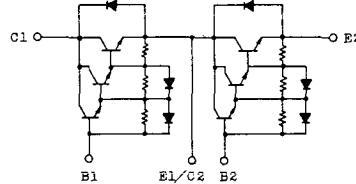


トランジスタ・モジュール (NPN, ダーリントン接続, 2個直列接続)

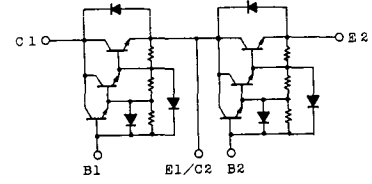
- ダーリントン・トランジスタを2個直列接続
- フリーホイール・ダイオード付
- 電極と金属ケース部が絶縁されている
- 直流電流増幅率は80以上(定格電流にて)

■等価回路

CK-1



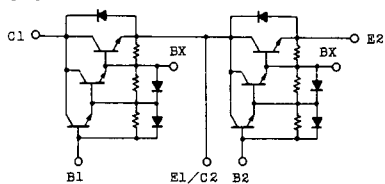
CK-2



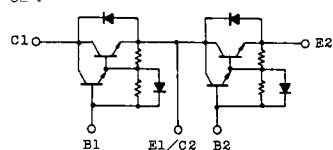
注1.  $T_c=25^{\circ}\text{C}$ . 注2. AC, 1分間。

型名	最大定格 ( $T_m=25^{\circ}\text{C}$ )											電気的特性									
	$V_{CBO}$	$V_{CEX(SUS)}$	$V_{EBO}$	$I_c$	$I_{CP}$	$I_B$	$I_F$	$I_{FM}$	$P_c$	$T_j$	$T_{Stg}$	$V_{150}$	$I_{CBO}$		$I_{EBO}$		$V_{CE0(SUS)}$		$h_{FE}$		
	(V)	(V)	(V)	(A)	(ms)	(A)	(A)	(ms)	(W)	( $^{\circ}\text{C}$ )	( $^{\circ}\text{C}$ )	(V)	最大	$V_{CE}$	最大	$V_{ER}$	最大	最小	$V_{CE}$	$I_c$	
MG15N2CK1	1100	1100	7	15	30	1.5	15	30	150	150	-40~125	2500	1.0	1100	200	7	900	1.0	100	5	15
MG15N2YK1	1100	1100	7	15	30	1.5	15	30	150	150	-40~125	2500	1.0	1100	200	7	900	1.0	100	5	15
MG25M2CK2	1000	1000	7	25	50	2.5	25	50	300	150	-40~125	2500	1.0	1000	200	7	880	1.0	100	5	25
MG25M2YK1	1000	1000	7	25	50	2.5	25	50	300	150	-40~125	2500	1.0	1000	200	7	880	1.0	100	5	25
MG25M2YK9	1000	1000	7	25	50	2.5	25	50	300	150	-40~125	2500	1.0	1000	200	7	880	1.0	100	5	25
MG25N2CK1	1100	1100	7	25	50	2.5	25	50	300	150	-40~125	2500	1.0	1100	200	7	900	0.5	100	5	25
MG25N2YK1	1100	1100	7	25	50	2.5	25	50	300	150	-40~125	2500	1.0	1100	200	7	900	0.5	100	5	25
MG30G2CL3	600	600	6	30	60	3.0	30	60	250	150	-40~125	2500	1.0	600	200	6	450	0.5	100	5	30
MG30G2YL1	600	600	6	30	60	3.0	30	60	200	150	-40~125	2500	1.0	600	200	6	450	0.5	100	5	30
MG40S2YK1	1400	1400	7	40	80	4.0	40	80	400	150	-40~125	2500	2.0	1400	150	7	1000	1.0	100	5	40
MG50G2CL3	600	600	6	50	100	5.0	50	100	300	150	-40~125	2500	1.0	600	200	6	450	0.5	100	5	50
MG50G2YL1A	600	600	6	50	100	5.0	50	100	300	150	-40~125	2500	1.0	600	200	6	450	0.5	100	5	50
MG50M2CK2	1000	1000	7	50	100	5.0	50	100	350	150	-40~125	2500	1.0	1000	200	7	880	1.0	100	5	50
MG50M2YK1	1000	1000	7	50	100	5.0	50	100	350	150	-40~125	2500	1.0	1000	200	7	880	1.0	100	5	50
MG50M2YK9	1000	1000	7	50	100	5.0	50	100	350	150	-40~125	2500	1.0	1000	200	7	880	1.0	100	5	50
MG50N2CK1	1100	1100	7	50	100	5.0	50	100	350	150	-40~125	2500	1.0	1100	200	7	900	1.0	100	5	50
MG50Q2YK1	1200	1200	7	50	100	5.0	50	100	350	150	-40~125	2500	1.0	1200	200	7	900	1.0	100	5	50
MG75G2CL1	600	600	6	75	150	10	75	150	350	150	-40~125	2500	1.0	600	200	6	450	0.5	80	5	75
MG75G2YL1A	600	600	6	75	150	10	75	150	350	150	-40~125	2500	1.0	600	200	6	450	0.5	80	5	75
MG75H2CL1	600	600	6	75	150	10	75	150	350	150	-40~125	2500	1.0	600	200	6	500	0.5	80	5	75
MG75H2YL1A	600	600	6	75	150	10	75	150	350	150	-40~125	2500	1.0	600	200	6	500	0.5	80	5	75

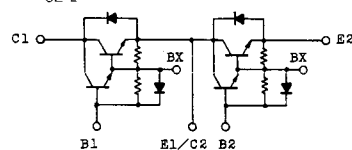
CK-3



CL-1



CL-2



注3. スイッチング時間の \* 印は typ. 値。

(T <sub>a</sub> =25°C)										エミッタ・コレクタ間ダイオード					熱抵抗		等 価 回 路	外 形 図	記 事	型 名			
飽和電圧 (V)		I <sub>c</sub> (A)	I <sub>B</sub> (A)	スイッチング時間 (μs)			I <sub>B1</sub> (A)	I <sub>B2</sub> (A)	V <sub>CC</sub> (V)	R <sub>L</sub> (Ω)	V <sub>F</sub> (V)	I <sub>F</sub> (A)	t <sub>rr</sub> (μs)	I <sub>F</sub> (A)	V <sub>BE</sub> (V)	di/dt (A/μs)					R <sub>th(j-c)</sub> (°C/W)		
V <sub>CE</sub>	V <sub>BE</sub>			t <sub>on</sub>	t <sub>stg</sub>	t <sub>r</sub>															トランジスタ部	ダイオード部	最大
2.5	3.5	15	0.3	2	11	6	0.3	-0.9	600	40	1.5	15	1.0	15	-3	60	0.83	1.3	CK-2	2-68B2A			MG15N2CK1
2.5	3.5	15	0.3	2	11	6	0.3	-0.9	600	40	1.5	15	1.0	15	-3	60	0.83	1.3	YK-1	2-94C3A			MG15N2YK1
2.5	3.5	25	0.5	2	15	5	0.5	-0.5	600	24	1.7	25	1.0	25	-3	100	0.41	1.3	CK-2	2-68B2A			MG25N2CK2
2.5	3.5	25	0.5	2	15	5	0.5	-0.5	600	24	1.7	25	1.0	25	-3	100	0.41	1.3	YK-1	2-94C3A			MG25N2YK1
2.5	3.5	25	0.5	2	15	5	0.5	-0.5	600	24	1.7	25	1.0	25	-3	100	0.41	1.3	YK-1	2-94D1A			MG25N2YK9
2.5	3.5	25	0.5	2	14	6	0.5	-1.5	600	24	1.7	25	1.0	25	-3	100	0.41	1.3	CK-2	2-68B2A			MG25N2CK1
2.5	3.5	25	0.5	2	14	6	0.5	-1.5	600	24	1.7	25	1.0	25	-3	100	0.41	1.3	YK-1	2-94C3A			MG25N2YK1
2.0	2.5	30	0.6	1	12	2	0.6	-0.6	300	10	1.5	30	1.0	30	-3	100	0.5	1.8	CL-1	2-68A2A			MG30G2CL3
2.0	2.5	30	1.0	1	12	3	0.6	-0.6	300	10	1.6	30	1.0	30	-2	60	0.625	1.8	YL-1	2-94C3A			MG30G2YL1
2.5	3.5	40	0.8	2	17	3	0.8	-2.4	600	15	1.8	40	1.2	40	-3	100	0.31	1.3	YK-1	2-108A2A			MG40S2YK1
2.0	2.5	50	1.0	1	12	2	1.0	-1.0	300	6	1.5	50	1.0	50	-3	100	0.41	1.3	CL-1	2-68A2A			MG50G2CL3
2.0	2.5	50	1.0	1	12	2	1.0	-1.0	300	6	1.7	50	1.0	50	-3	100	0.41	1.3	YL-1	2-94C3A			MG50G2YL1A
2.5	3.5	50	1.0	2	15	5	1.0	-1.0	600	12	1.7	50	1.0	50	-3	100	0.36	1.3	CK-2	2-68B2A			MG50M2CK2
2.5	3.5	50	1.0	2	15	5	1.0	-1.0	600	12	1.7	50	1.0	50	-3	100	0.36	1.3	YK-1	2-94C3A			MG50M2YK1
2.5	3.5	50	1.0	2	15	5	1.0	-1.0	600	12	1.7	50	1.0	50	-3	100	0.36	1.3	YK-1	2-94D1A			MG50M2YK9
2.5	3.5	50	1.0	2	15	5	1.0	-3.0	600	12	1.8	50	2.0	50	-3	100	0.35	1.3	CK-2	2-68B2A			MG50N2CK1
2.5	3.2	50	1.0	2	13	4	1.0	-3.0	600	12	1.8	50	1.0	50	-3	100	0.35	1.3	YK-1	2-94C3A			MG50N2YK1
2.0	2.5	75	1.5	2	12	2	1.5	-1.5	300	4	1.5	75	2.0	75	-3	100	0.35	1.3	CL-1	2-68A2A			MG75G2CL1
2.0	2.5	75	1.5	2	12	2	1.5	-1.5	300	4	1.7	75	1.0	75	-3	100	0.36	1.3	YL-1	2-94C3A			MG75G2YL1A
2.0	2.5	75	2.0	2	12	4	2.0	-2.0	300	4	1.5	75	2.0	75	-3	100	0.35	1.3	CL-1	2-68A2A			MG75H2CL1
2.0	2.5	75	2.0	2	12	4	2.0	-2.0	300	4	1.7	75	1.0	75	-3	100	0.35	1.3	YL-1	2-94C3A			MG75H2YL1A

FD-1



FD-2



FD-3



FD-4



FD-5



FD-6



FD-7



FD-8



FD-9



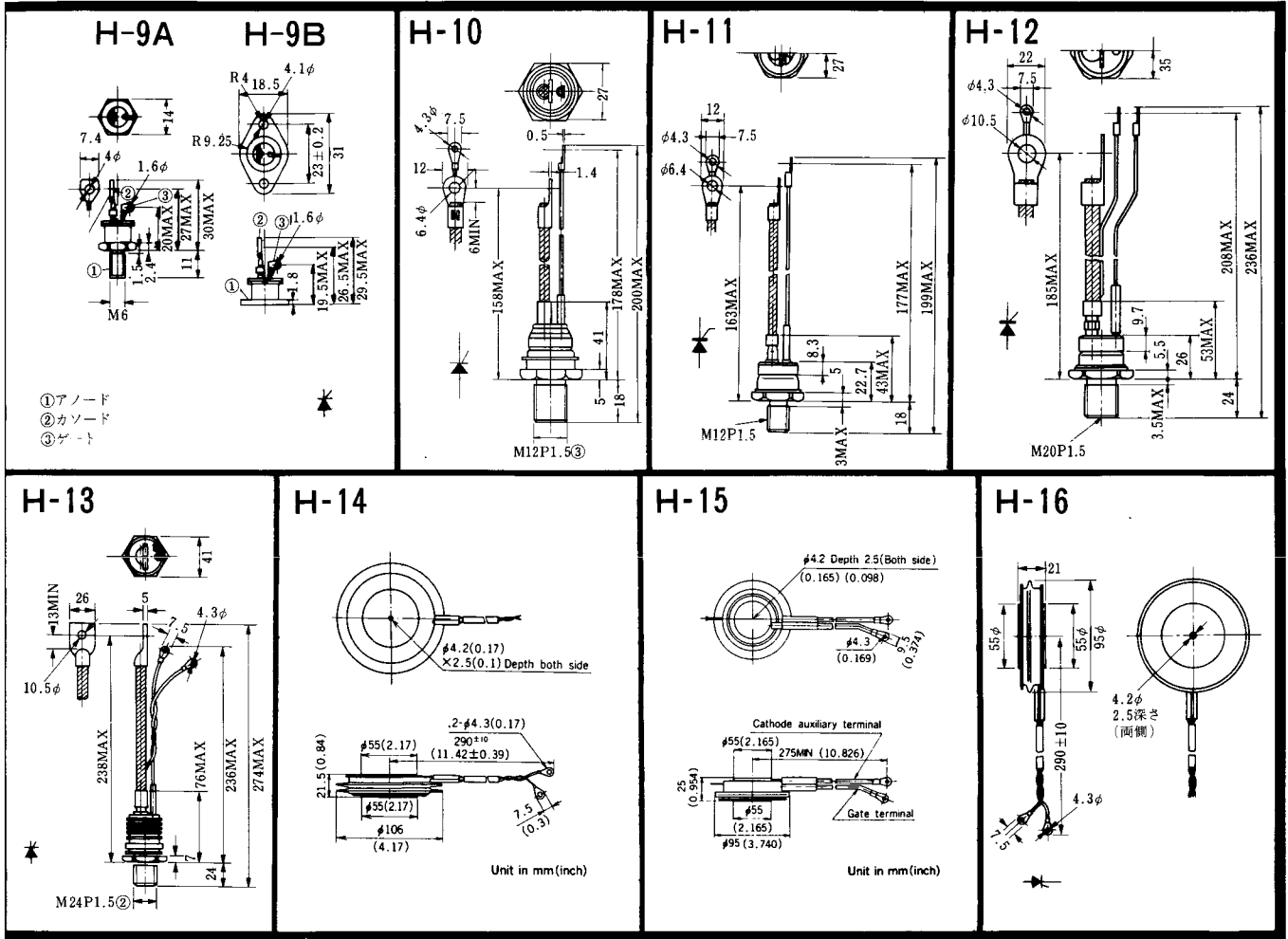
FD-10



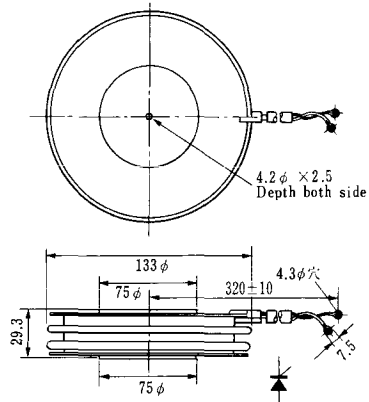
FD-11

FD-12

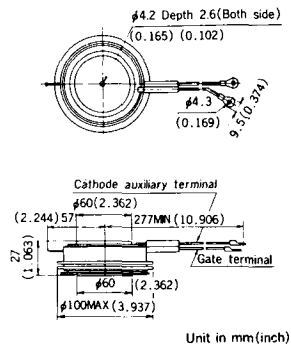




### H-17

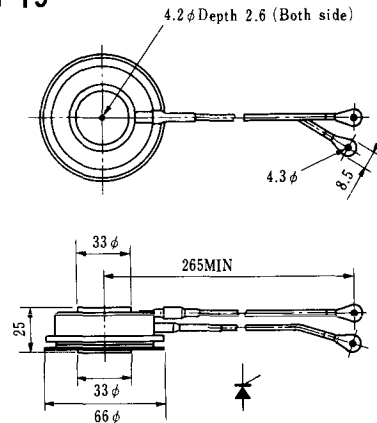


### H-18

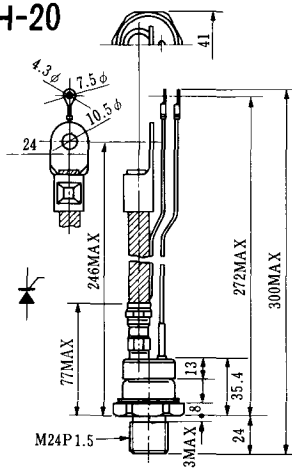


Unit in mm (inch)

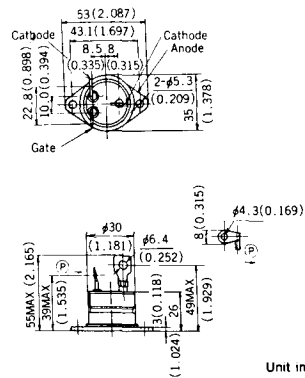
### H-19



### H-20

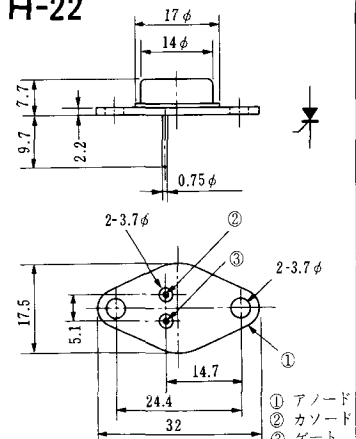


### H-21



Unit in mm (inch)

### H-22



### H-23

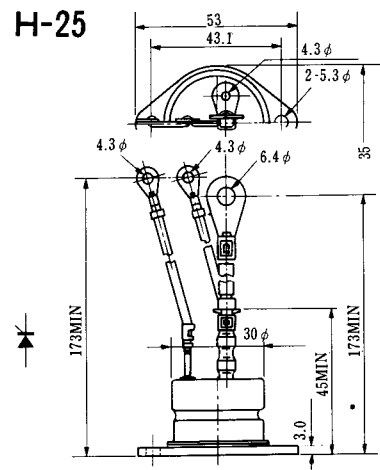


① アノード  
② カソード  
③ ゲート

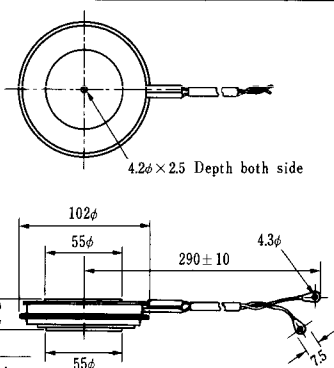
### H-24



### H-25



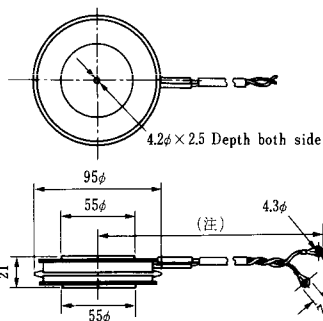
### H-26



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

CA12	
------	--

### H-27

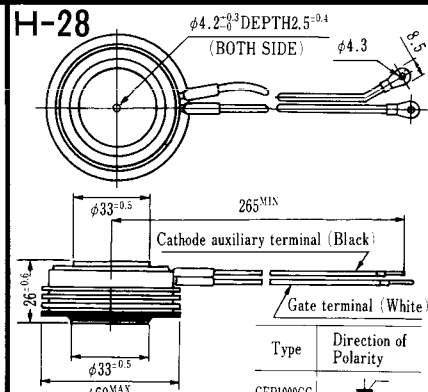


Type	Direction of polarity
------	-----------------------

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.



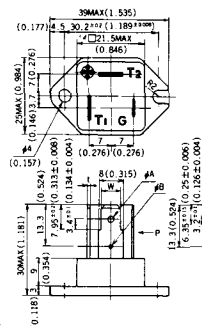


Note: The thickness is a dimension in press at the rated mounting force. Weight: 870(g)



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

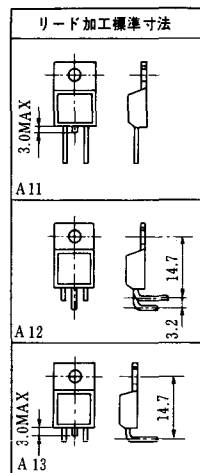
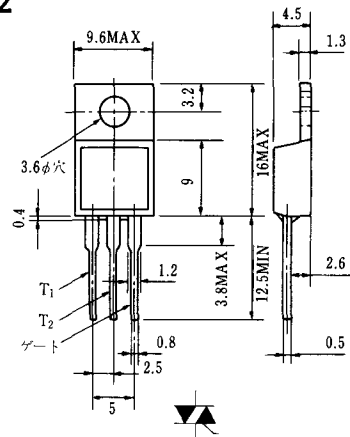
# HT-1



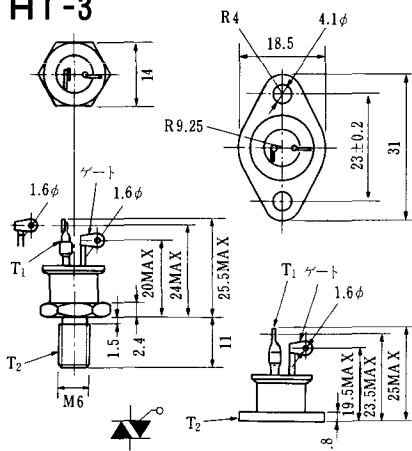
TERMINAL	t	W	φA	φB
T <sub>1</sub>	0.8±0.025 (0.031±0.001)	6.35±0.1 (0.250±0.004)	2.00 <sup>+0.1</sup> <sub>0</sub> (0.079±0.004)	1.3 (0.051)
T <sub>2</sub>	0.8±0.025 (0.031±0.001)	6.35±0.1 (0.250±0.004)	2.00 <sup>+0.1</sup> <sub>0</sub> (0.079±0.004)	1.3 (0.051)
G	0.5±0.025 (0.020±0.001)	4.75±0.1 (0.187±0.004)	1.55 <sup>+0.1</sup> <sub>0</sub> (0.061±0.004)	1.3 (0.051)

Unit in mm (inch)

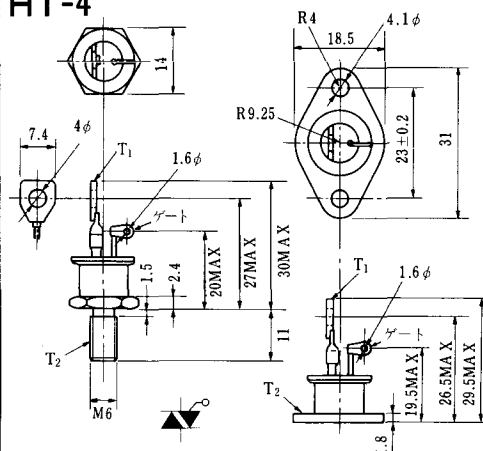
# HT-2



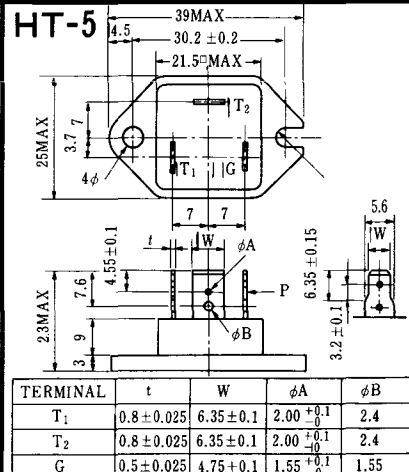
# HT-3



# HT-4



# HT-5



### M-1



### M-2



### M-3



### M-4



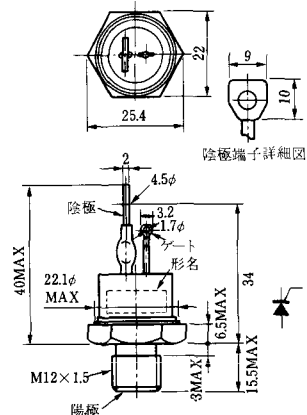
### M-5



### M-6



### M-7



### M-8



M-9



M-10



M-11



M-12



M-13



M-14



M-15



M-16





M-25



M-26



M-27



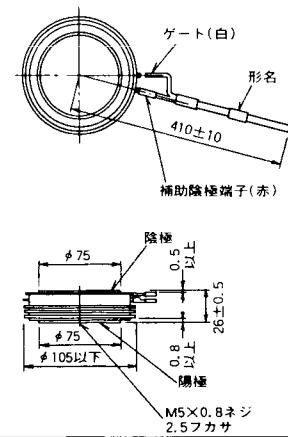
M-28



M-29



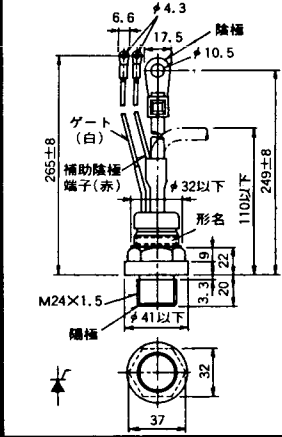
M-30



M-31



M-32



### M-33



### M-34



### MT-1



### MT-2

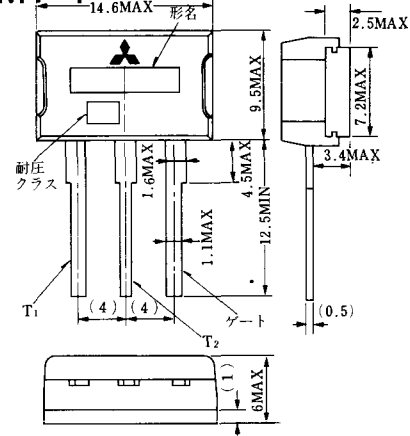


### MT-3

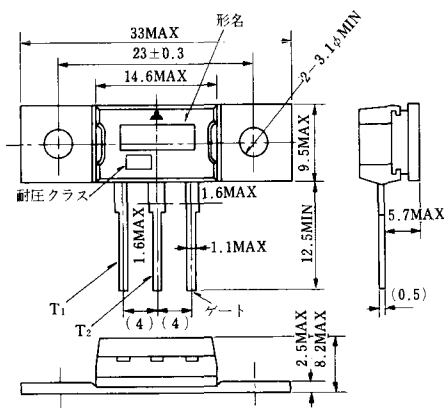


1. T<sub>1</sub>
2. T<sub>2</sub>
3. ゲート
4. T<sub>2</sub> (非絶縁形のみ、絶縁形は他の端子と絶縁されている)

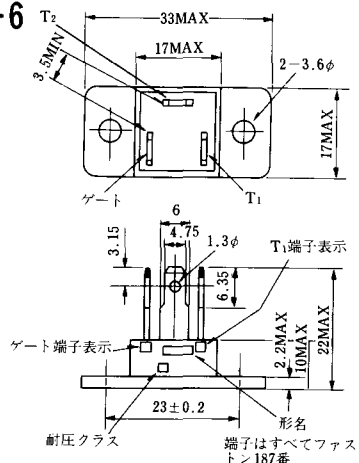
### MT-4



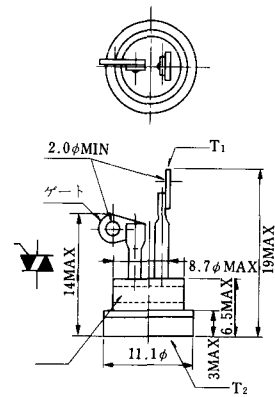
### MT-5



### MT-6

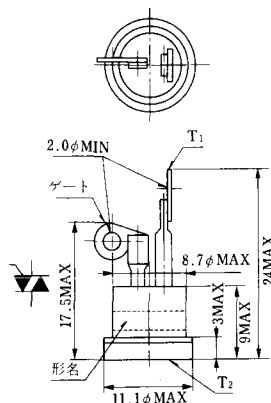


### MT-7

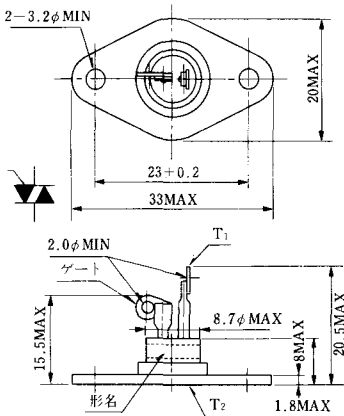




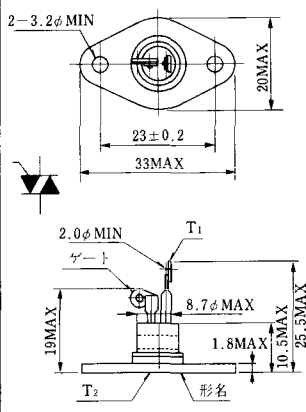
MT-8



MT-9



MT-10



MT-11



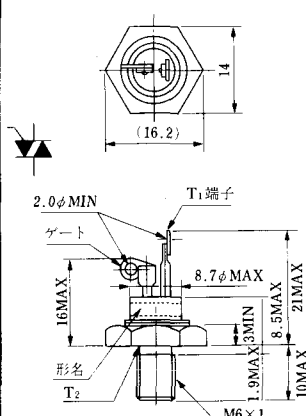
MT-12



MT-13



MT-14



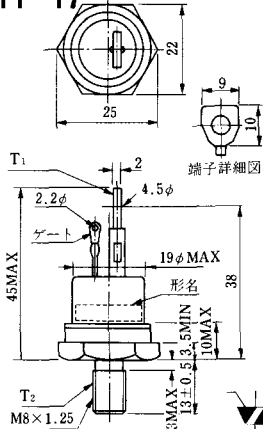
MT-15



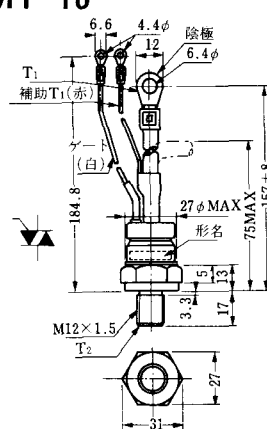
MT-16



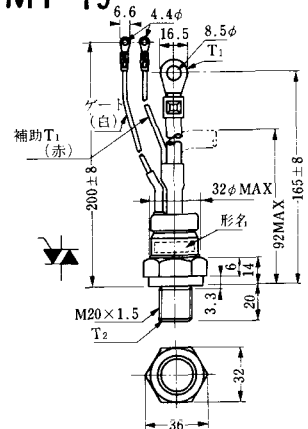
MT-17



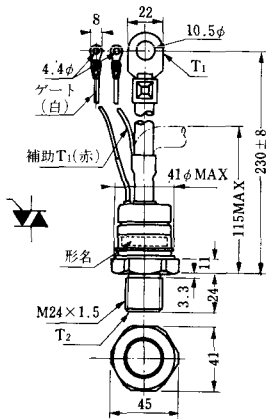
MT-18



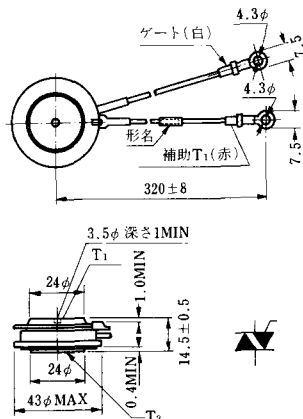
MT-19



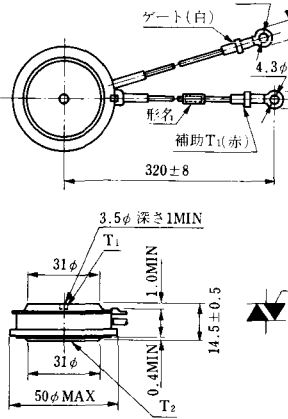
MT-20



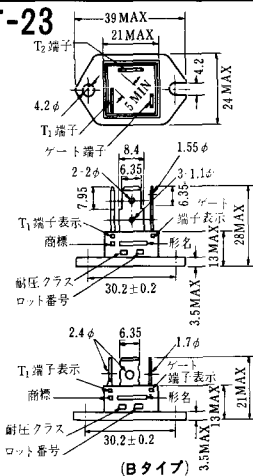
MT-21



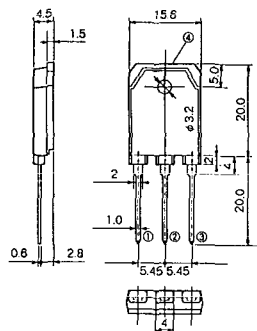
MT-22



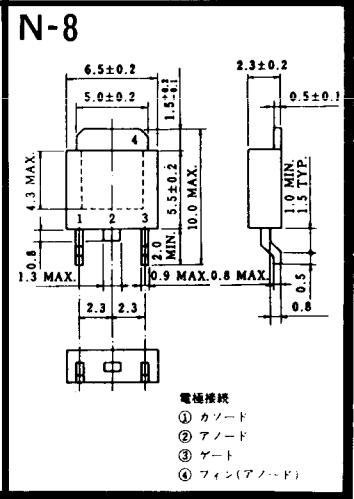
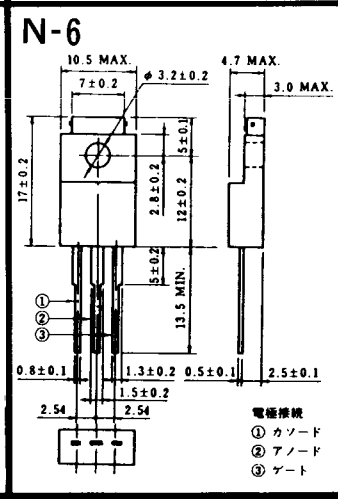
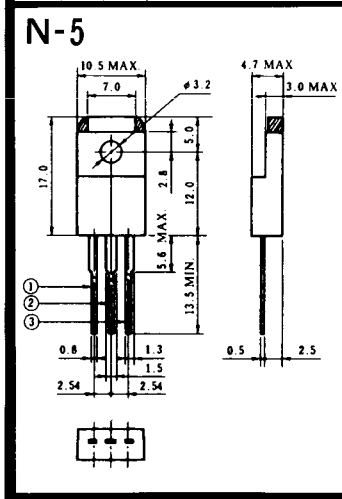
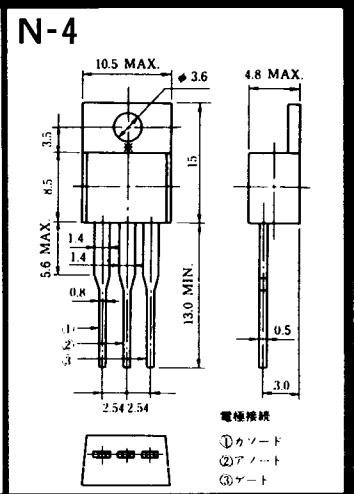
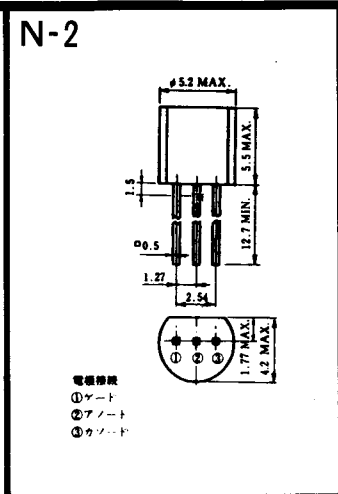
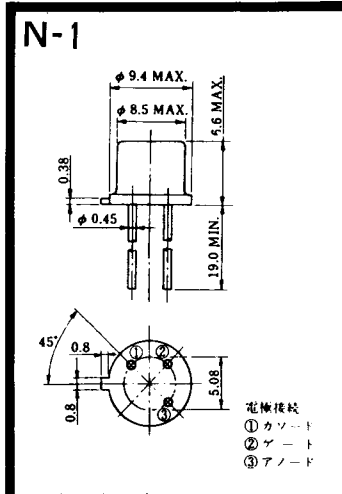
MT-23



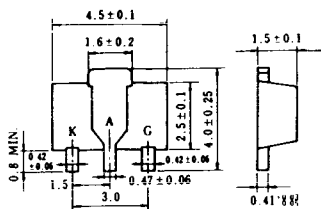
# MT-24



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



# N-9



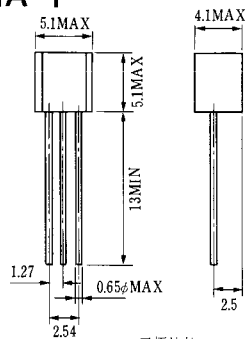
## 電極接続

K : カソード

A : アノード

G : ゲート

## NA-1



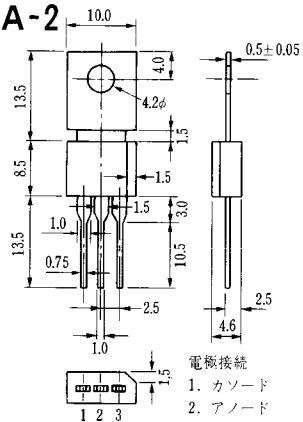
電極接続

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

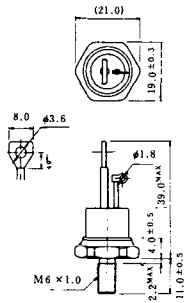


### NI-1



### NI-2

29RD



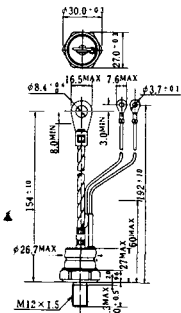
### NI-3

39RC  
59RC  
39RF  
59RF



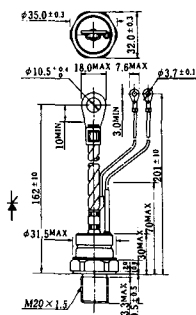
### NI-4

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



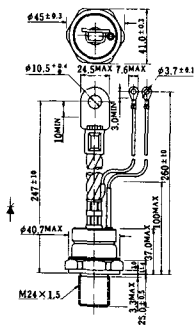
### NI-5

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



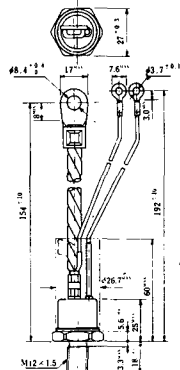
### NI-6

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



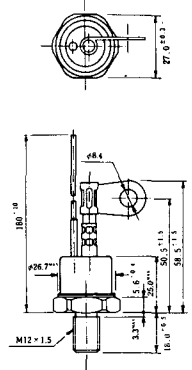
### NI-7

89RW<sub>JL</sub>  
129RW<sub>JL</sub>



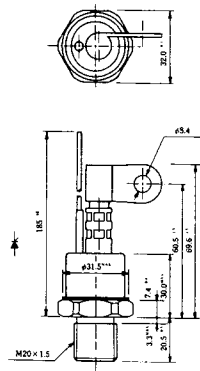
### NI-8

89RW  
129RW



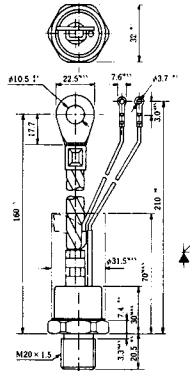
### NI-9

259RW  
309RW



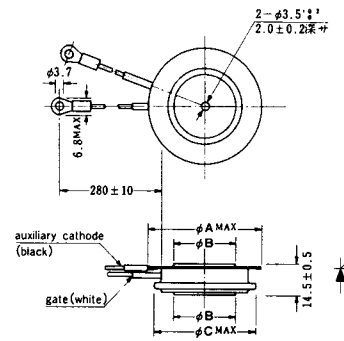
### NI-10

259RW<sub>JL</sub>  
309RW<sub>JL</sub>



### NI-11

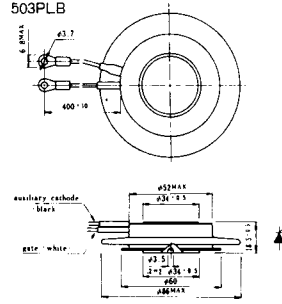
103PA  
253PA  
503PA  
553PA  
803PA  
103PLE  
103PLG  
103PLH  
203PLG  
253PLE  
253PLH  
353PLG  
403PLE  
403PLH



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

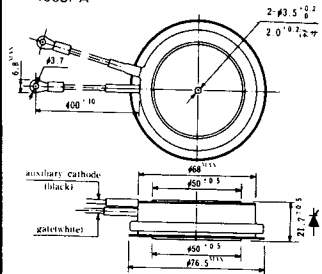
### NI-12

403PAB  
503PAB  
503PLB



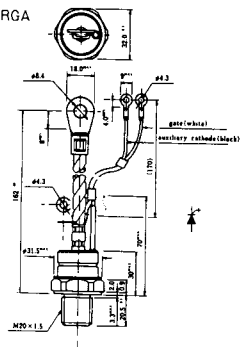
### NI-13

1003PA  
1003PAB  
1003PLF  
1003PLH  
1503PA



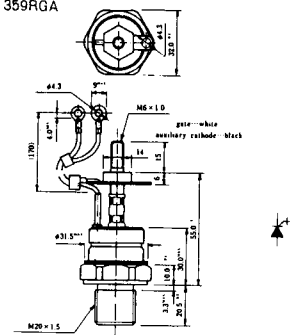
### NI-14

358RGA



### NI-15

359RGA







NI-24

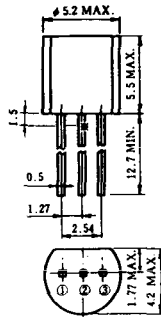
2001PGB<sup>r</sup> JE



NI-25

NI-26

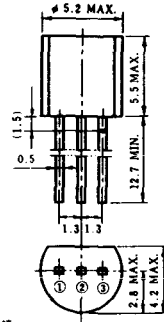
### NT-1



電極接続

- ① T<sub>1</sub>
- ② ゲート
- ③ T<sub>2</sub>

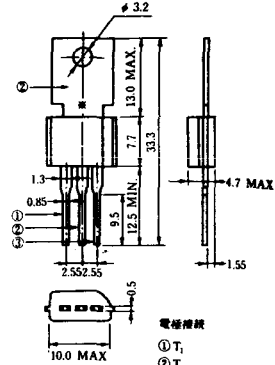
### NT-2



電極接続

- ① T<sub>1</sub>
- ② ゲート
- ③ T<sub>2</sub>

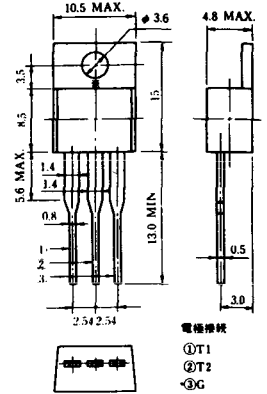
### NT-3



電極接続

- ① T<sub>1</sub>
- ② T<sub>2</sub>
- ③ ゲート

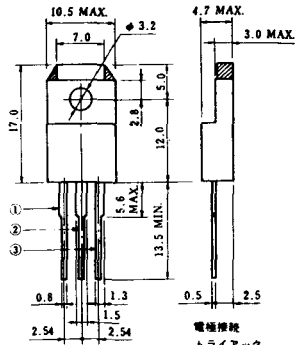
### NT-4



電極接続

- ① T<sub>1</sub>
- ② T<sub>2</sub>
- ③ G

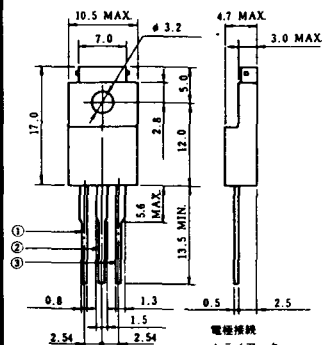
### NT-5



電極接続  
トライアック

- ① T<sub>1</sub>
- ② T<sub>2</sub>
- ③ ゲート

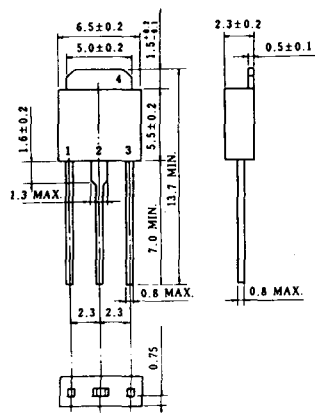
### NT-6



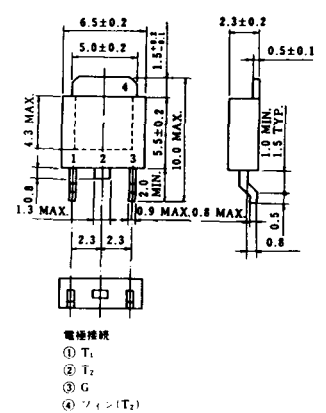
電極接続  
トライアック

- ① T<sub>1</sub>
- ② T<sub>2</sub>
- ③ ゲート

### NT-7



### NT-8



電極接続

- ① T<sub>1</sub>
- ② T<sub>2</sub>
- ③ G
- ④ シフト(T<sub>2</sub>)

S-1



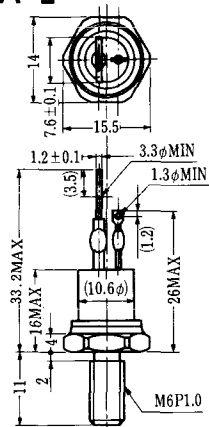
ST-1



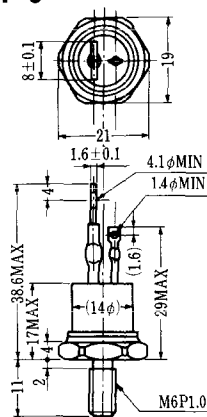
SA-1



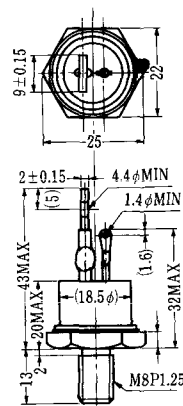
SA-2



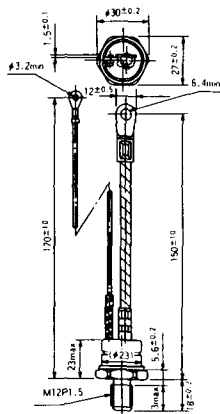
SA-3



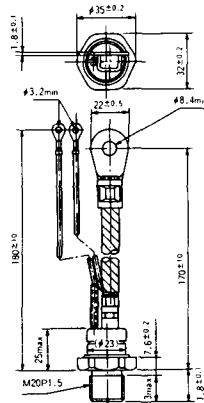
SA-4



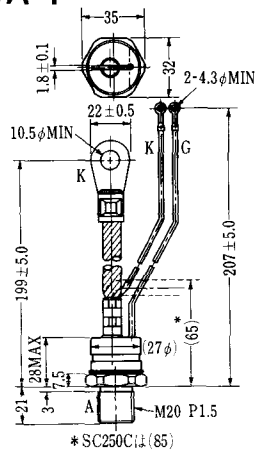
SA-5



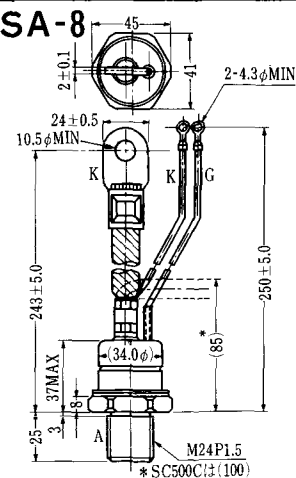
SA-6



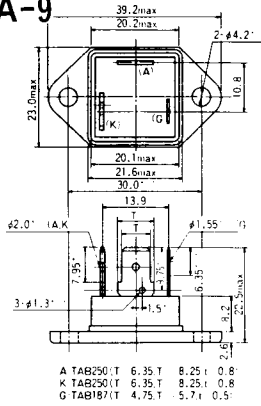
SA-7



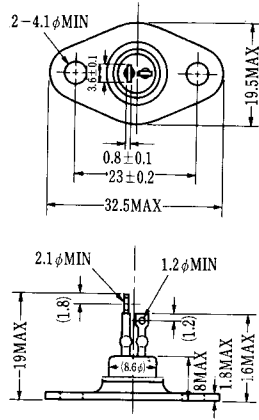
SA-8



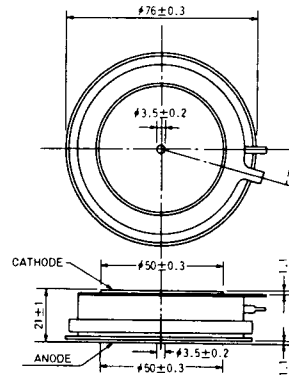
### SA-9



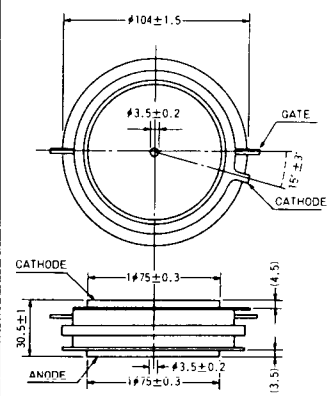
### SA-10



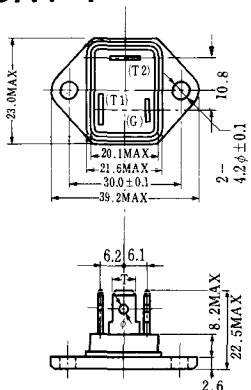
### SA-11



### SA-12

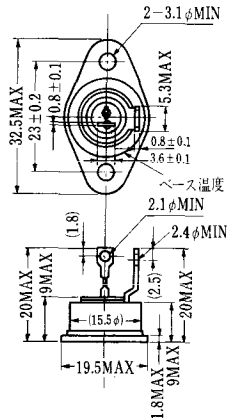


SAT-1

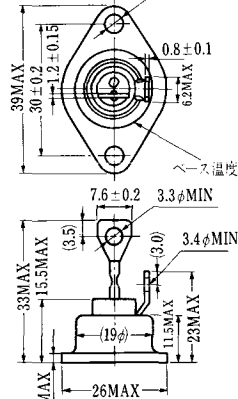


T1 端子: フラスト > 250 (T=6.35, t=0.8,  $\phi=1.65$ )  
 T2 端子: フラスト > 250 (T=6.35, t=0.8,  $\phi=1.65$ )  
 C 端子: フラスト > 187 (T=4.75, t=0.5,  $\phi=1.3$ )

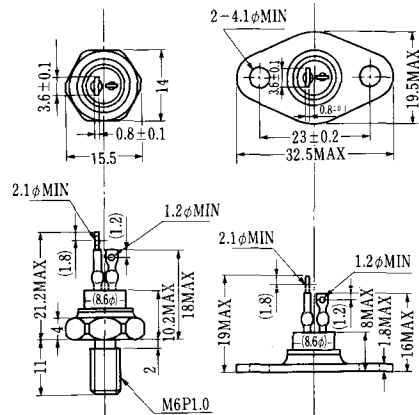
SAT-2



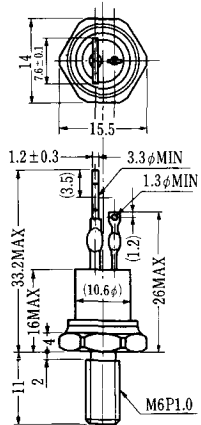
SAT-3



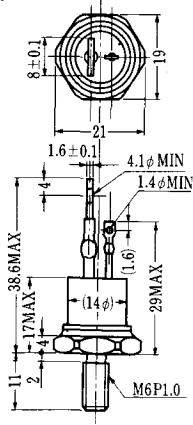
SAT-4



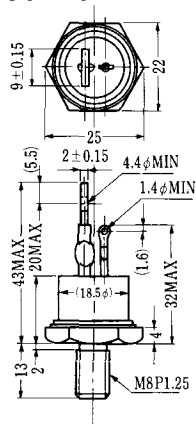
SAT-5



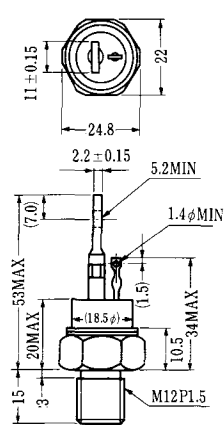
SAT-6



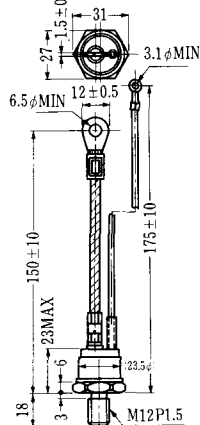
SAT-7



SAT-8



SAT-9



SAT-10



SAT-11





### SY-1 (1096A)



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



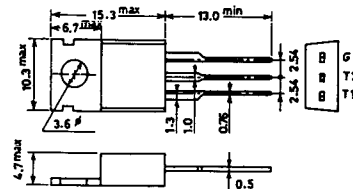
### 1142



### 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)

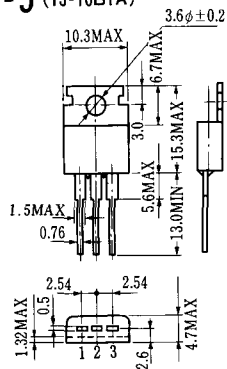
**T-3 (13-8C1A)**



アノード

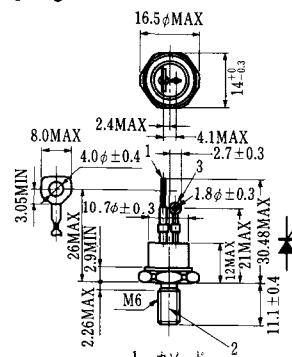
- 1 カソード
- 2 アノード
- 3 ゲート

**T-5 (13-10B1A)**



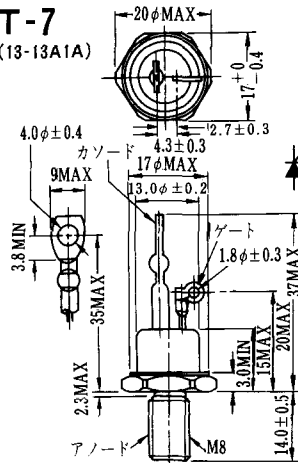
- 1 カソード
- 2 アノード
- 3 ゲート

**T-6 (13-11D1A)**

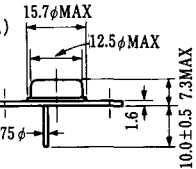


- 1 カソード
- 2 アノード
- 3 ゲート

**T-7 (13-13A1A)**

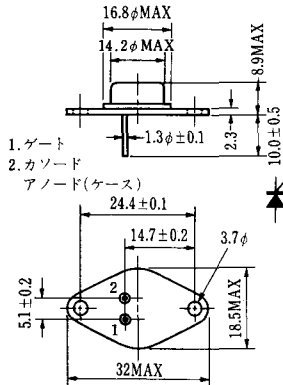


アノード



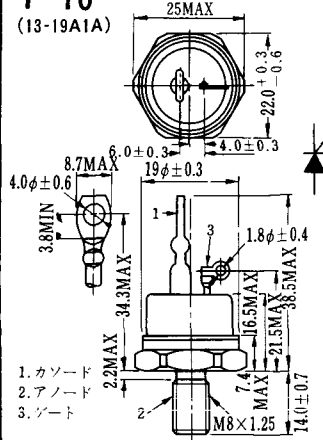
1. ゲート
2. カソード
3. アノード(ケース)

### T-9 (13-14A1A)



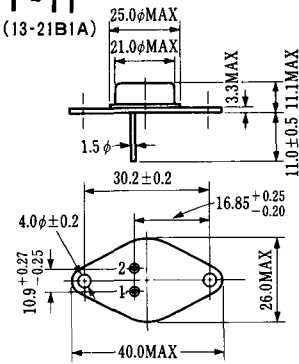
1. ゲート
2. カソード
- アノード(ケース)

### T-10 (13-19A1A)



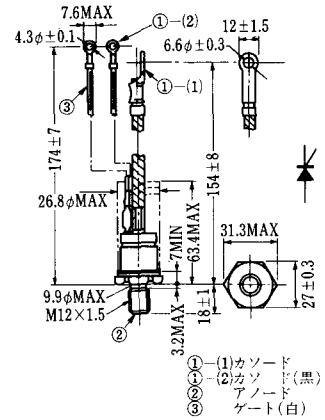
1. カソード
2. アノード
3. ゲート

### T-11 (13-21B1A)



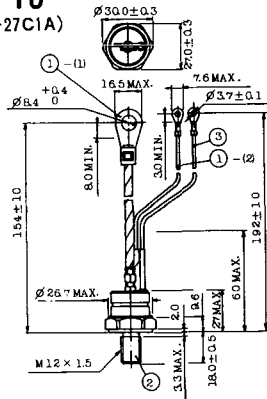
1. ゲート
2. カソード
- アノード(ケース)

### T-12 (13-27B1B)



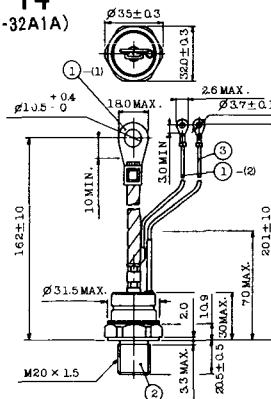
- ①(1) カソード
- ①(2) カソード(黒)
- ② アノード
- ③ ゲート(白)

### T-13 (13-27C1A)



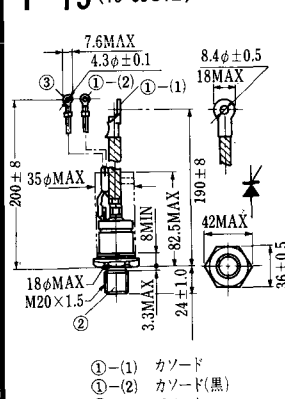
- 1-(1) カソード
- 1-(2) カソード(黒)
- 2 アノード
- 3 ゲート(白)

### T-14 (13-32A1A)



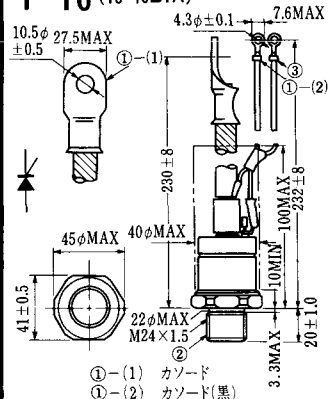
- 1-(1) カソード
- 1-(2) カソード(黒)
- 2 アノード
- 3 ゲート(白)

### T-15 (13-35C1B)

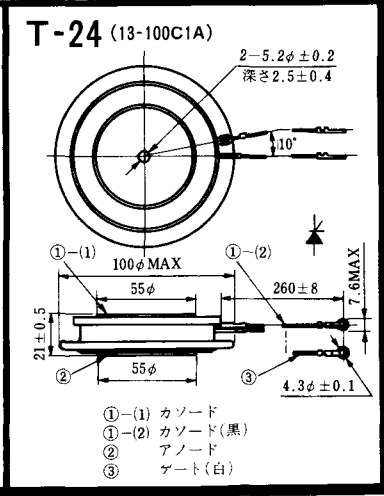
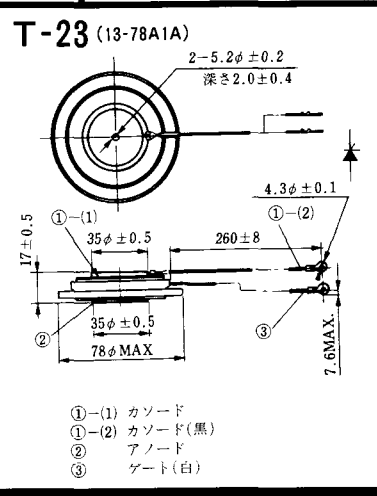
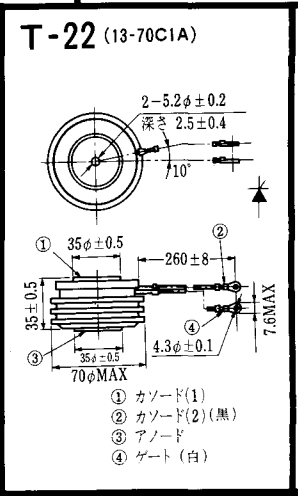
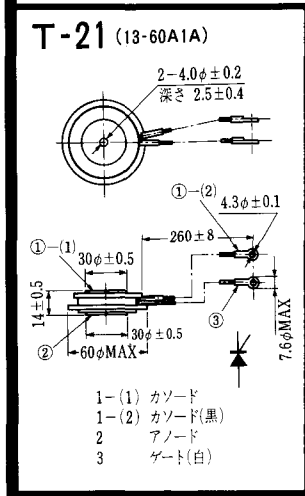
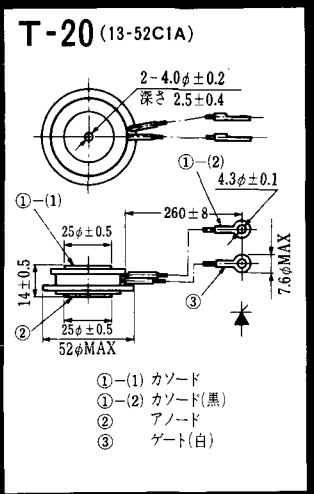
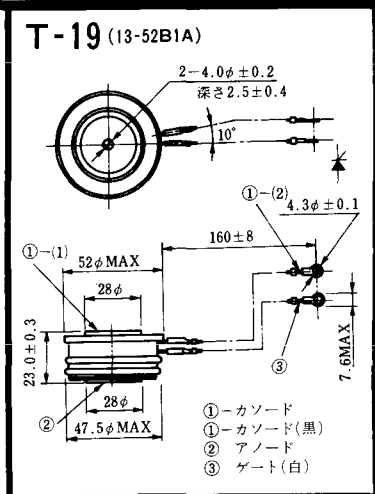
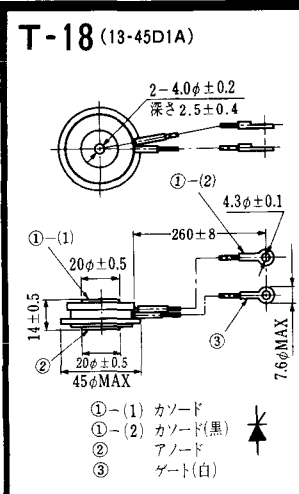
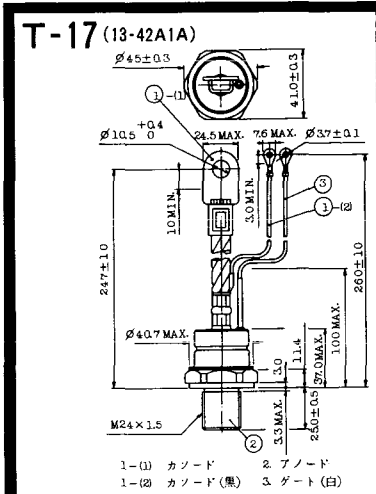


- ①(1) カソード
- ①(2) カソード(黒)
- ② アノード
- ③ ゲート(白)

### T-16 (13-40B1A)



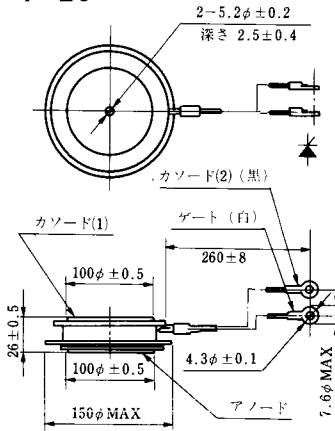
- ①(1) カソード
- ①(2) カソード(黒)
- ② アノード
- ③ ゲート(白)



**T-25** (13-120A2A)



**T-26** (13-150A1A)



**T-27** (13-37A1A)



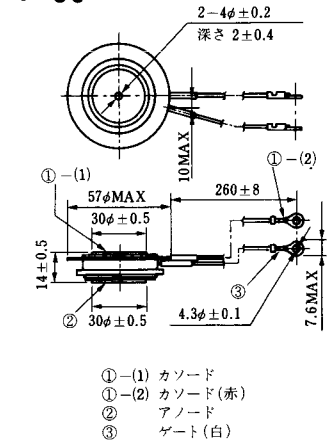
**T-28** (13-45E1A)



**T-29** (13-51A1A)



**T-30** (13-57A1A)



**T-31** (13-100E1A)



**T-32** (13-60E3A)



**T-33 (13-78B1A)**



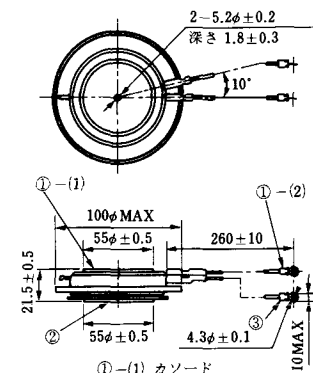
- ① カソード
- ② アノード
- ③ ゲート

**T-34 (13-66A1A)**



- ① カソード
- ② アノード
- ③ ゲート

**T-35 (13-100D1A)**



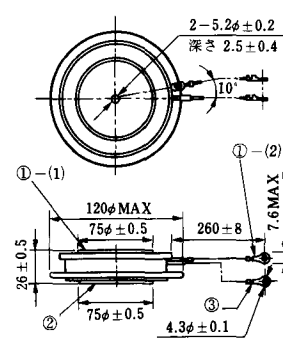
- ①-(1) カソード
- ①-(2) カソード(黒)
- ② アノード
- ③ ゲート(白)

**T-36 (13-120E1A)**



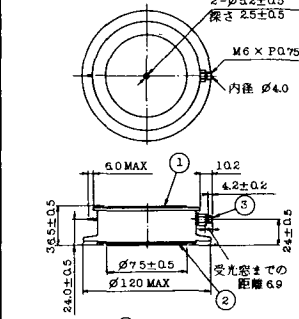
- ①-(1) カソード
- ①-(2) カソード(黒)
- ② アノード
- ③ ゲート(白)

**T-37 (13-120A1A)**



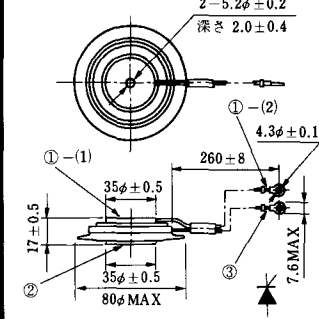
- ①-(1) カソード
- ①-(2) カソード(黒)
- ② アノード
- ③ ゲート(白)

**T-38 (13-120C1A)**



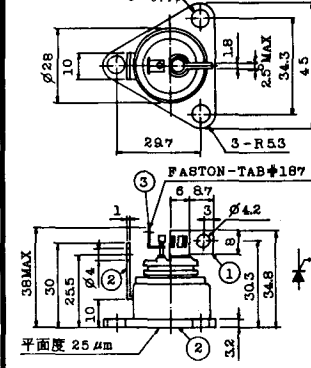
- ① カソード
- ② アノード
- ③ ゲート

**T-39 (13-80B1A)**



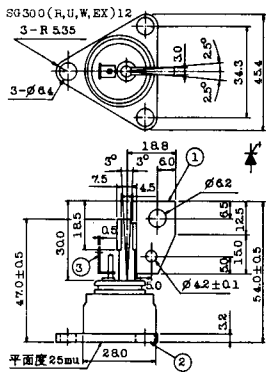
- ①-(1) カソード
- ①-(2) カソード(黒)
- ② アノード
- ③ ゲート(白)

**T-40 (13-28A1A)**



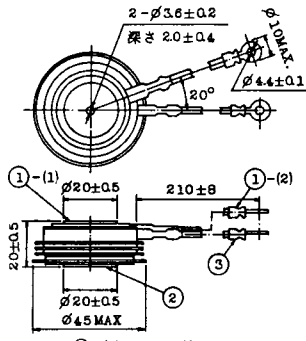
- 1. カソード
- 2. アノード
- 3. ゲート

### T-41 (13-28A2A)



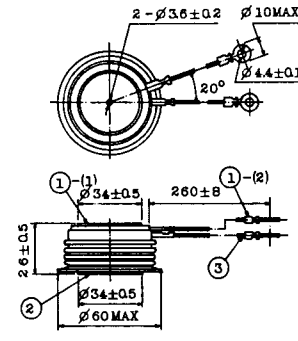
- 1 カソード
- 2 アノード
- 3 ゲート

### T-42 (13-45F1A)



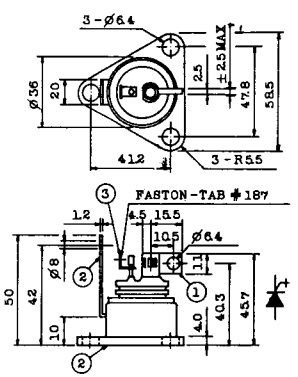
- ①-(1) カソード
- ①-(2) カソード(黒)
- ② アノード
- ③ ゲート(白)

### T-43 (13-60E2A)



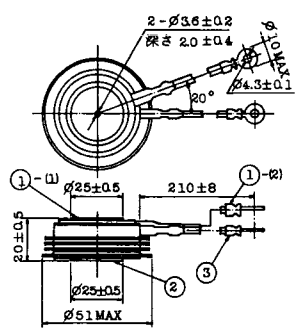
- ①-(1) カソード
- ①-(2) カソード(黒)
- ② アノード
- ③ ゲート(白)

### T-44 (13-36A1A)



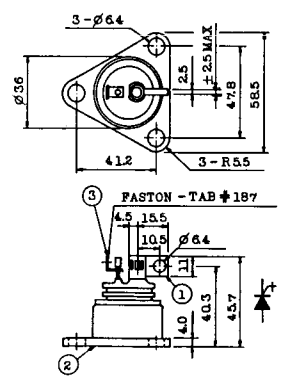
- 1 カソード
- 2 アノード
- 3 ゲート

### T-45 (13-51B1A)



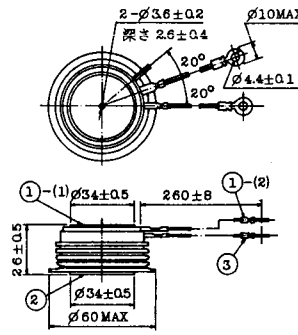
- ①-(1) カソード
- ①-(2) カソード(黒)
- ② アノード
- ③ ゲート(白)

### T-46 (13-36B1A)



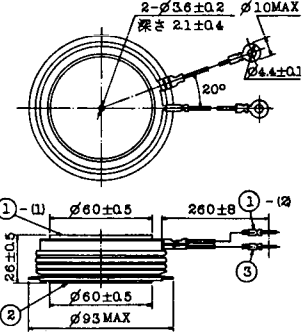
- 1 カソード
- 2 アノード
- 3 ゲート

### 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-49** (13-75A1A)



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

**T-50** (13-10A3A)



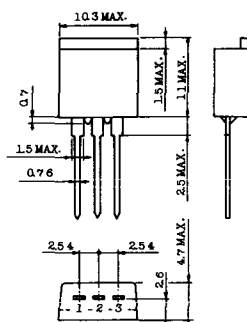
- 1 カソード
- 2 アノード
- 3 ゲート

**T-51** (13-10D1A)



- 1 カソード
- 2 アノード
- 3 ゲート

**T-52** (13-10D2A)



- 1 カソード
- 2 アノード
- 3 ゲート

**T-53** (13-10E1B)



- 1 カソード
- 2 アノード
- 3 ゲート

**T-54** (13-10F1B)



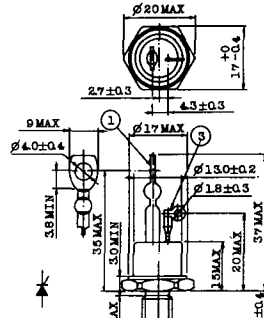
- 1 カソード
- 2 アノード
- 3 ゲート

**T-55** (13-5A1D)



- 1 カソード
- 2 アノード
- 3 アノード

**T-56** (13-13C1A)



- 1 カソード
- 2 アノード
- 3 ゲート

T-57 (12-16C1A)



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

T-58 (13-10H1B)



1. カソード
2. アノード
3. ゲート

T-59 (13-120A1A)



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

T-60



1. カソード
2. アノード
3. ゲート

T-61 (13-5B1A)



1. ゲート
2. アノード
3. カソード

T-62 (13-10H1A)



1. カソード
2. アノード
3. ゲート

T-63 (13-16A1B)



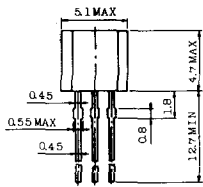
1. カソード
2. アノード
3. ゲート

TT-1



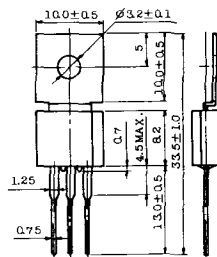
- 1 ゲート
- 2 T<sub>2</sub>
- 3 T<sub>1</sub>

TT-2



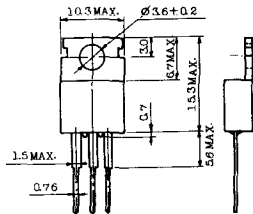
- 1 T<sub>1</sub>
- 2 ゲート
- 3 T<sub>2</sub>

TT-3



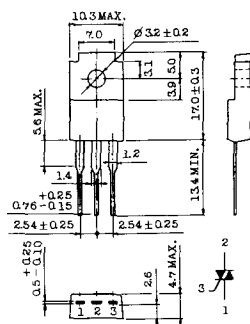
- 1 T<sub>1</sub>
- 2 T<sub>2</sub>
- 3 ゲート

TT-4



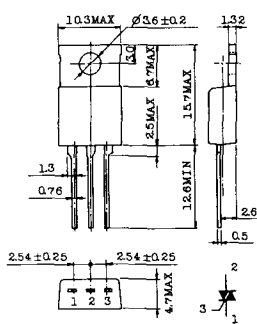
- 1 T<sub>1</sub>
- 2 T<sub>2</sub>
- 3 ゲート

TT-5



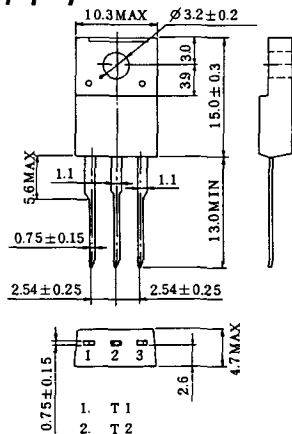
- 1 T<sub>1</sub>
- 2 T<sub>2</sub>
- 3 ゲート

TT-6



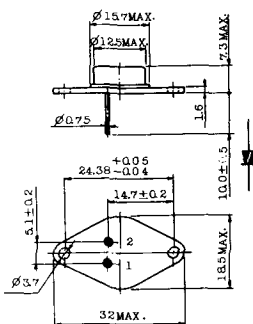
- 1 T<sub>1</sub>
- 2 T<sub>2</sub> (放熱板)
- 3 ゲート

TT-7



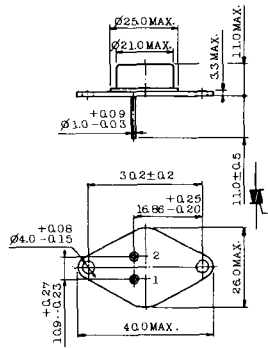
- 1 T<sub>1</sub>
- 2 T<sub>2</sub>
- 3 ゲート

TT-8



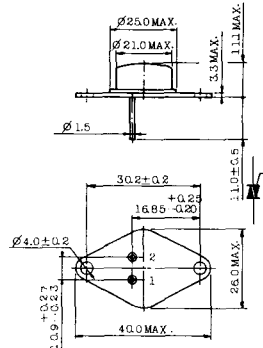
- 1 ゲート
- 2 T<sub>1</sub>
- T<sub>2</sub> (ケース)

TT-9



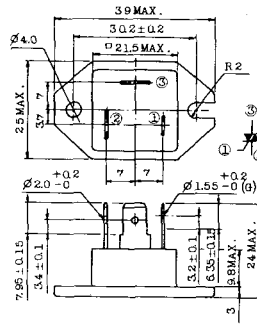
1. ゲート  
2. T<sub>1</sub>  
3. T<sub>2</sub> (ケース)

TT-10



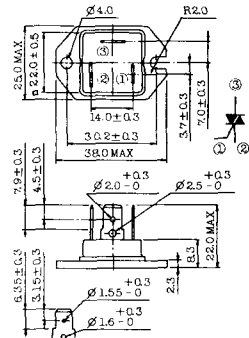
1. ゲート  
2. T<sub>1</sub>  
3. T<sub>2</sub> (ケース)

TT-11



1. ゲート (フーストン端子 #187)  
2. T<sub>1</sub> ( " #250)  
3. T<sub>2</sub> ( " #250)

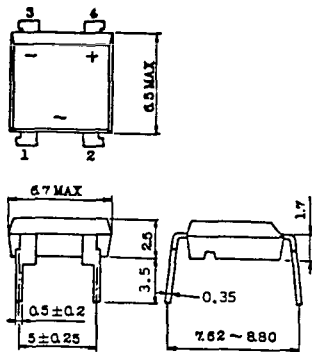
TT-12



ゲート端子詳細

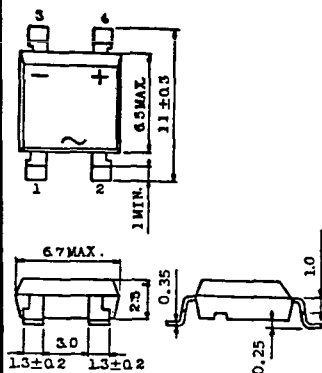
- ① ゲート (フーストン端子 #187)  
② T<sub>1</sub> ( " #250)  
③ T<sub>2</sub> ( " #250)

TT-13



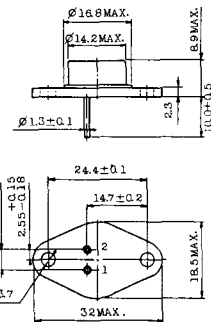
- 1, 2: T<sub>2</sub>  
3: GATE  
4: T<sub>1</sub>

TT-14



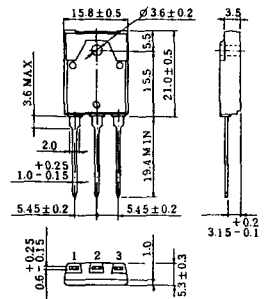
- 1, 2: T<sub>2</sub>  
3: GATE  
4: T<sub>1</sub>

TT-15 (13-14A1B)



1. ゲート  
2. T<sub>1</sub>  
T<sub>2</sub> (ケース)

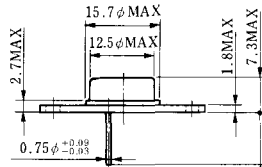
TT-16 (13-16A1A)



1. T<sub>1</sub>  
2. T<sub>2</sub>  
3. ゲート

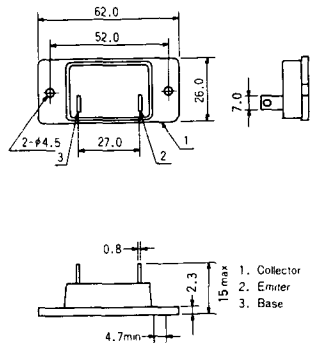


# TS-8

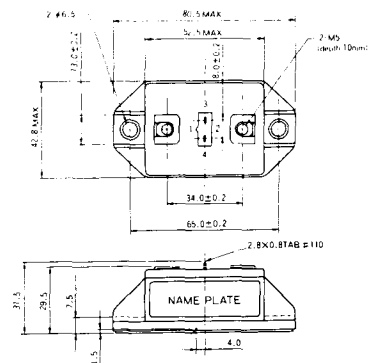


- 1. ベース
- 2. エミッタ  
コレクタ  
(ケース)

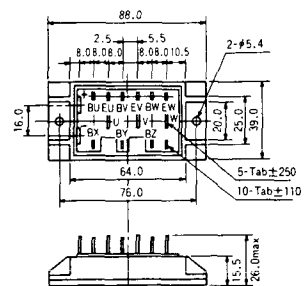
S-62A1A



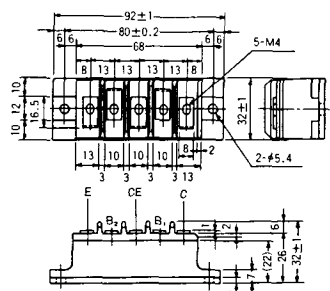
S-80A1A



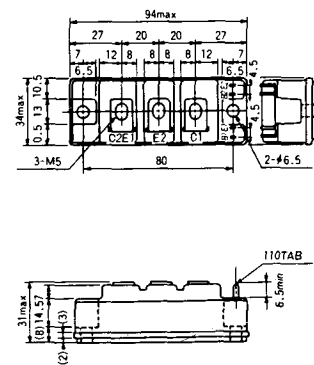
S-88D1A



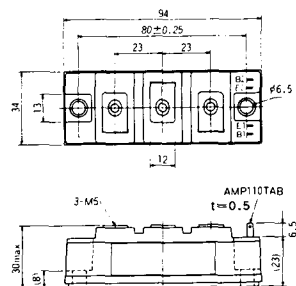
S-92B1A



S-94B1A



S-94B1B



S-94B2A



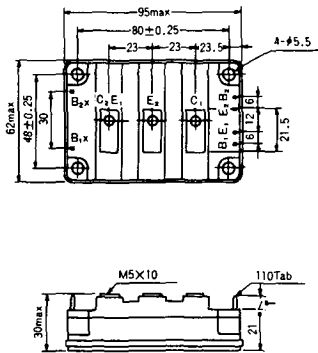
S-94D1A



S-95A1A



S-95B1A



S-98B1B



S-108A2A

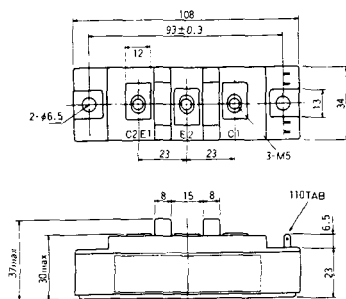




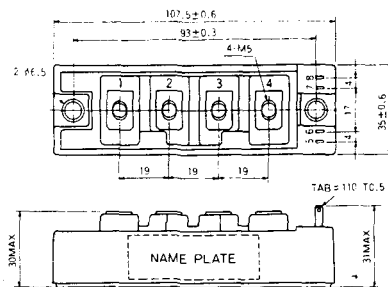
S-108B1A



S-108B1B



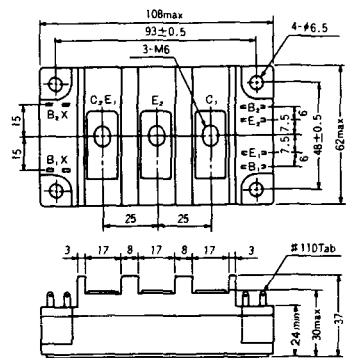
S-108B1C



S-108B2A



S-108B2B



### 2-22B1A



### 2-27A4A



### 2-33C1A



### 2-33D1A



### 2-33F1A



### 2-37A1A



2-48A3A



2-48A3B



2-48A4A



2-64A2A



2-64A2B



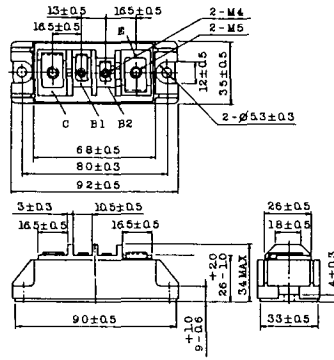
2-68A2A



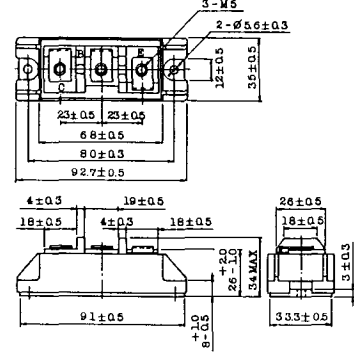
2-68B2A



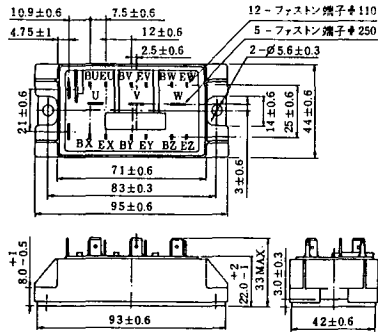
2-68C1A



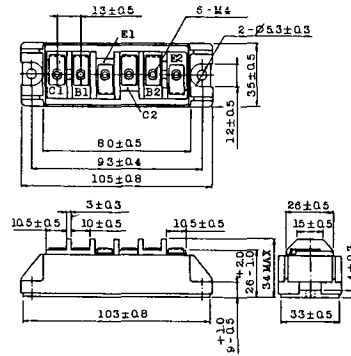
2-68D2A



2-72A3A



2-80A1A



2-80B1A





### 2-94D1A



### 2-96A3A



### 2-96A4A



### 2-98B1A



### 2-98C2A



### 2-108A2A



### 2-108B1A



### 2-109A3A



### 2-109A4A



### 2-109B3A



### 2-109B4A



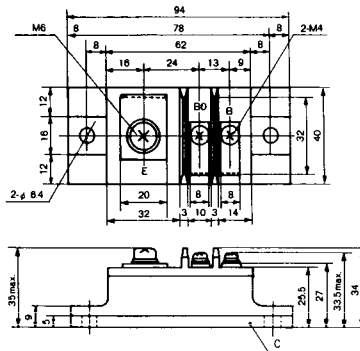
### BBT-II

BBTII  
1D200A-020



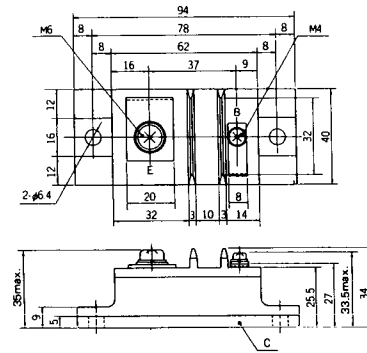
### BBT-III

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



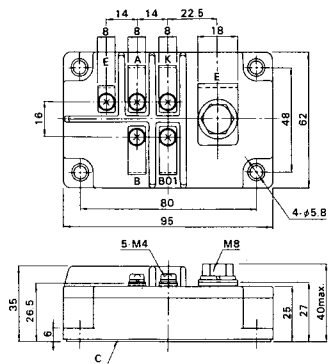
### BBT-III

BBTIII  
ETN01-055  
ET1257



### BBT-IV

BBTIV  
1D500A-030

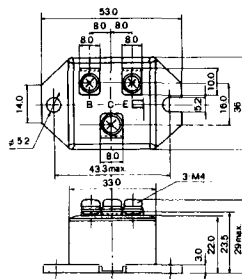




M-101



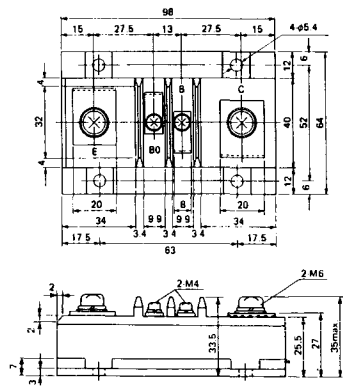
M-102



M-103



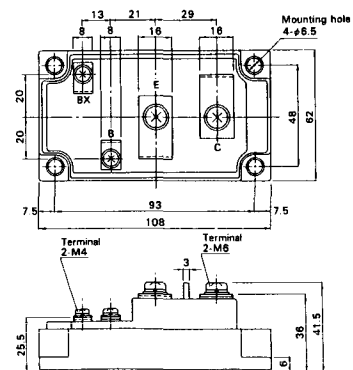
M-104



M-105



M-106



### M-107



### M-116



M-201



M-202



M-203



M-204



M-205



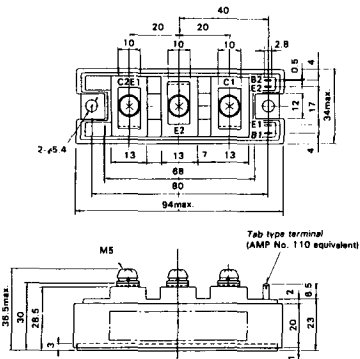
M-206



M-207



M-208



M-209



M-210



M-211



M-212

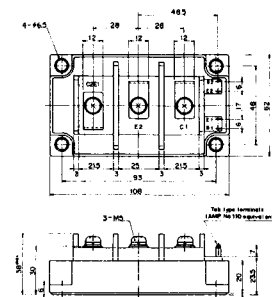


M-213



M-214

M-215



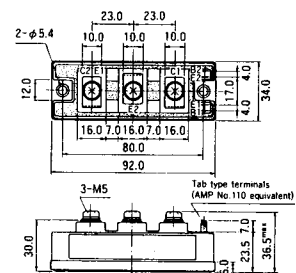
M-216



M-217



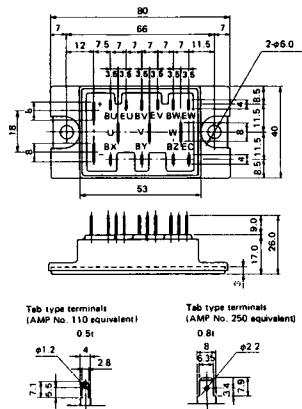
M-218



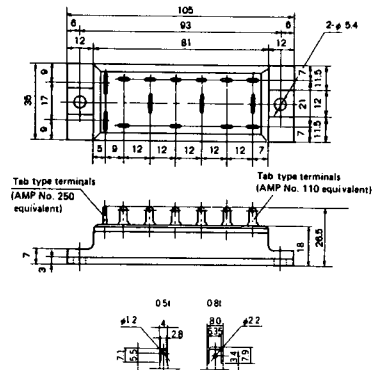
M-219



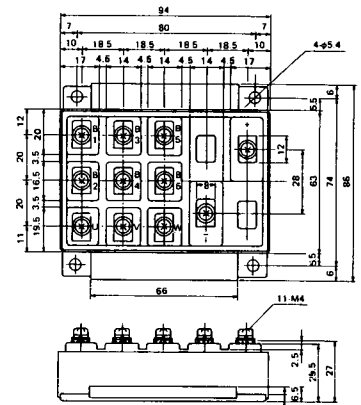
**M-601**



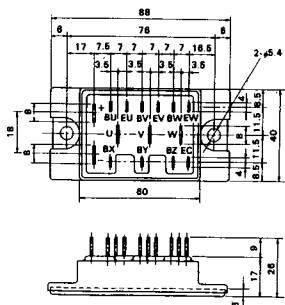
**M-602**



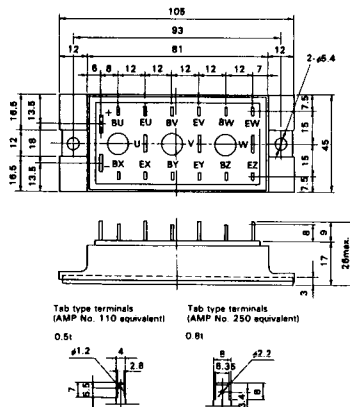
**M-603**



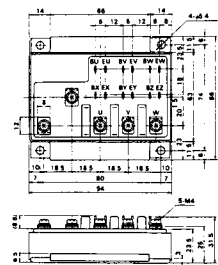
**M-604**



**M-605**



**M-606**



M-607



M-608



M-609



M-610

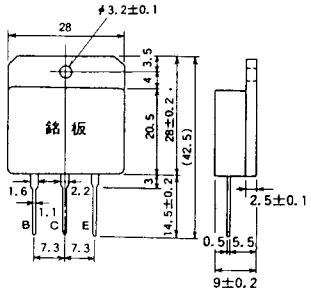


M-616

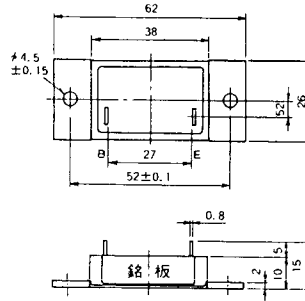




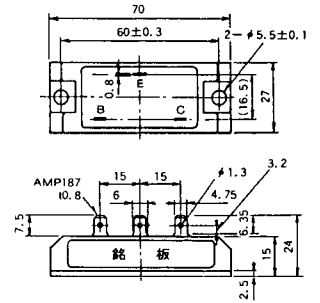
M-1A1A



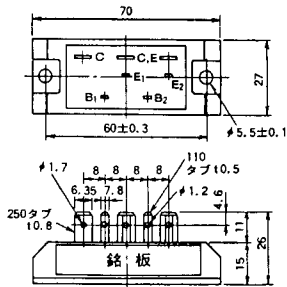
M-2A1A



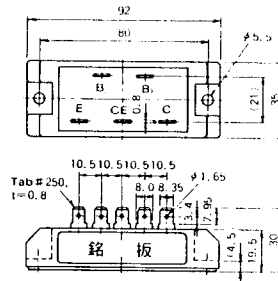
M-2B1A



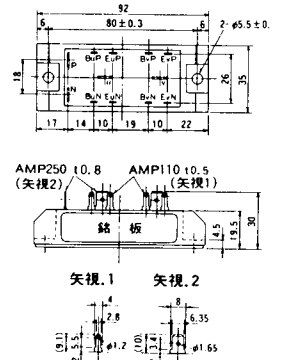
M-2B2A



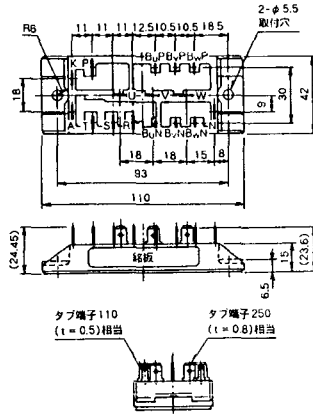
M-2C2A



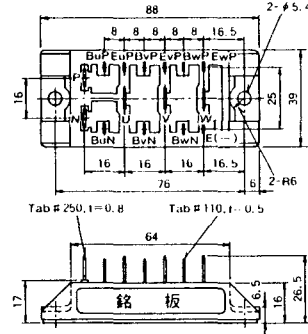
M-2D4A



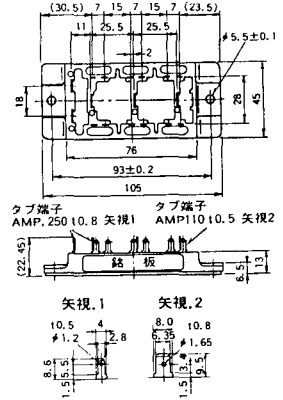
### M-2E6A



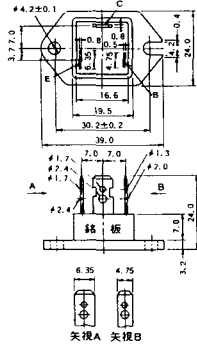
### M-2F6A



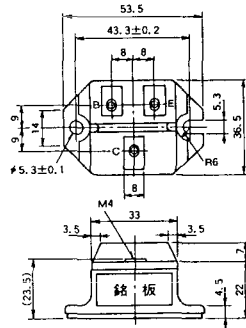
### M-2G6A



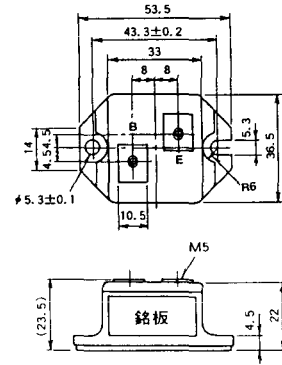
### M-3A1A



### M-3B1A



### M-3B1B



M-3C1A



M-3D6A



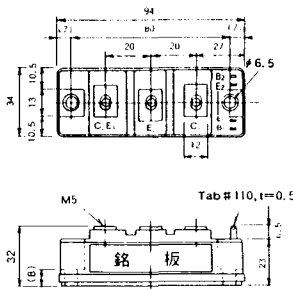
M-3E6A



M-4A1A



M-4A2A



M-4A1B



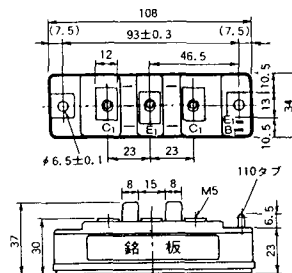
M-4A2B



M-4B2A



M-5A1A



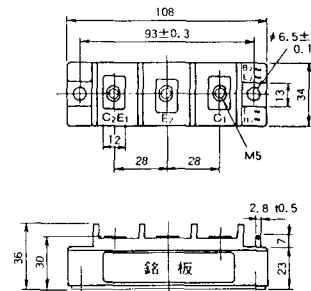
M-5A1B



M-5A2A



M-5B2A



M-5C2A



M-5D2A



M-6A1A



M-7A1A



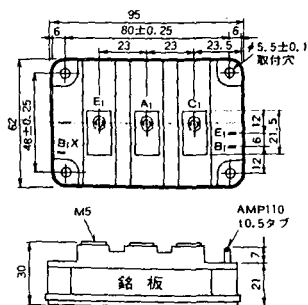
M-7B1A



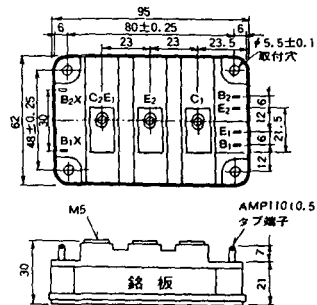
M-8A1A



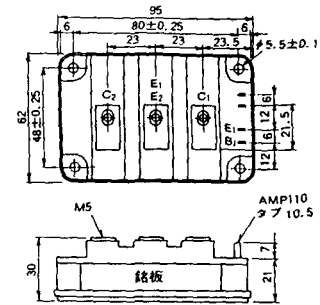
### M-8A1B



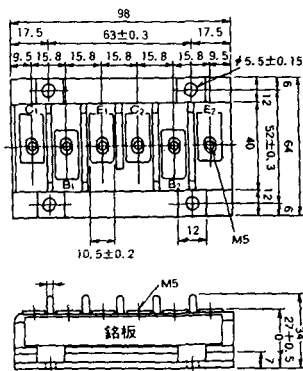
### M-8A2A



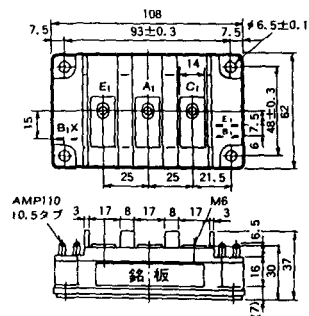
### M-8A2B



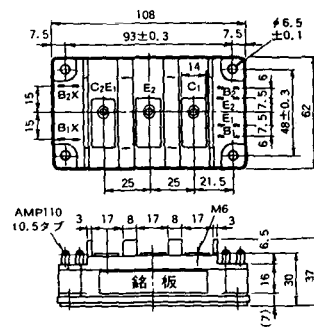
### M-8B2A



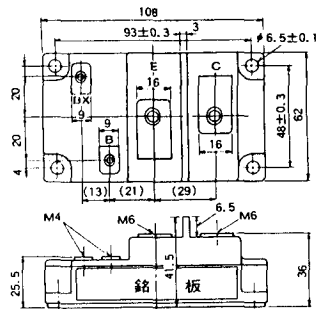
### M-9A1A



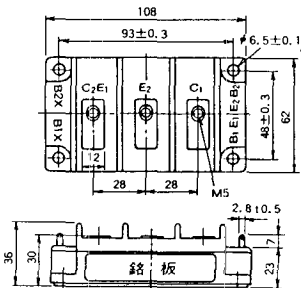
### M-9A2A



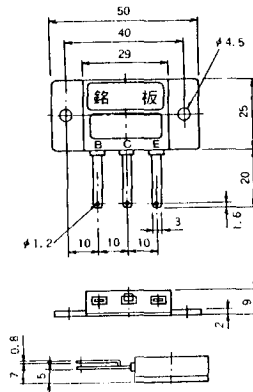
M-9B1A



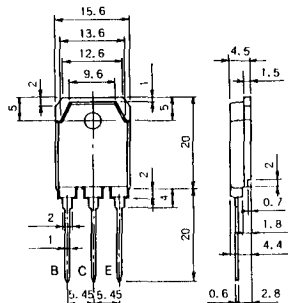
M-9C2A



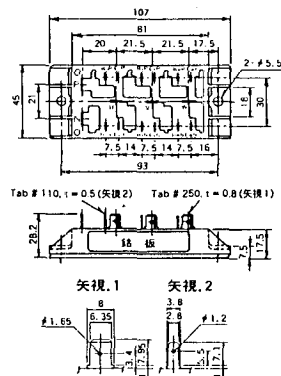
M-1A1B



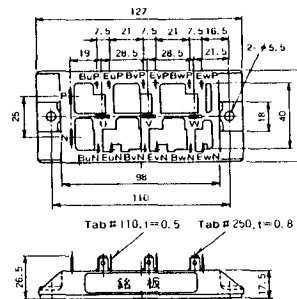
M-1A1C



M-2E6B



M-2E6C



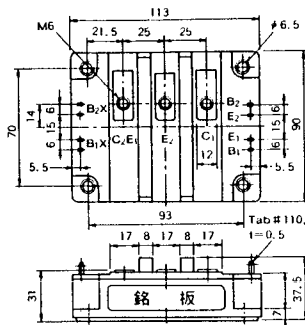




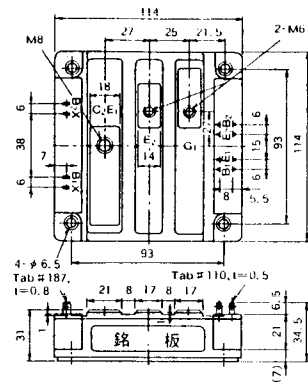
M-10A2A



M-10A2B



M-11A2A



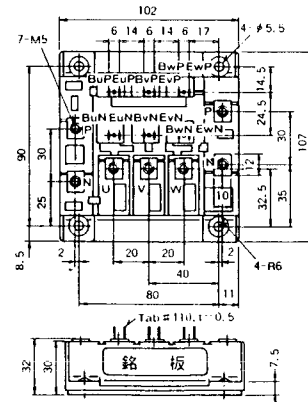
M-12A6A



M-12B6A



M-12B6B



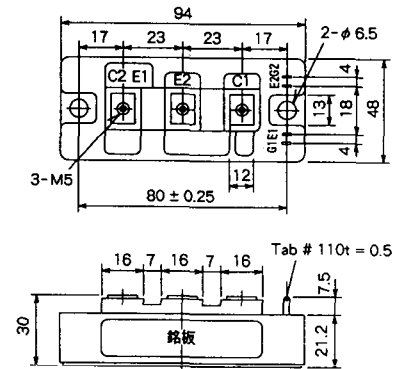
### M-4A2D



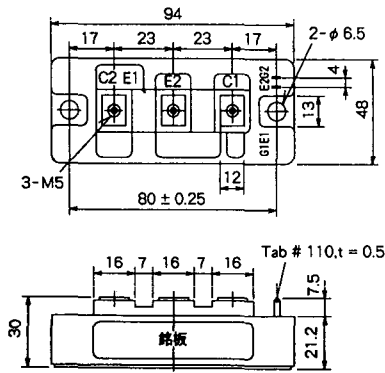
### M-4A2E



### M-4C2A



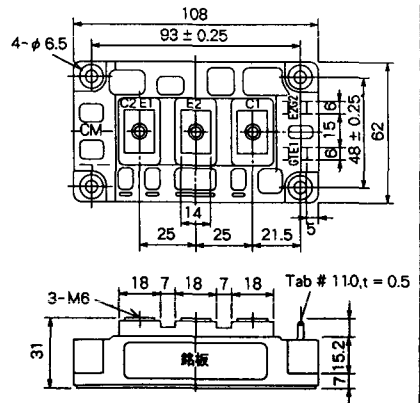
### M-4C2B



### M-9B1C



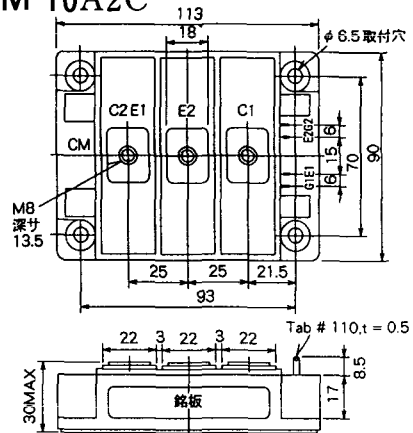
### M-9D2A



M-9D2B



M-10A2C



H-101



Weight :480g

### H-201



Weight: 200g

### H-202



Weight: 360g

### LF-J



### LF-K



