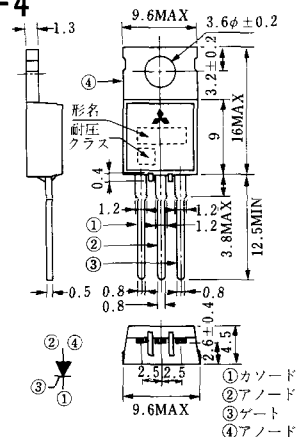
M-2



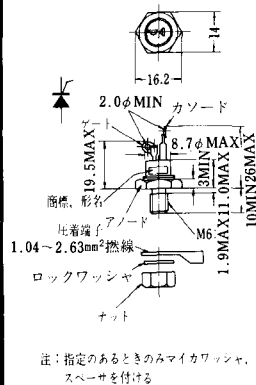
M-3



M-4



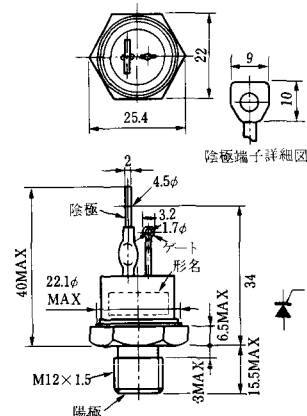
M-5



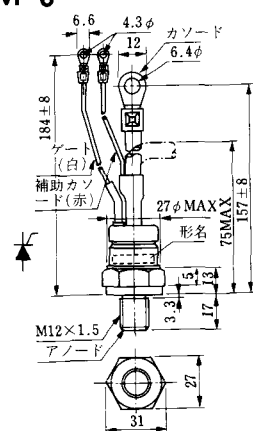
M-6



M-7



M-8



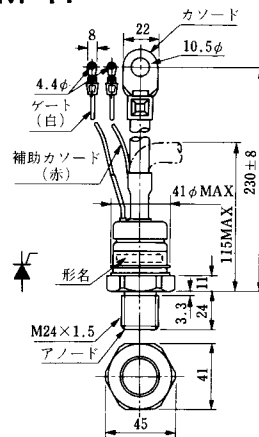
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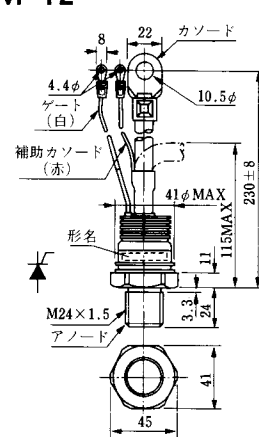
M-10



M-11



M-12



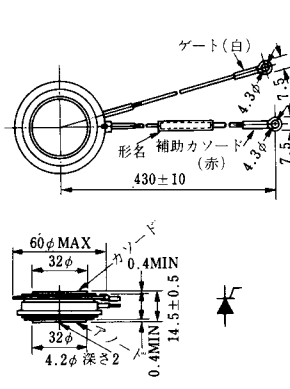
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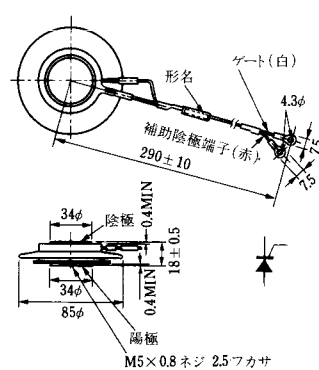
M-14



M-15



M-16



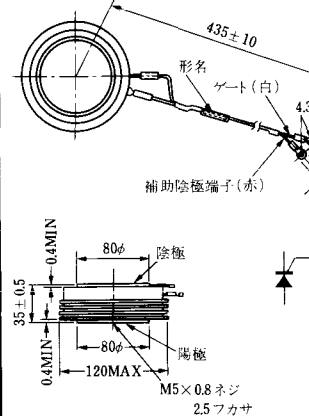
M-17



M-18



M-19



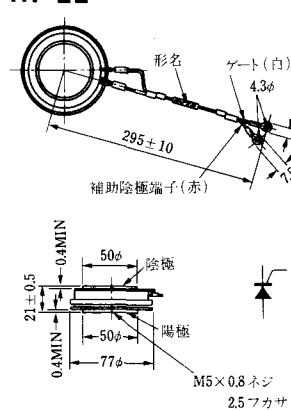
M-20



M-21



M-22



M-23



M-24



M-25



M-26



M-27



M-28



M-29



M-30



M-31



M-32



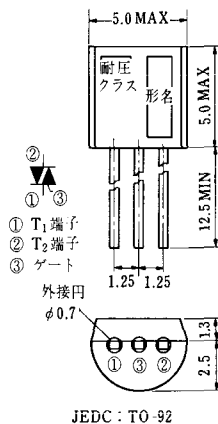
M-33



M-34



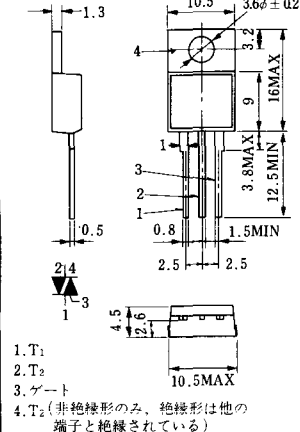
MT-1



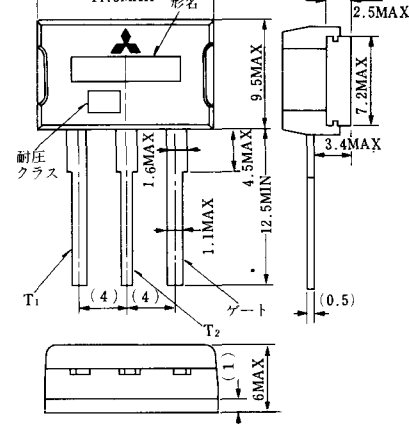
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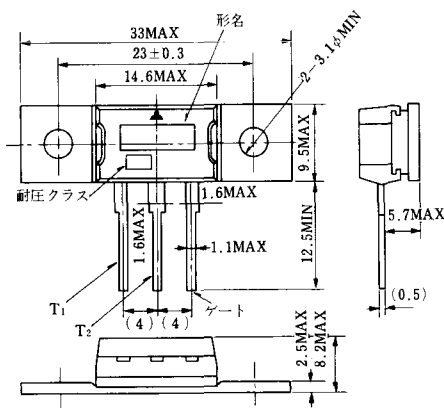
MT-3



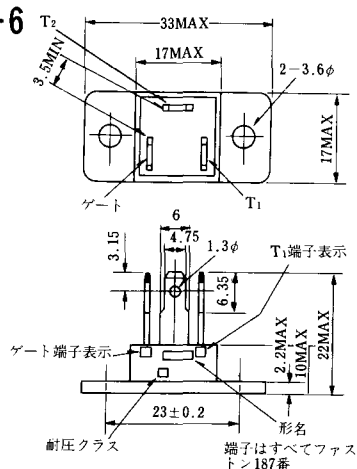
MT-4



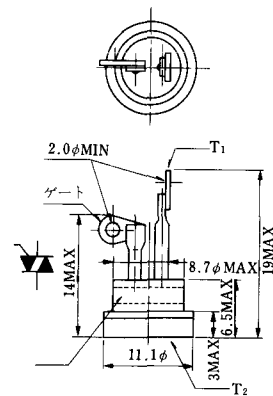
MT-5



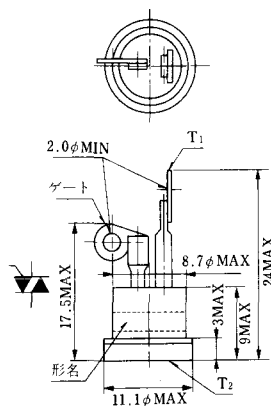
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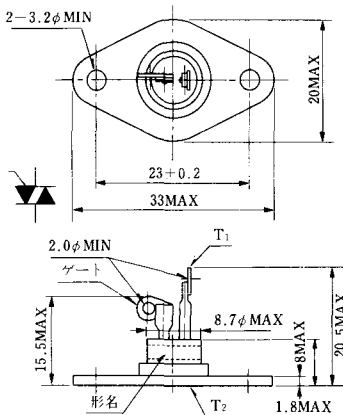
MT-7



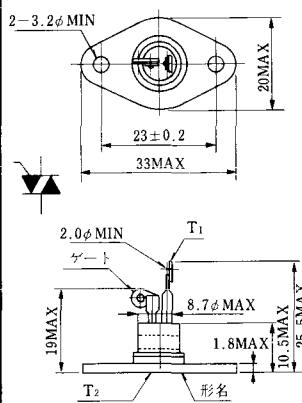
MT-8



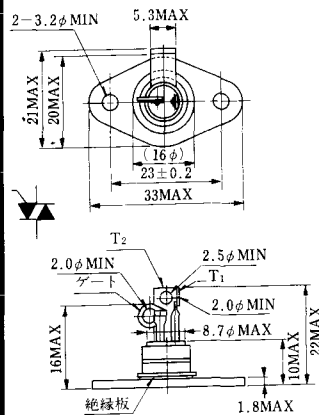
MT-9



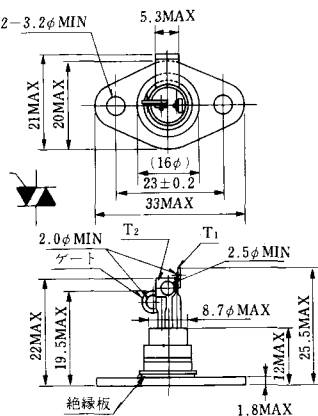
MT-10



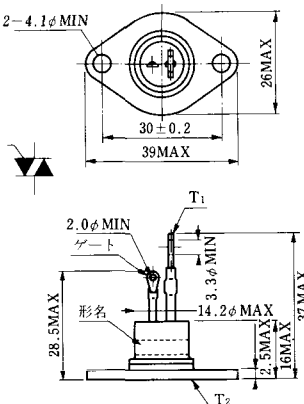
MT-11



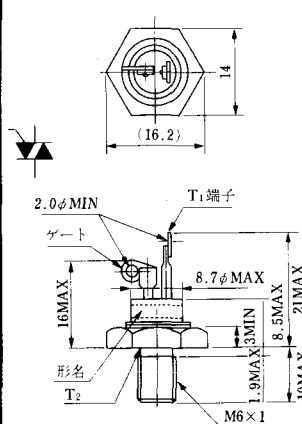
MT-12



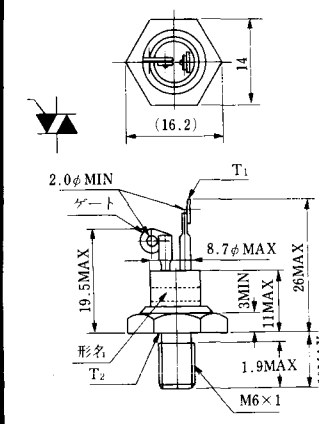
MT-13



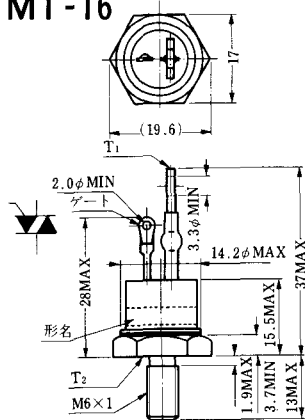
MT-14



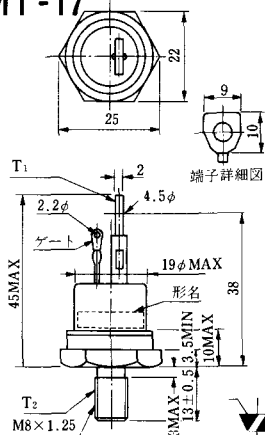
MT-15



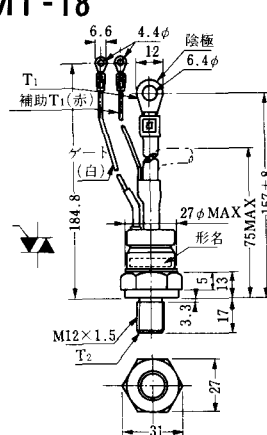
MT-16



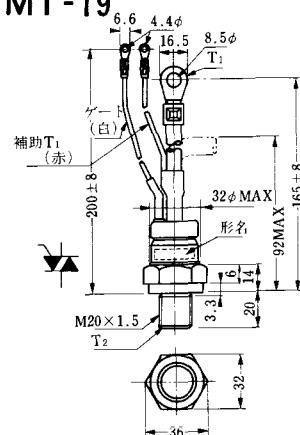
MT-17



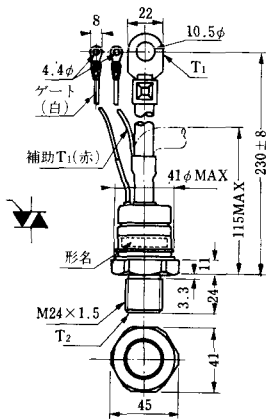
MT-18



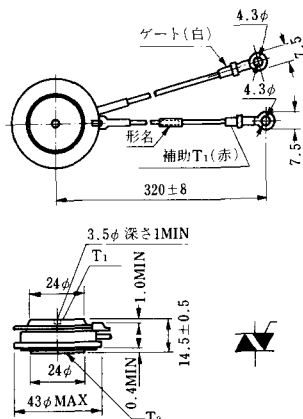
MT-19



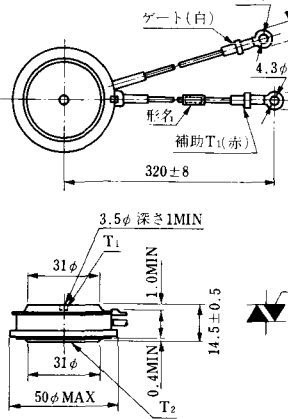
MT-20



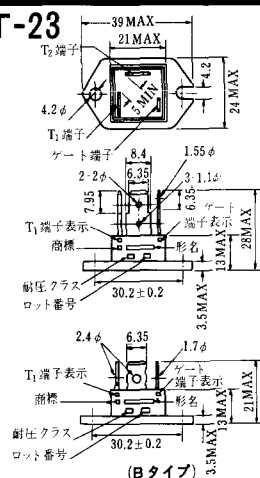
MT-21



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-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

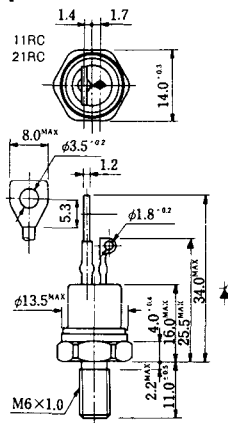


電極接続

1. カソード
2. アノード
3. ゲート

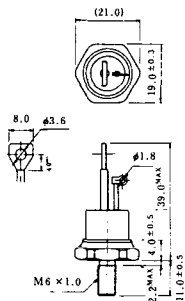
JEDEC: TO-202AA

NI-1



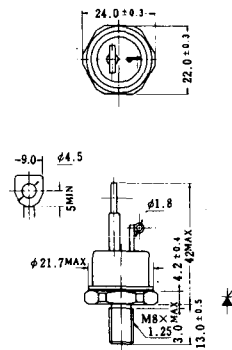
NI-2

29RD



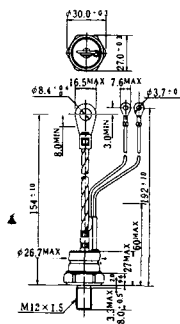
NI-3

39RC
59RC
39RF
59RF



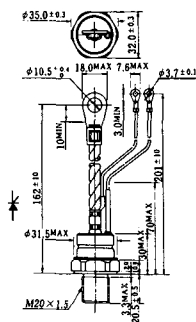
NI-4

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



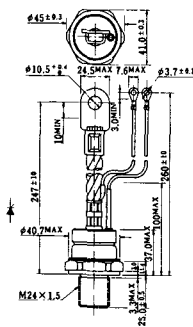
NI-5

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



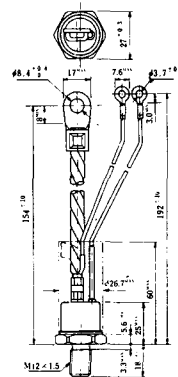
NI-6

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



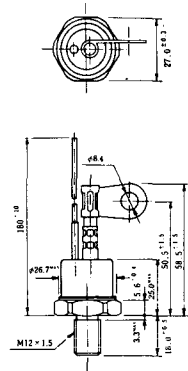
NI-7

89RW $\frac{1}{2}$ L
129RW $\frac{1}{2}$ L



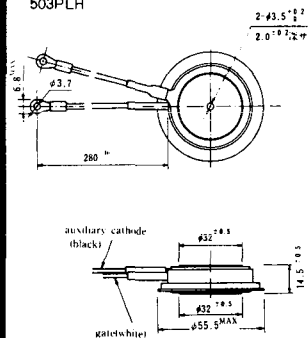
NI-8

89RW
129RW



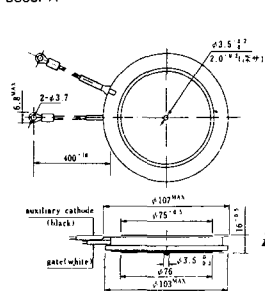
NI-16

503PLF
503PLH



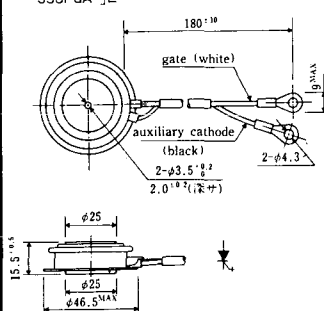
NI-17

3003PA



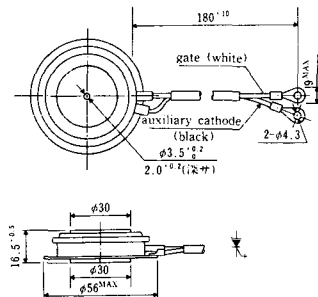
NI-18

353PGA「E



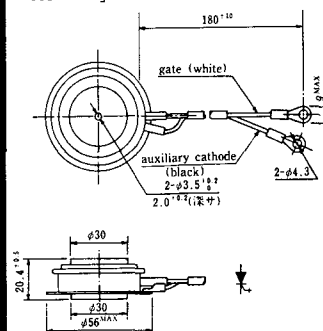
NI-19

603PGA, 603PGA「A, 803PGA



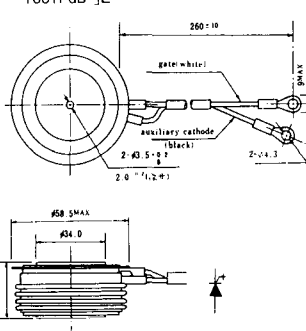
NI-20

603PGA「E



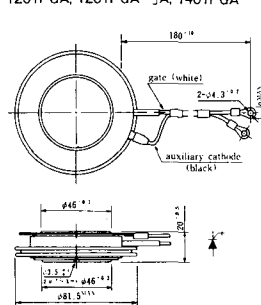
NI-21

1001PGB「E



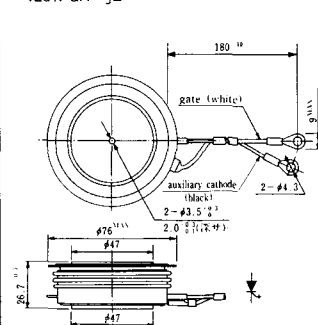
NI-22

1201PGA, 1201PGA「A, 1401PGA



NI-23

1201PGA「E



NI-24

2001PGB^r JE



NI-25

NI-26

NT-1



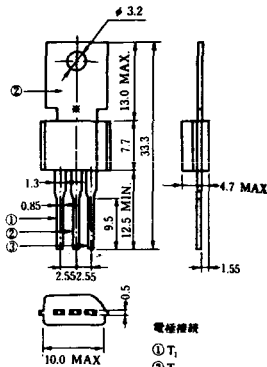
電極接続
①T₁
②ゲート
③T₂

NT-2



電極接続
①T₁
②ゲート
③T₂

NT-3



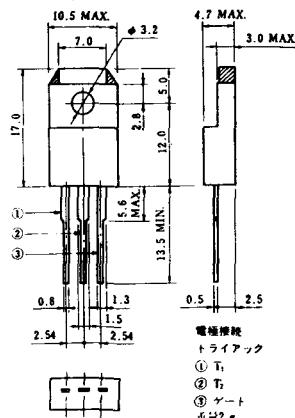
電極接続
①T₁
②T₂
③ゲート

NT-4



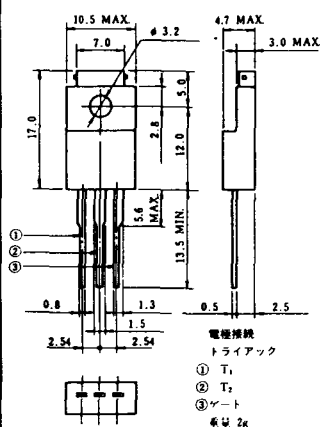
電極接続
①T₁
②T₂
③G

NT-5



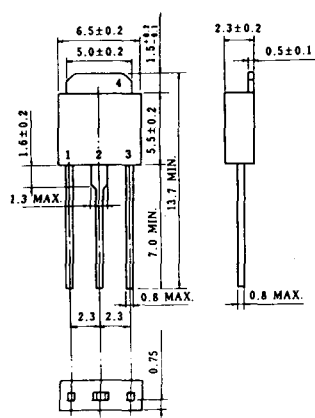
電極接続
トライアック
①T₁
②T₂
③ゲート
※2g

NT-6

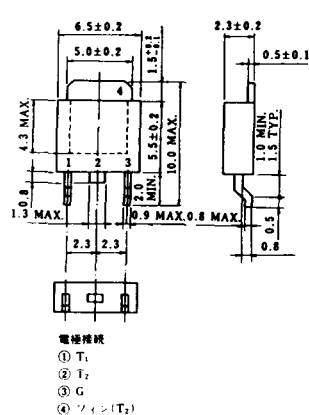


電極接続
トライアック
①T₁
②T₂
③ゲート
※2g

NT-7



NT-8

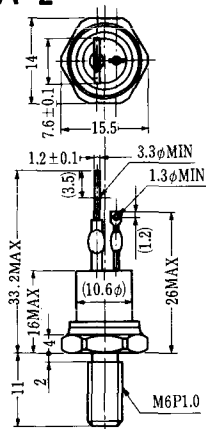


電極接続
①T₁
②T₂
③G
④フィイン(T₂)

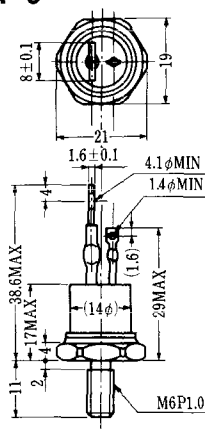
SA-1



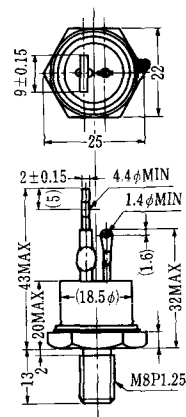
SA-2



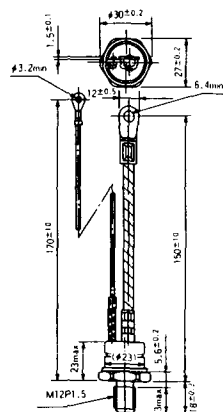
SA-3



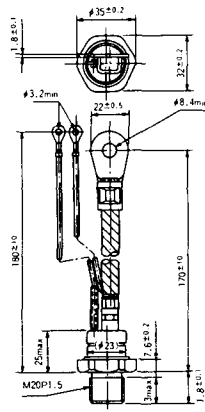
SA-4



SA-5



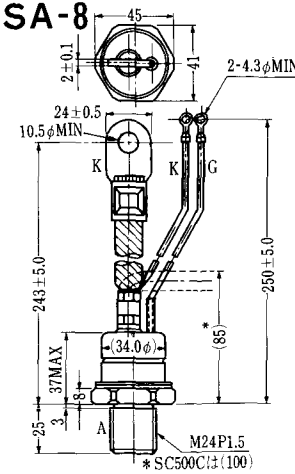
SA-6



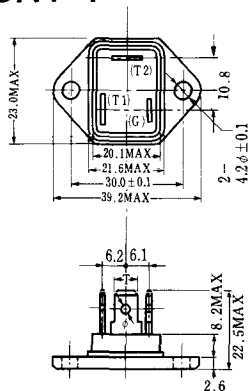
SA-7



SA-8

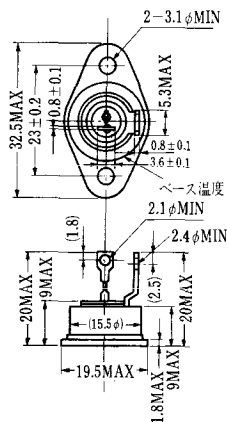


SAT-1

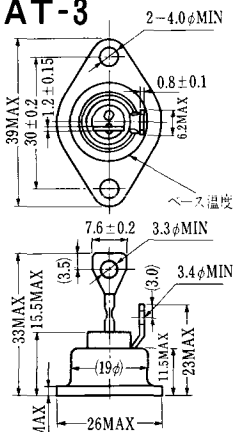


T1端子:ファストン250($T=6.35$, $t=0.8$, $\phi=1.65$)
T2端子:ファストン250($T=6.35$, $t=0.8$, $\phi=1.65$)
G端子:ファストン187($T=4.75$, $t=0.5$, $\phi=1.3$)

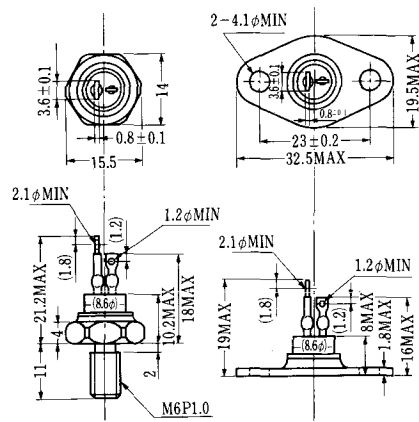
SAT-2



SAT-3



SAT-4



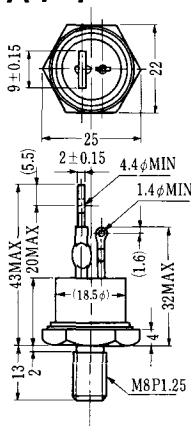
SAT-5



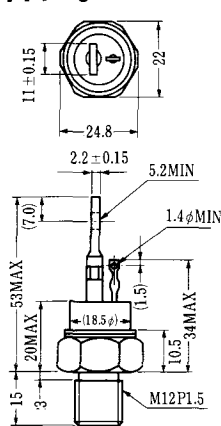
SAT-6



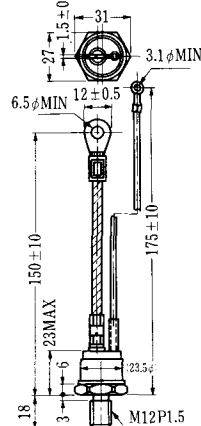
SAT-7



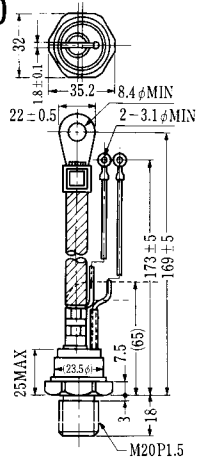
SAT-8



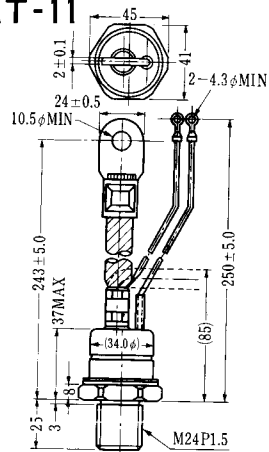
SAT-9



SAT-10



SAT-11



SY-1(1096A)



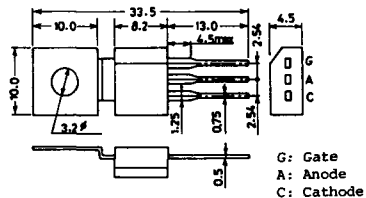
SY-2(1151)



SY-3(1104)



SY-4(1150)



1097A



G: Gate

1102



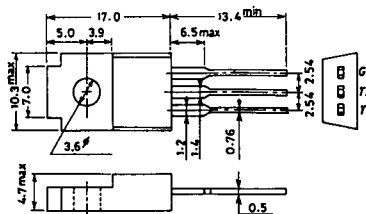
1141



1142



1144



1155



1192A

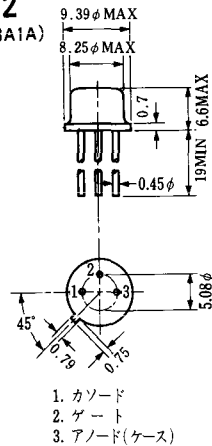


G: Gate

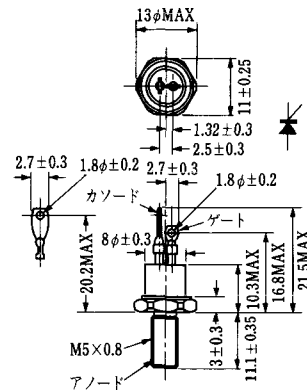
T-1 (13-5A1A)



T-2 (13-8A1A)



T-3 (13-8C1A)



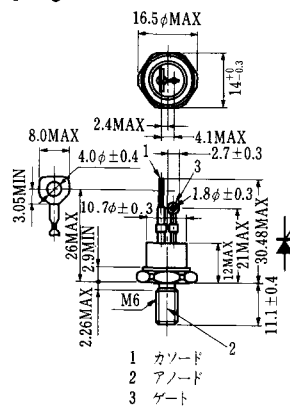
T-4 (13-10A1A)



T-5 (13-10B1A)



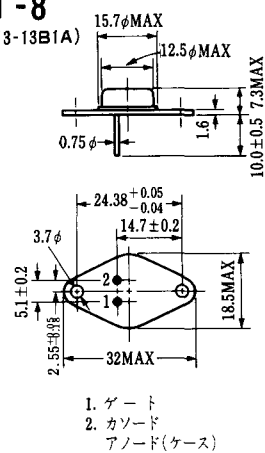
T-6 (13-11D1A)



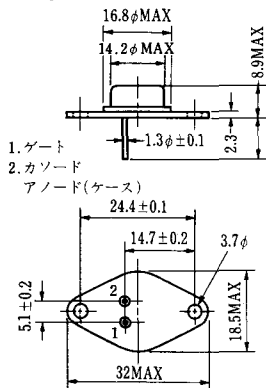
T-7 (13-13A1A)



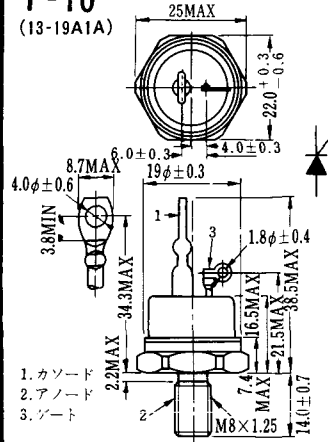
T-8 (13-13B1A)



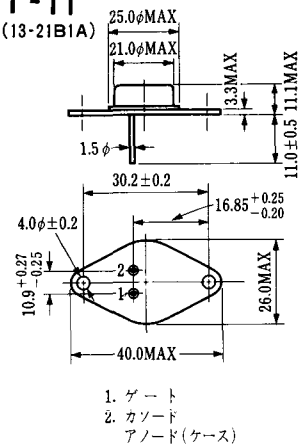
T-9 (13-14A1A)



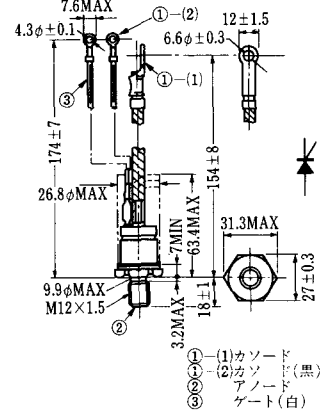
T-10 (13-19A1A)



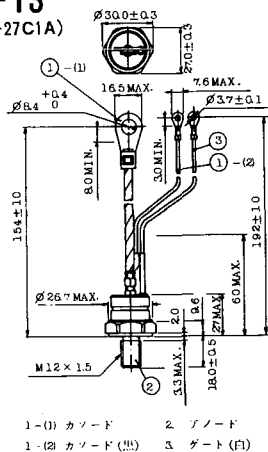
T-11 (13-21B1A)



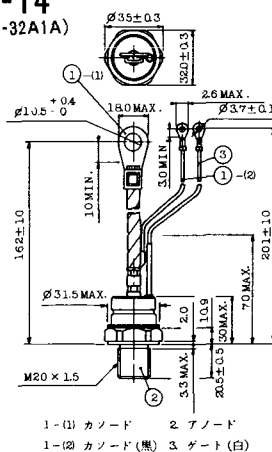
T-12 (13-27B1B)



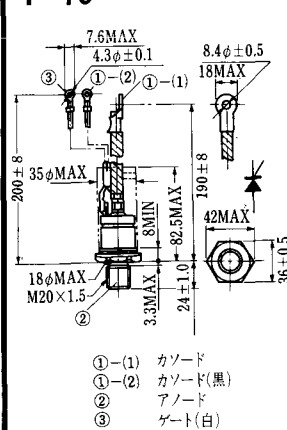
T-13 (13-27C1A)



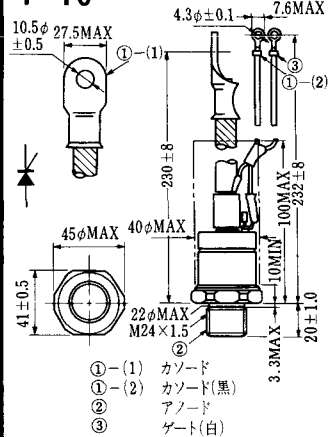
T-14 (13-32A1A)



T-15 (13-35C1B)



T-16 (13-40B1A)



T-17 (13-42A1A)



T-18 (13-45D1A)



T-19 (13-52B1A)



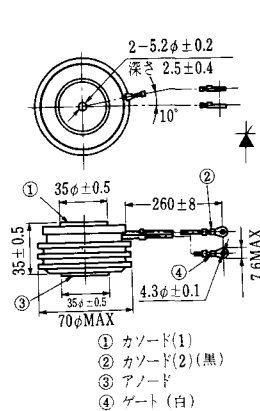
T-20 (13-52C1A)



T-21 (13-60A1A)



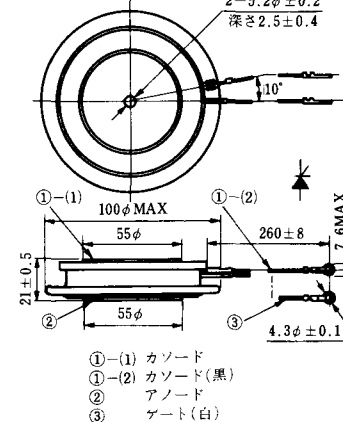
T-22 (13-70C1A)



T-23 (13-78A1A)



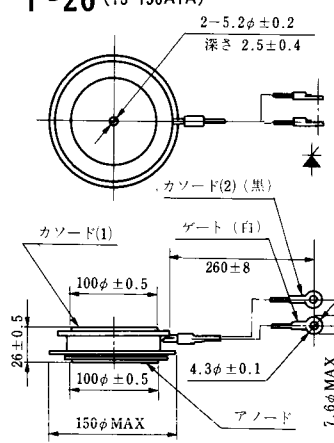
T-24 (13-100C1A)



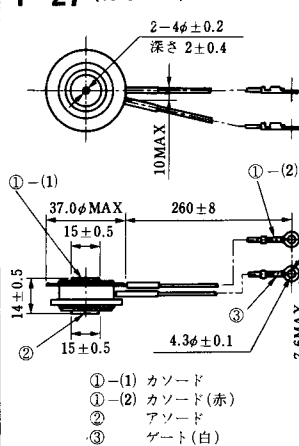
T-25 (13-120A2A)



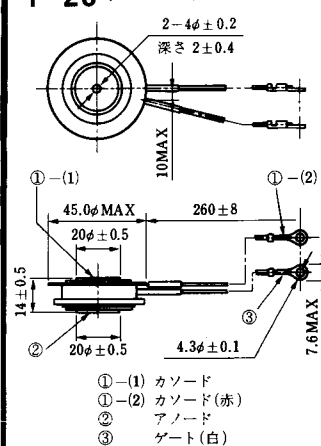
T-26 (13-150A1A)



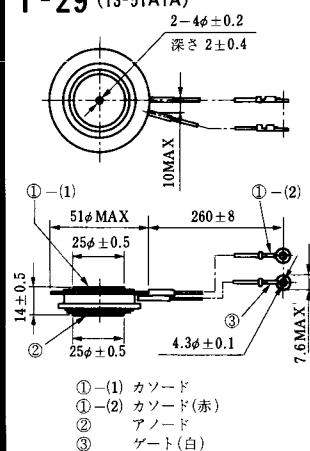
T-27 (13-37A1A)



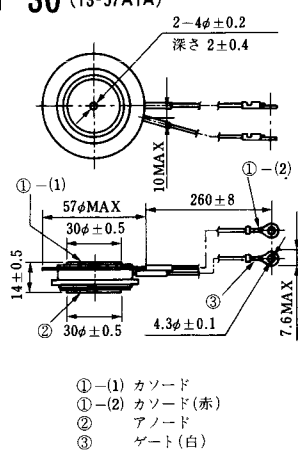
T-28 (13-45E1A)



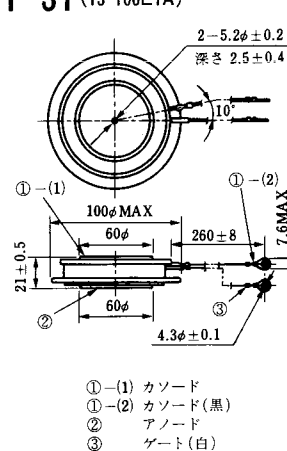
T-29 (13-51A1A)



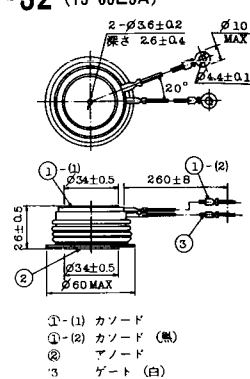
T-30 (13-57A1A)



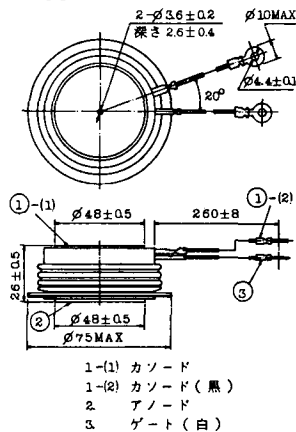
T-31 (13-100E1A)



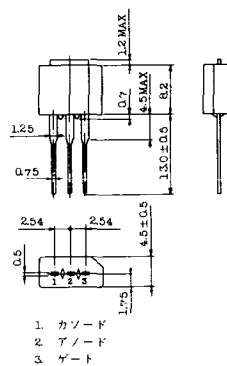
T-32 (13-60E3A)



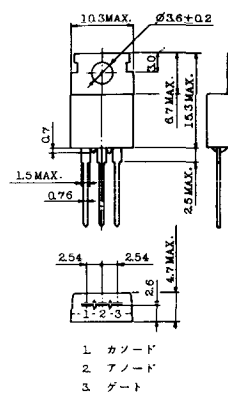
T-49 (13-75A1A)



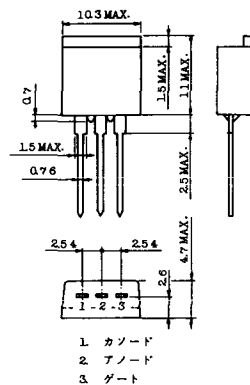
T-50 (13-10A3A)



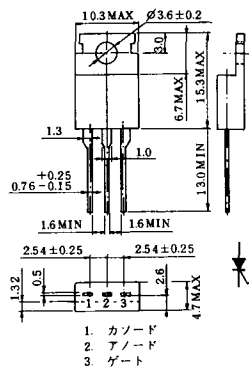
T-51 (13-10D1A)



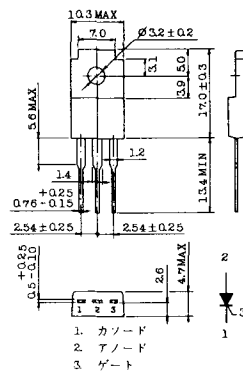
T-52 (13-10D2A)



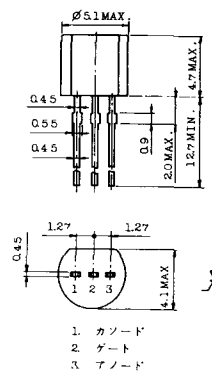
T-53 (13-10E1B)



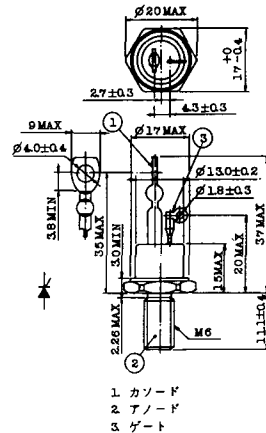
T-54 (13-10F1B)



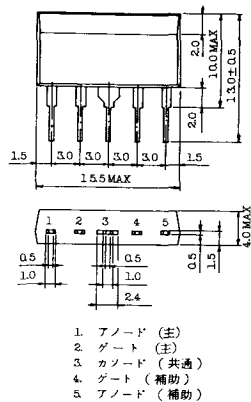
T-55 (13-5A1D)



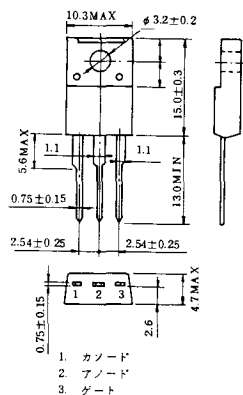
T-56 (13-13C1A)



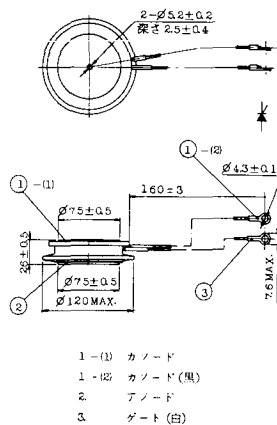
T-57 (12-16C1A)



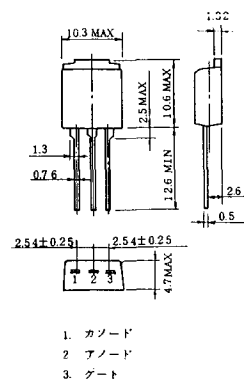
T-58 (13-10H1B)



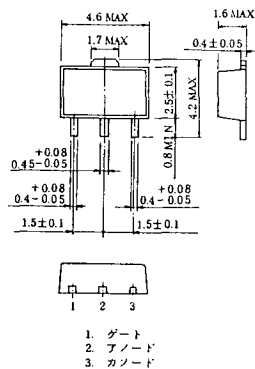
T-59 (13-120A1A)



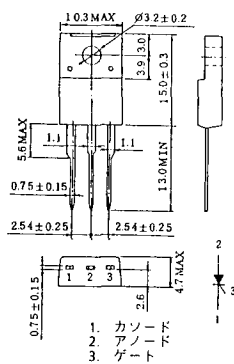
T-60



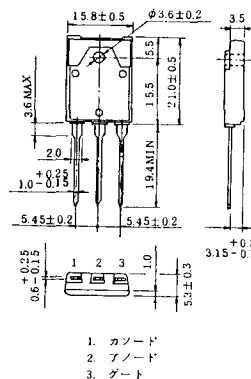
T-61 (13-5B1A)



T-62 (13-10H1A)



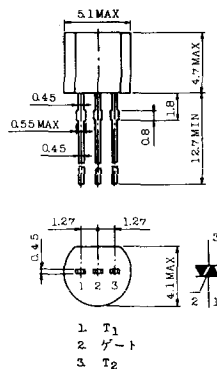
T-63 (13-16A1B)



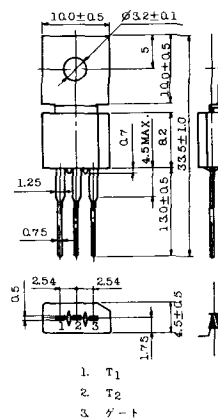
TT-1



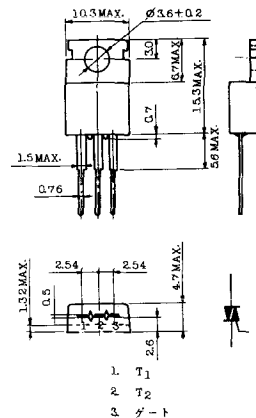
TT-2



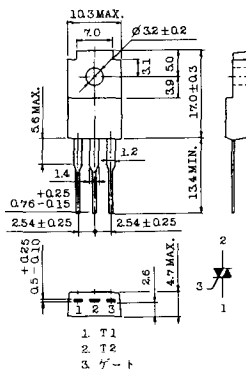
TT-3



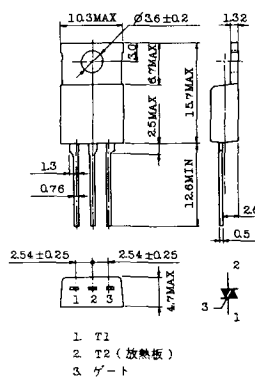
TT-4



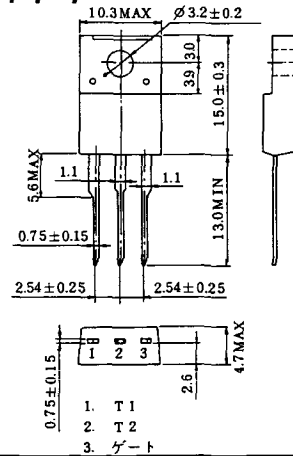
TT-5



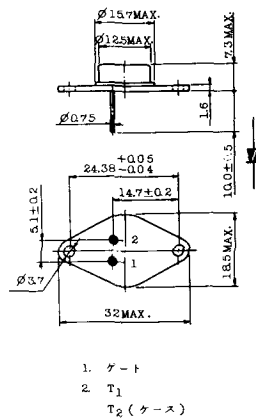
TT-6



TT-7



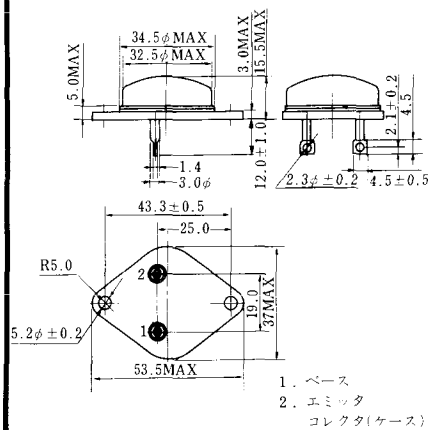
TT-8



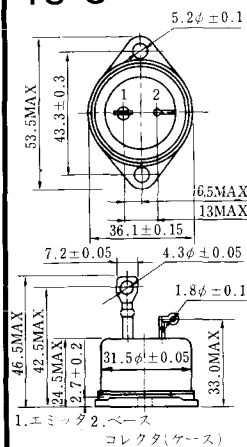
TS-1



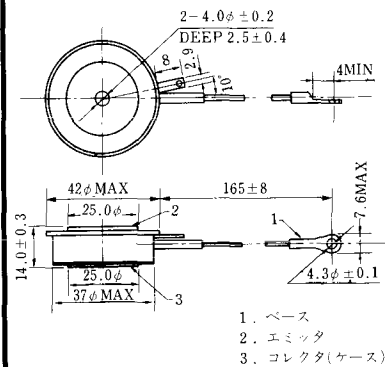
TS-2



TS-3



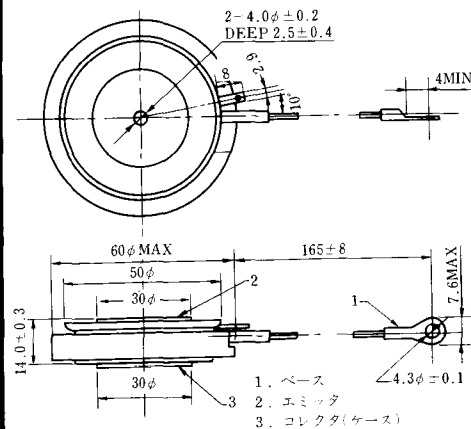
TS-4



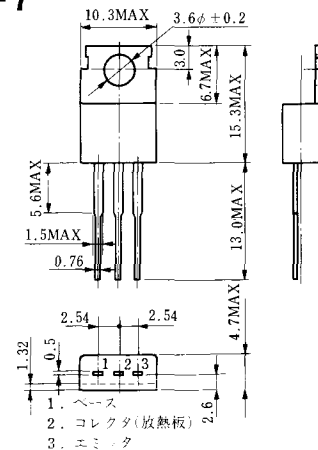
TS-5

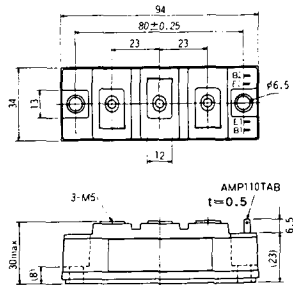
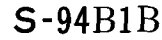
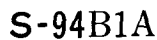
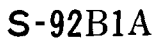
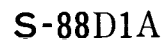
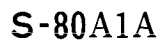


TS-6

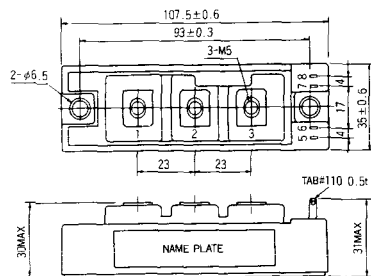


TS-7

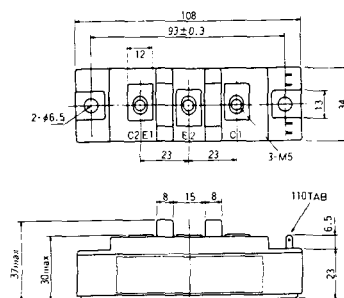




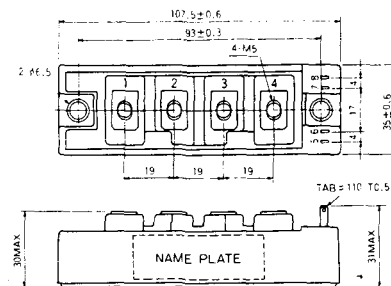
S-108B1A



S-108B1B



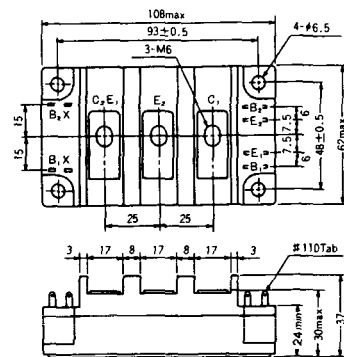
S-108B1C



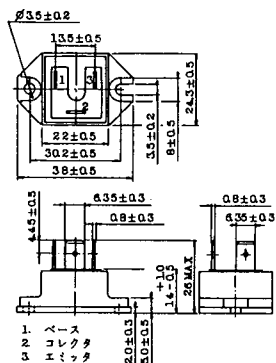
S-108B2A



S-108B2B



2-22B1A



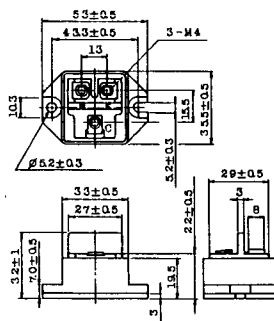
2-27A4A



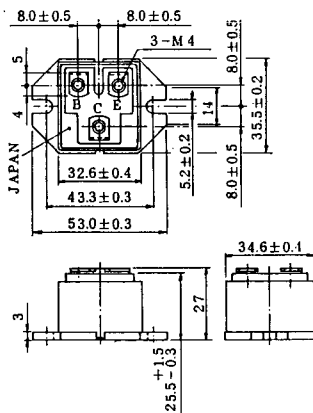
2-33C1A



2-33D1A



2-33F1A



2-37A1A



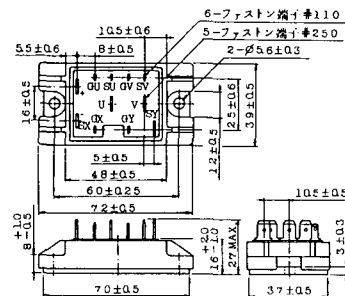
2-48A3A



2-48A3B



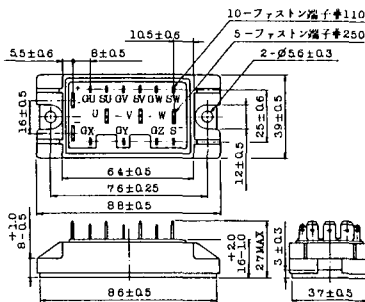
2-48A4A



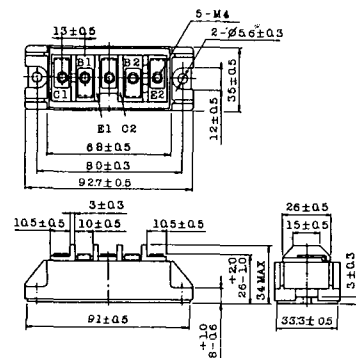
2-64A2A



2-64A2B



2-68A2A



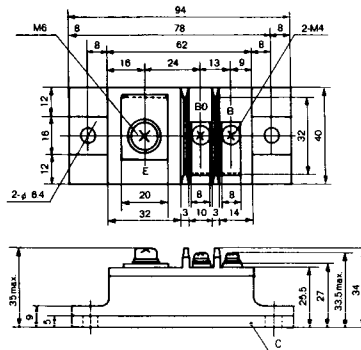
BBT-II

BBTII
1D200A-020



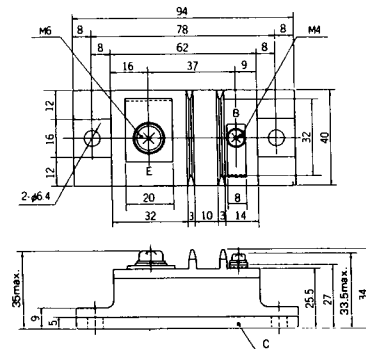
BBT-III

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



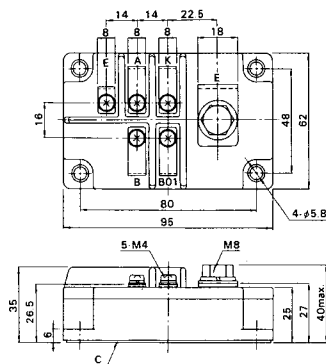
BBT-III

BBTIII
ETN01-055
ET1257



BBT-IV

BBTIV
1D500A-030



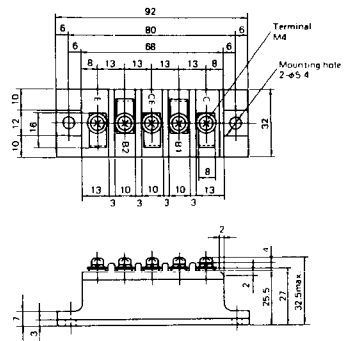
M-107



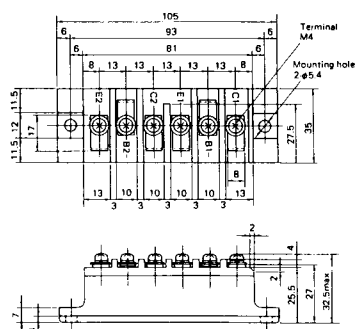
M-116



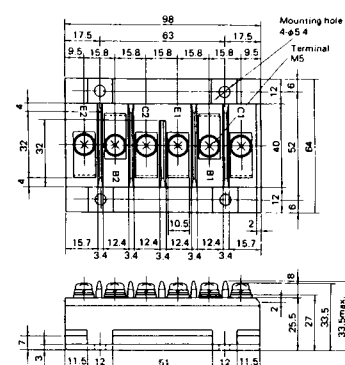
M-201



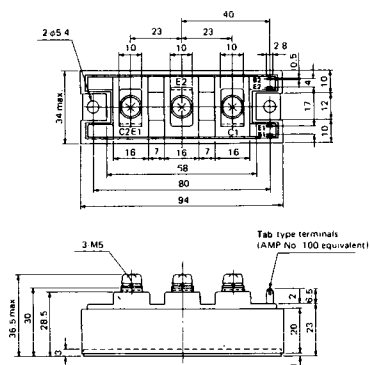
M-202



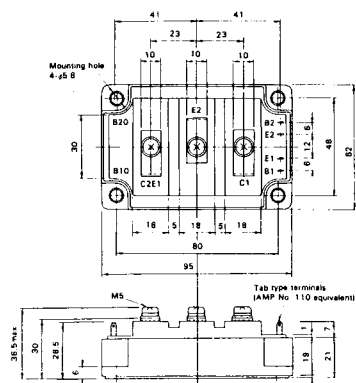
M-203



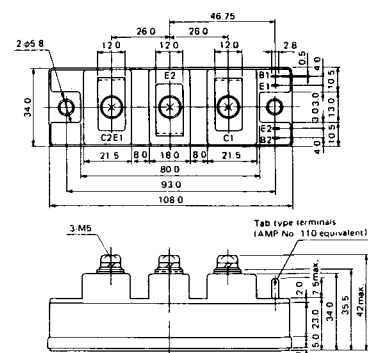
M-204



M-205



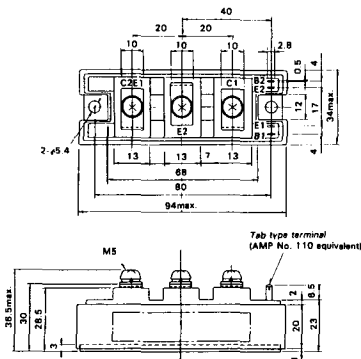
M-206



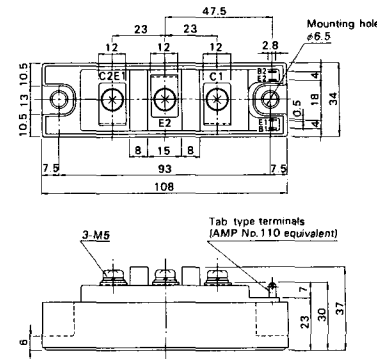
M-207



M-208



M-209



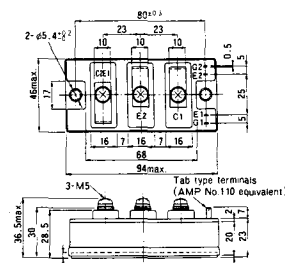
M-210



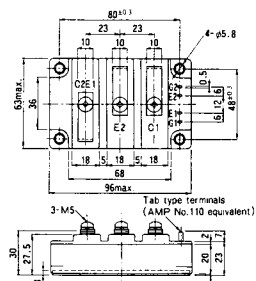
M-211



M-212

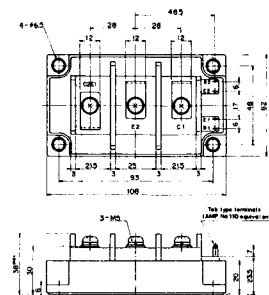


M-213

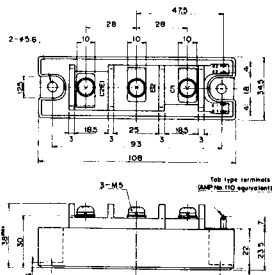


M-214

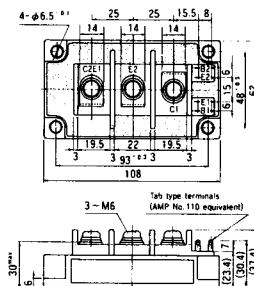
M-215



M-216



M-217



M-218



M-601



M-602



M-603



M-604



M-605



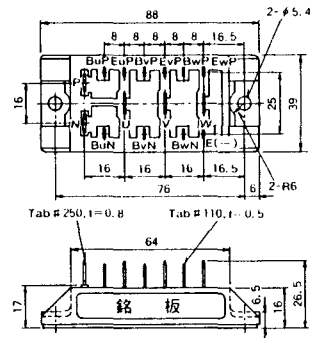
M-606



M-2E6A



M-2F6A



M-2G6A



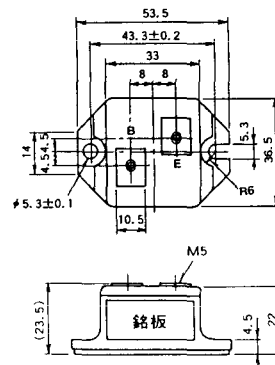
M-3A1A



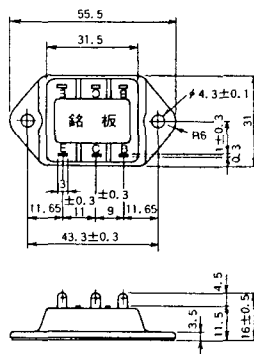
M-3B1A



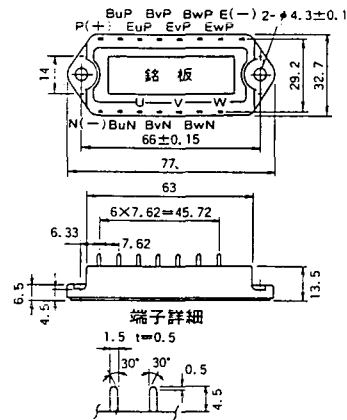
M-3B1B



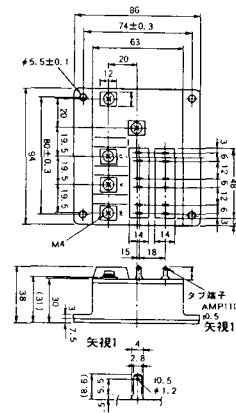
M-3C1A



M-3D6A



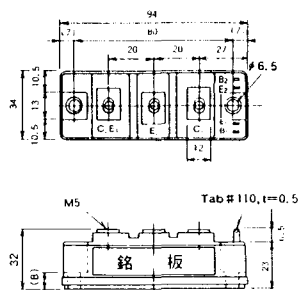
M-3E6A



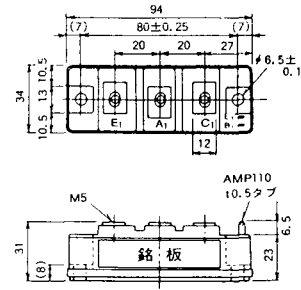
M-4A1A



M-4A2A



M-4A1B



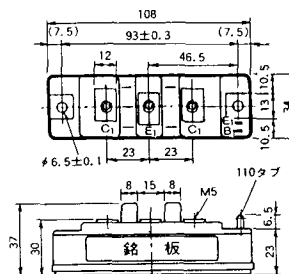
M-4A2B



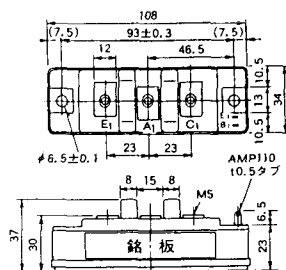
M-4B2A



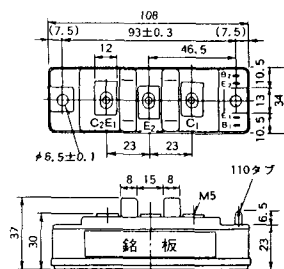
M-5A1A



M-5A1B



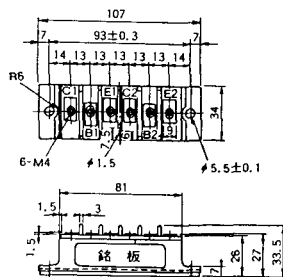
M-5A2A



M-5B2A



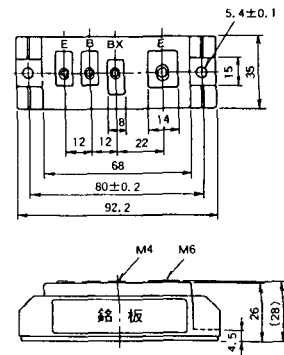
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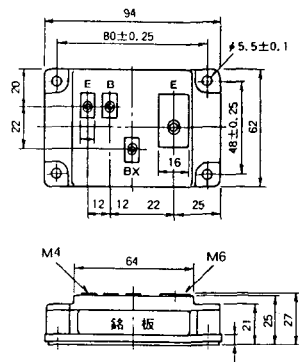
M-5D2A



M-6A1A



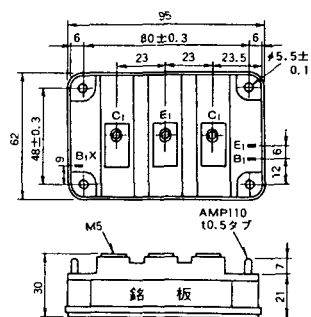
M-7A1A



M-7B1A



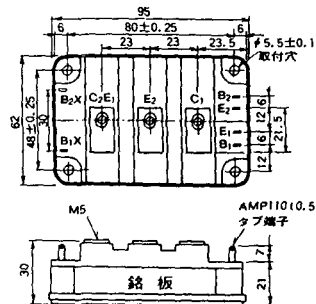
M-8A1A



M-8A1B



M-8A2A



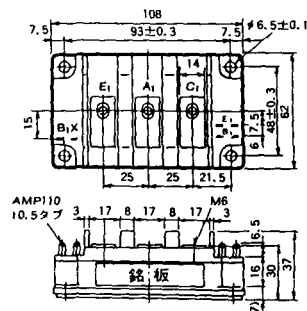
M-8A2B



M-8B2A



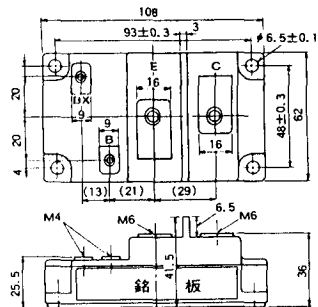
M-9A1A



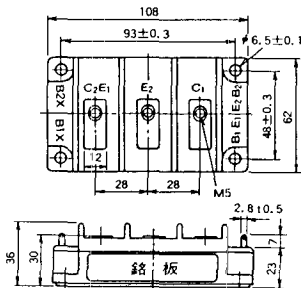
M-9A2A



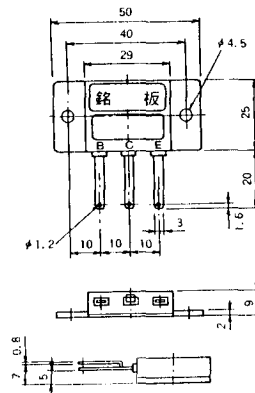
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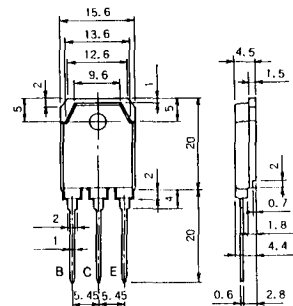
M-9C2A



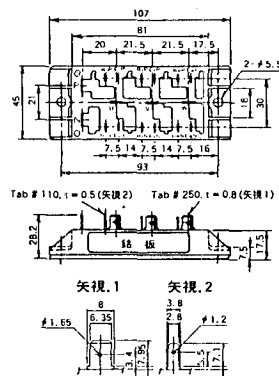
M-1A1B



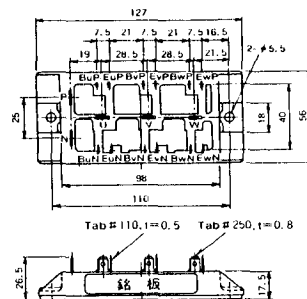
M-1A1C



M-2E6B



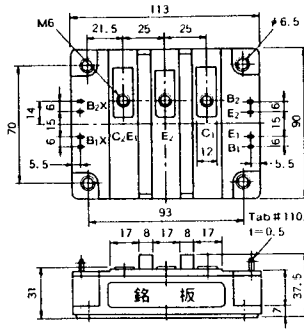
M-2E6C



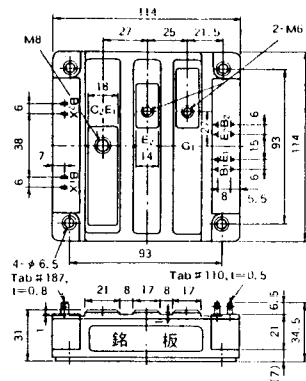
M-10A2A



M-10A2B



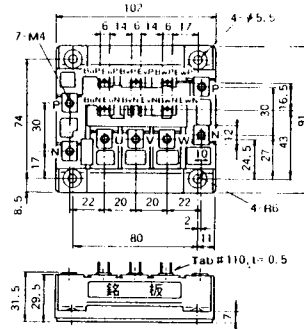
M-11A2A



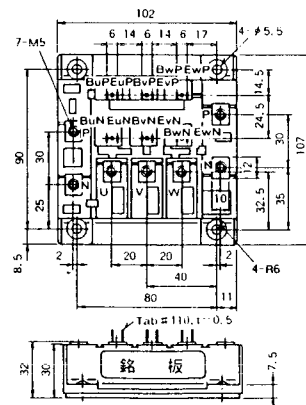
M-12A6A



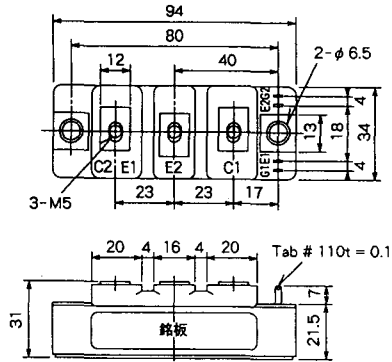
M-12B6A



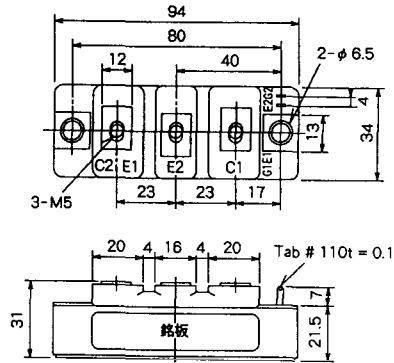
M-12B6B



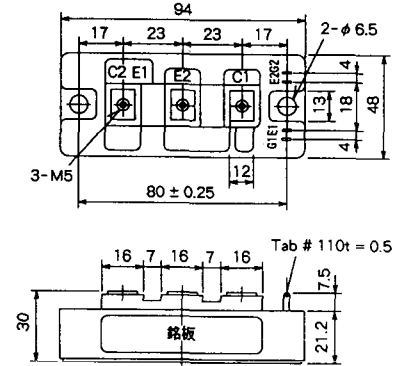
M-4A2D



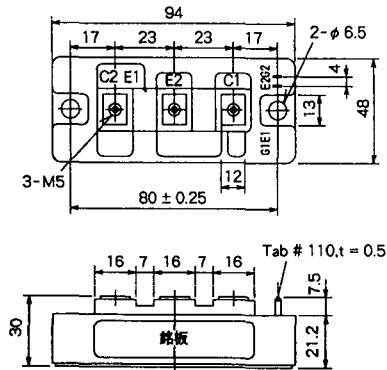
M-4A2E



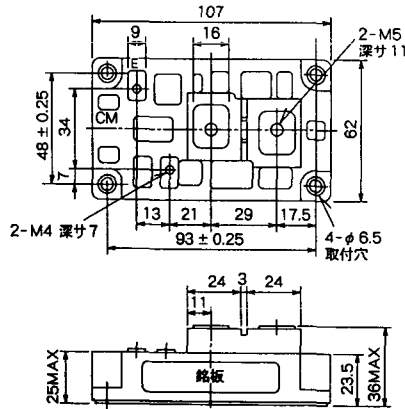
M-4C2A



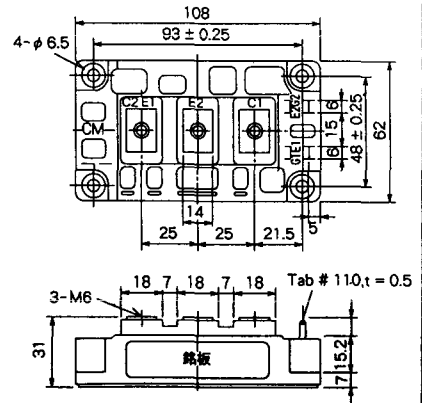
M-4C2B



M-9B1C



M-9D2A



M-9D2B



M-10A2C



H-101



Weight :480g

TERMINALS

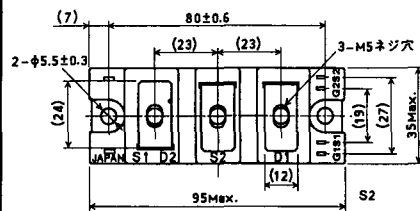
H-201



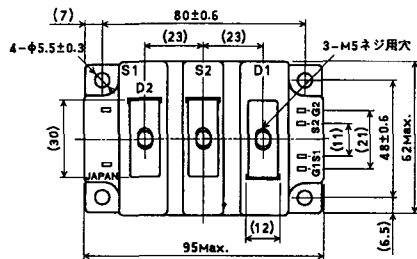
H-202



LF-J



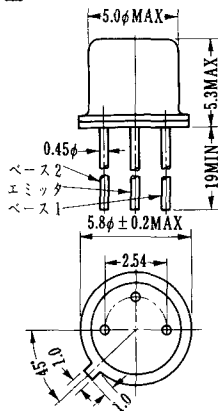
LF-K



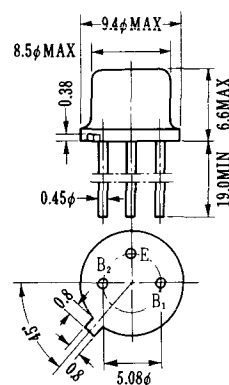
U-1



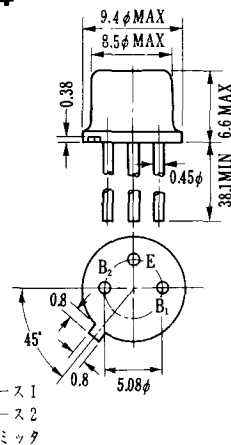
U-2



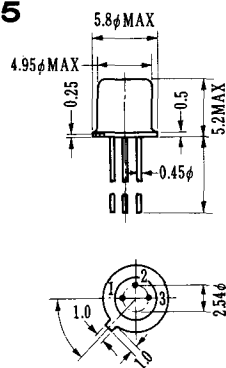
U-3



U-4

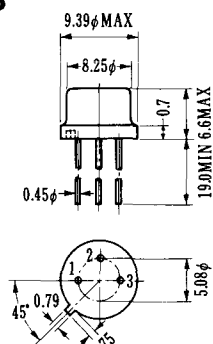


U-5



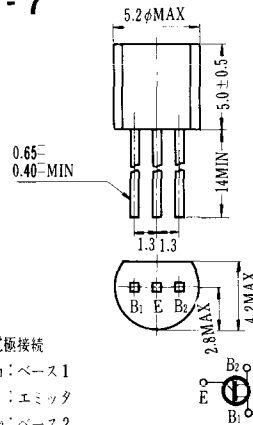
1. BASE 1
2. EMITTER
3. BASE 2 (CASE)

U-6



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

U-7



U-8

