

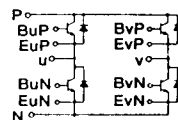
トランジスタ・モジュール (NPN, 単相/三相ブリッジ)

- ダーリントン・トランジスタ4個/6個内蔵  
(単相ブリッジ/3相ブリッジ接続)
- フリーホイール・ダイオード付
- 絶縁形
- UL認定品あり

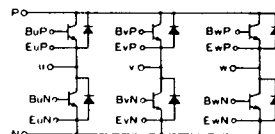
Yellow Card No. : E80276 (N)  
File No. : E80271

■ 等価回路

BA-1A



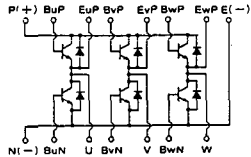
TA-1A



注1.  $I_c = 1A$ ,  $V_{EB} = 2V$ , #印は $V_{CEX}$  ( $V_{EB} = 2V$ )。 注2. 60Hz, 単相半波1サイクル波高値。 注3.  $T_c = 25^\circ C$ 。 注4. AC, 1分間。

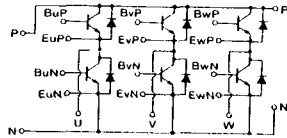
型名	最大定格 (T <sub>J</sub> =25°C)											電 気 的 特 性									
	V <sub>CB0</sub>	V <sub>CEX (SUS)</sub>	V <sub>EB0</sub>	I <sub>c</sub>	I <sub>B</sub>	I <sub>F</sub>	I <sub>FM</sub>	P <sub>c</sub>	T <sub>J</sub>	T <sub>reg</sub>	V <sub>iso</sub>	I <sub>CEX</sub>		I <sub>EB0</sub>		V <sub>CE0 (SUS)</sub>		h <sub>FE</sub>			
	(V)	(V) (注1)	(V)	(A)	(A)	(A)	(A) (注2)	(W) (注3)	(°C)	(°C)	(V) (注4)	最大 (mA)	V <sub>CE</sub> (V)	V <sub>EB</sub> (V)	最大 (mA)	V <sub>EB</sub> (V)	最小 (V)	I <sub>c</sub> (A)	最小 (V)	V <sub>CE</sub> (V)	I <sub>c</sub> (A)
QM20BA-H	600	600	7	20	1.0	20	200	160	150	-40~125	2500	1	600	2	150	7			75/100	2/5	20
QM10TD-H	600	600	7	10	1.0	10	100	83	150	-40~125	2000	1	600	2	100	7			75/100	2/5	10
QM10TE-HB	600	600	7	10	1.0	10	100	73	150	-40~125	2500	1	600	2	40	7			250	2	10
QM10KD-HB	600	600	7	10	1.0	10	100	74	150	-40~125	2500	1	600	2	40	7			250	2	10
QM15TD-9	500	450	7	15	1.0	15	150	83	150	-40~125	2000	1	500	2	100	7			75/100	2/5	15
QM15TD-9B	500	450	7	15	1.0	15	150	74	150	-40~125	2500	1	500	2	40	7			250	2	15
QM15TG-9	500	450	7	15	1.0	15	150	83	150	-40~125	2000	1	500	2	100	7			75/100	2/5	15
QM15TG-9B	500	450	7	15	1.0	15	150	83	150	-40~125	2000	1	500	2	40	7			250	2	15
QM15TB-2H	1000	1000	7	15	1.0	15	150	150	150	-40~125	2500	2	1000	2	100	7			75/100	2.8/5	15
QM15TB-2HB	1000	1000	7	15	1.0	15	150	150	150	-40~125	2500	1	1000	2	50	7			250	3	15
QM15TB-24	1200	1200	7	15	1.0	15	150	150	150	-40~125	2500	2	1200	2	100	7			75	5	15
QM15TD-H	600	600	7	15	1.0	15	150	100	150	-40~125	2000	1	600	2	100	7			75/100	2/5	15
QM15TD-HB	600	600	7	15	1.0	15	150	75	150	-40~125	2500	1	600	2	40	7			250	2	15
QM15KD-HB	600	600	7	15	1.0	15	150	76	150	-40~125	2500	1	600	2	40	7			250	2	15
QM20TD-9	500	450	7	20	1.0	20	200	100	150	-40~125	2000	1	500	2	100	7			75/100	2/5	20
QM20TD-9B	500	450	7	20	1.0	20	200	76	150	-40~125	2500	1	500	2	40	7			250	2	20
QM20TG-9B	500	450	7	20	1.0	20	200	100	150	-40~125	2000	1	500	2	40	7			250	2	20
QM20TD-H	600	600	7	20	1.0	20	200	100	150	-40~125	2000	1	600	2	150	7			75/100	2/5	20

TA-1B



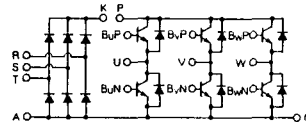
注) トランジスタはすべてダーリントン

TA-1C

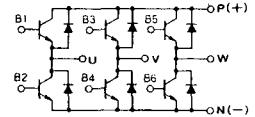


注) トランジスタはすべてダーリントン

KD-1A



TX 1A



注) トランジスタはすべてダーリントン

飽和電圧 (V)		(T <sub>J</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			
V <sub>CE</sub>	V <sub>BE</sub>	I <sub>C</sub>	I <sub>B</sub>	スイッチング時間 (μs)			I <sub>B1</sub>	I <sub>B2</sub>	V <sub>CC</sub>	I <sub>C</sub>	V <sub>F</sub>	t <sub>rr</sub>	θ <sub>J-C</sub> (°C/W)											
最大	最大	(A)	(A)	t <sub>on</sub>	t <sub>off</sub>	t <sub>r</sub>	(A)	(A)	(V)	(A)	(V)	I <sub>F</sub>	(μs)	I <sub>F</sub>	V <sub>BE</sub>							di/dt	トランジスタ部	ダイオード部
2.0	2.5	20	0.28	1.5	12	2.0	0.4	-0.4	300	20	1.5	20							0.8	2.2	BA-1A	M-2D4A	UL認定済	QM20BA-H
2.0	2.5	10	0.13	1.5	10	2.5	0.2	-0.2	300	10	1.5	10							1.5	2.5	TA-1A	M-2G6B	UL認定済	QM10TD-H
2.0	2.5	10	0.04	1.5	10	2.0	0.06	-0.2	300	10	1.5	10							1.7	2.8	TA-1B	M-3D6A	UL認定済	QM10TC-HB
2.0	2.5	10	0.04	1.5	10	2.0	0.06	-0.2	300	10	1.5	10							1.7	2.8	KD-1A	M-3D6B	UL認定済	QM10KD-HB
2.0	2.5	15	0.2	1.5	9.5	2.5	0.3	-0.3	250	15	1.5	15							1.5	2.5	TA-1A	M-2G6B	UL認定済	QM15TD-9
2.0	2.5	15	0.06	1.5	10	2.0	0.09	-0.3	250	15	1.5	15							1.7	2.8	TA-1A	M-2G6A	UL認定済	QM15TD-9B
2.0	2.5	15	0.2	1.5	9.5	2.5	0.3	-0.3	250	15	1.5	15							1.5	2.5	TA-1B	M-2F6A	UL認定済	QM15TC-9
2.0	2.5	15	0.06	1.5	10	2.0	0.09	-0.3	250	15	1.5	15							1.5	2.5	TA-1B	M-2F6A	UL認定済	QM15TC-9B
2.5	3.5	15	0.3	2.5	15	3.0	0.3	-0.3	600	15	1.5	15							0.8	1.2	TA-1A	M-2E6B	UL認定済	QM15TB-2H
3.0	3.5	15	0.06	2.0	10	3.0	0.09	-0.3	600	15	1.8	15							0.8	2.0	TA-1A	M-2E6B	UL認定済	QM15TB-2HB
3.0	3.5	15	0.3	2.5	15	3.0	0.3	-0.3	600	15	1.5	15							0.8	1.2	TA-1A	M-2E6B	UL認定済	QM15TB-24
2.0	2.5	15	0.2	1.5	10	3.0	0.3	-0.3	300	15	1.5	15							1.2	2.5	TA-1A	M-2G6B	UL認定済	QM15TD-H
2.0	2.5	15	0.06	1.5	10	2.0	0.09	-0.3	300	15	1.5	15							1.65	2.8	TA-1A	M-2G6B	UL認定済	QM15TD-HB
2.0	2.5	15	0.06	1.5	10	2.0	0.09	-0.3	300	15	1.5	15							1.65	2.8	KD-1A	M-2F6A	UL認定済	QM15KD-HB
2.0	2.5	20	0.28	1.5	9.5	2.5	0.4	-0.4	250	20	1.5	20							1.2	2.5	TA-1A	M-2G6B	UL認定済	QM20TD-9
2.0	2.5	20	0.08	2.0	10	2.0	0.12	-0.4	250	20	1.5	20							1.65	2.8	TA-1A	M-2G6A	UL認定済	QM20TD-9B
2.0	2.5	20	0.08	2.0	10	2.0	0.12	-0.4	250	20	1.5	20							1.25	2.5	TA-1B	M-2F6A	UL認定済	QM20TC-9B
2.0	2.5	20	0.28	1.5	12	2.0	0.4	-0.4	300	20	1.5	20							1.2	2.2	TA-1A	M-2G6B	UL認定済	QM20TD-H

FD-1



FD-2



FD-3



FD-4



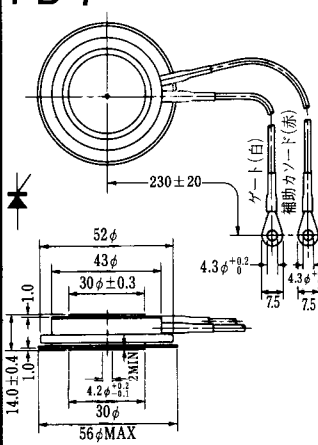
FD-5



FD-6



FD-7



FD-8



FD-9



FD-10



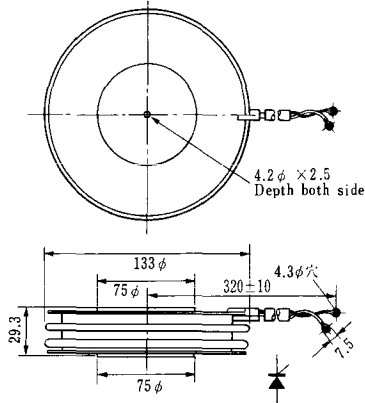
FD-12



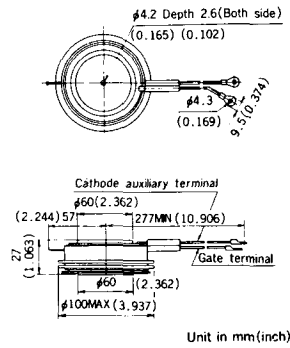


《寸法図単位：mm》

### H-17



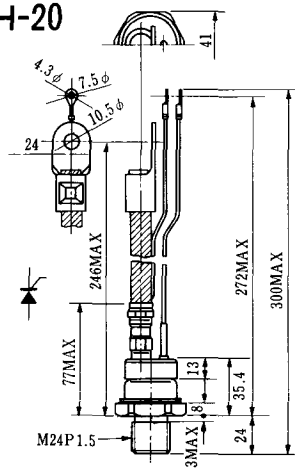
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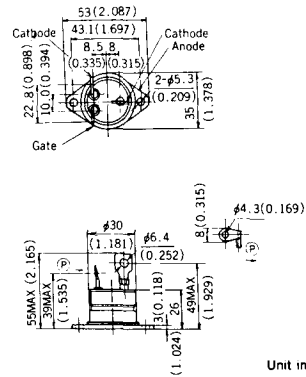
### H-19



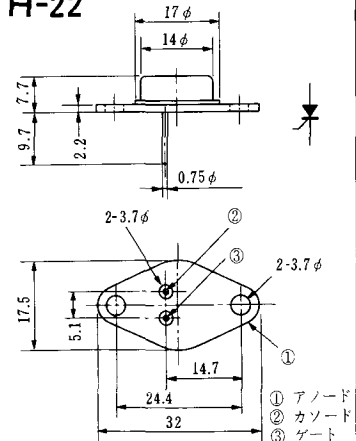
### H-20



### H-21



### H-22



### H-23

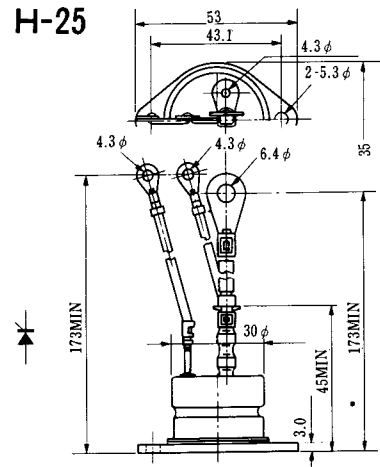


① アノード  
② カソード  
③ ゲート

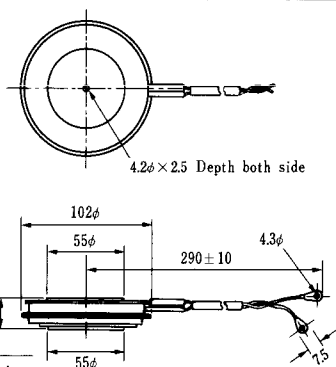
### H-24



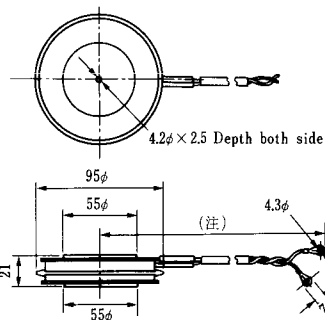
### H-25



### H-26

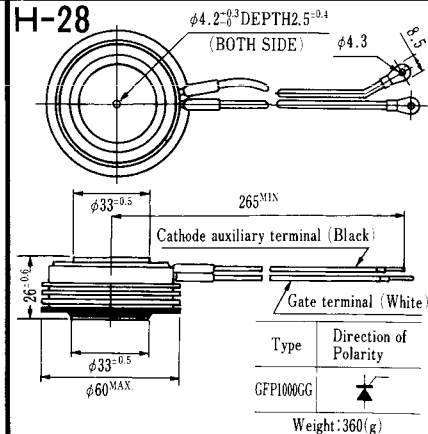


### H-27



(注) CC11V : 400 ± 10  
CF11V : 250 ± 10

### H-28



Weight: 360(g)

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

Type	Direction of polarity
CA12	

Type	Direction of polarity
CF11V	

Type	Direction of Polarity
GFP100GG	



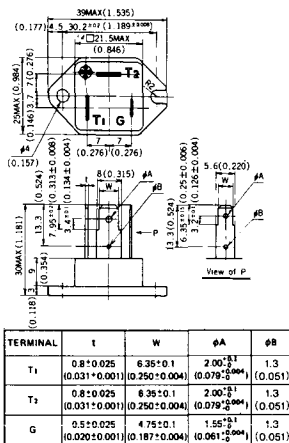


Note: The thickness is a dimension in press at the rated mounting force. Weight: 870(g)



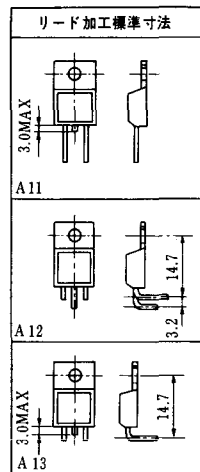
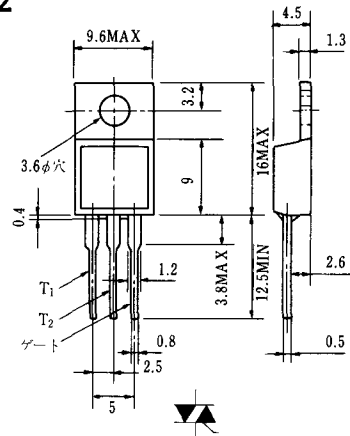
Note: The thickness is a dimension in press at the rated mounting force. Weight: 1,460(g)

### HT-1

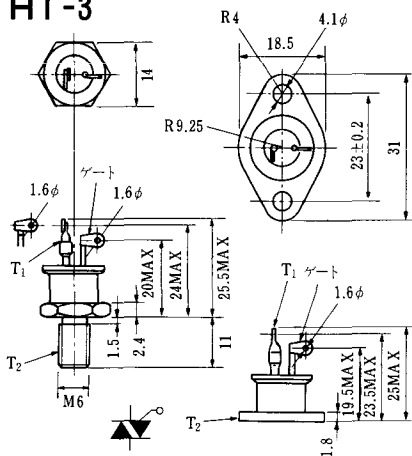


Unit in mm (inch)

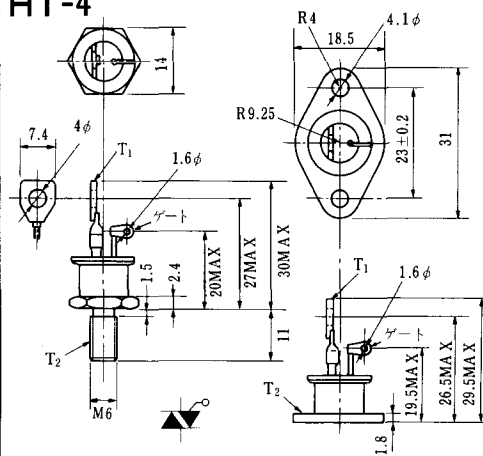
### HT-2



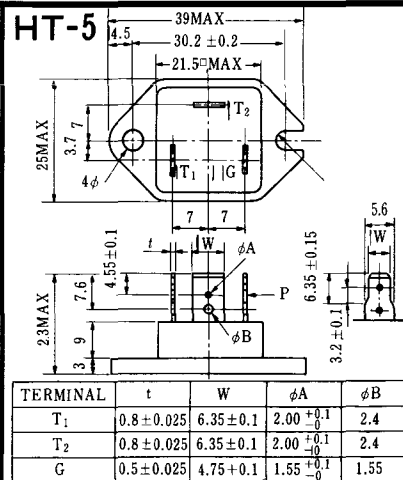
### HT-3



### HT-4



### HT-5



### M-1



### M-2



### M-3



### M-4



### M-5



### M-6



### M-7



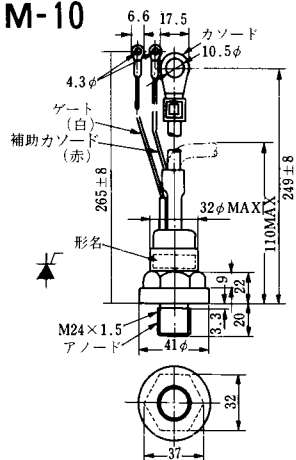
### M-8



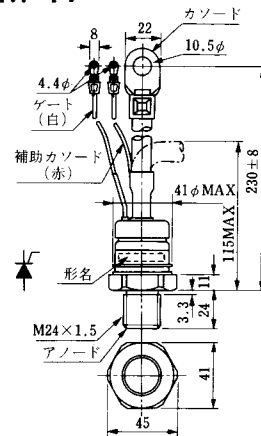
M-9



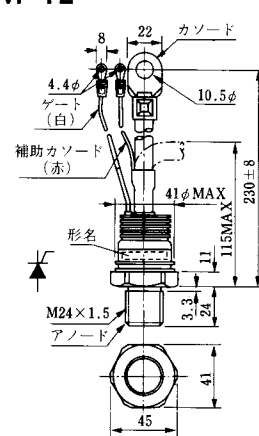
M-10



M-11



M-12



M-13



M-14



M-15



M-16





M-25



M-26



M-27



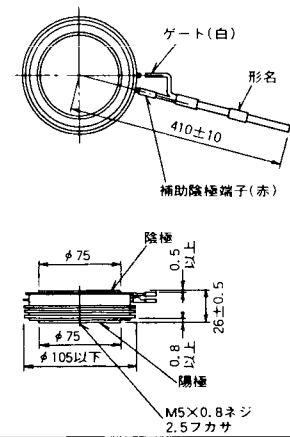
M-28



M-29



M-30



M-31



M-32



### M-33



### M-34



### MT-1



### MT-2



### MT-3



### MT-4



### MT-5



### MT-6

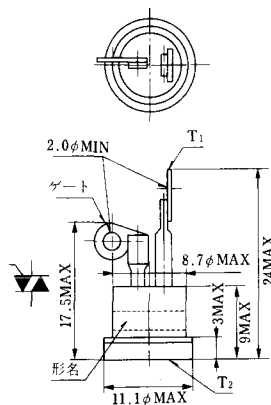


### MT-7

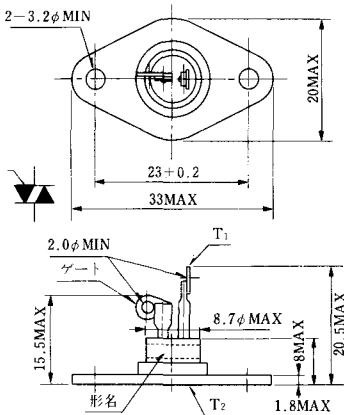




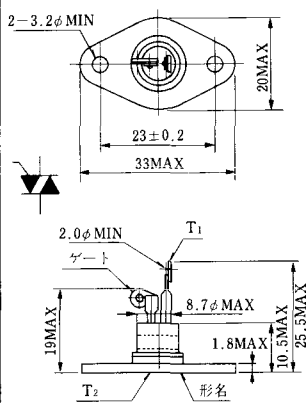
MT-8



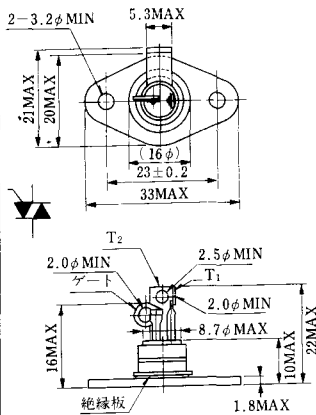
MT-9



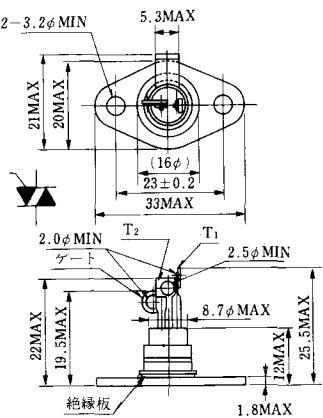
MT-10



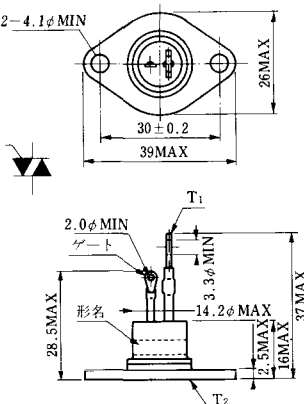
MT-11



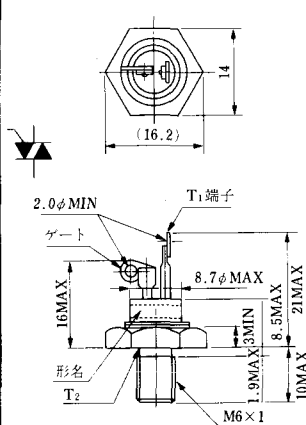
MT-12



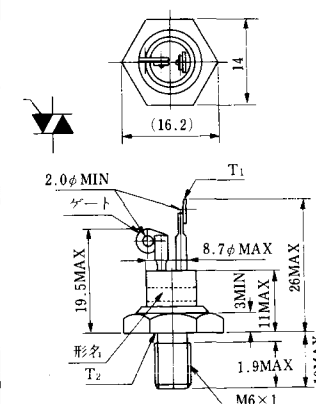
MT-13



MT-14



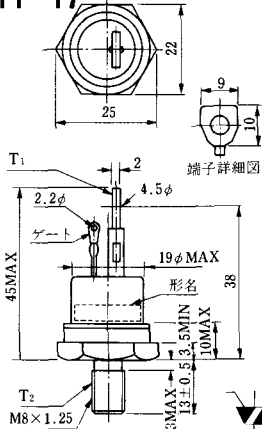
MT-15



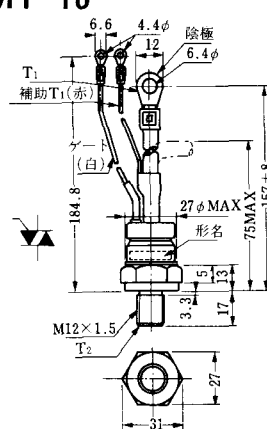
MT-16



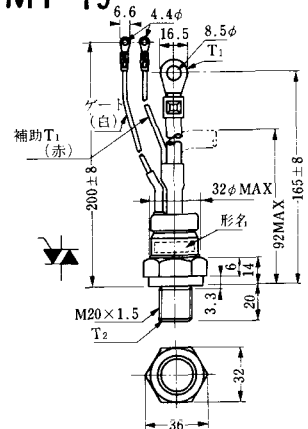
MT-17



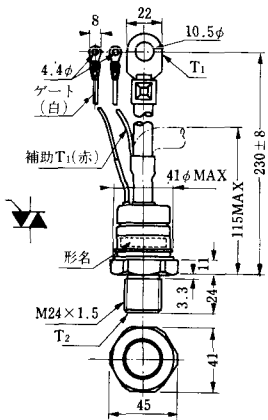
MT-18



MT-19



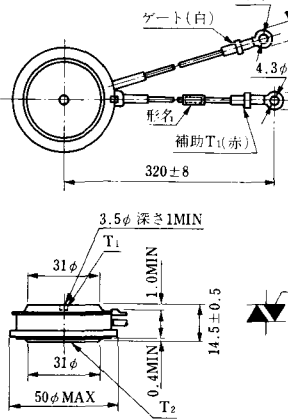
MT-20



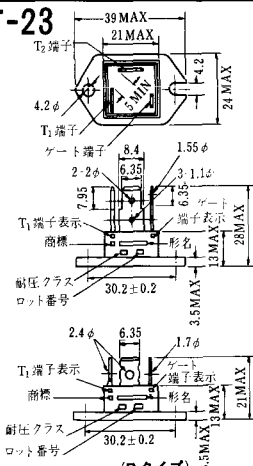
MT-21



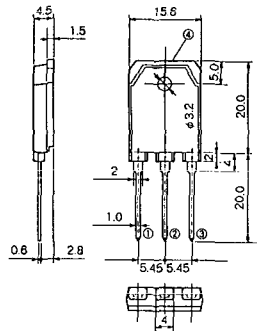
MT-22



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



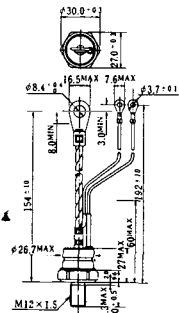
### NI-3

39RC  
59RC  
39RF  
59RF



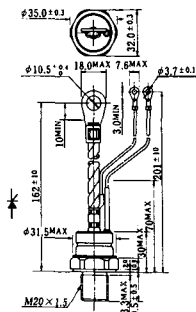
### NI-4

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



### NI-5

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



### NI-6

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



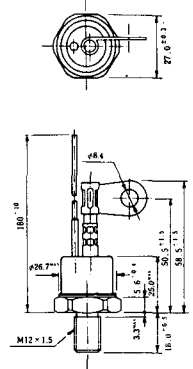
### NI-7

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



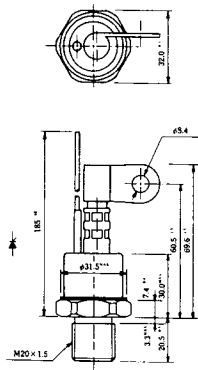
### NI-8

89RW  
129RW



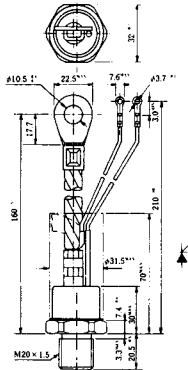
### NI-9

259RW  
309RW



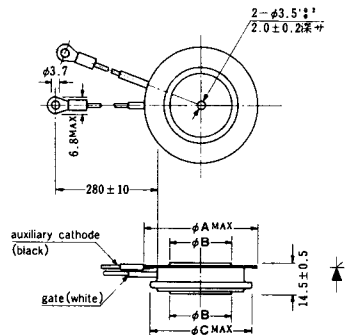
### NI-10

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



### NI-11

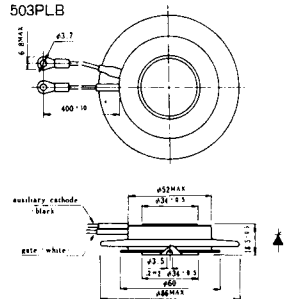
103PA  
253PA  
503PA  
553PA  
803PA  
103PLE  
103PLG  
103PLH  
203PLG  
253PLE  
253PLH  
353PLG  
403PLE  
403PLH



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

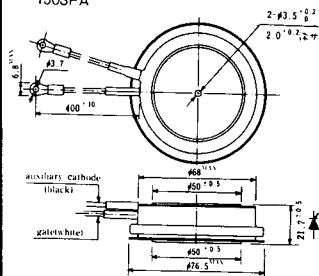
### NI-12

403PAB  
503PAB  
503PLB



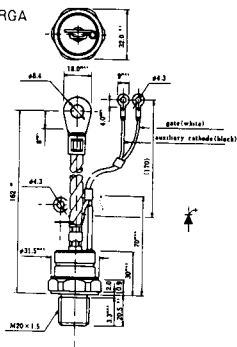
### NI-13

1003PA  
1003PAB  
1003PLF  
1003PLH  
1503PA



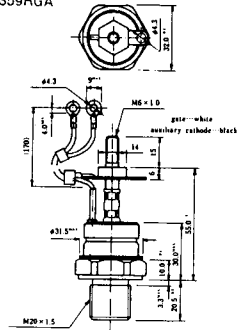
### NI-14

358RGA



### NI-15

359RGA







NI-24

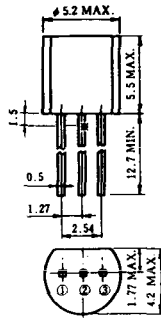
2001PGB<sup>r</sup> JE



NI-25

NI-26

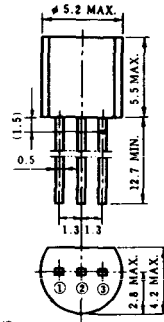
### NT-1



電極接続

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

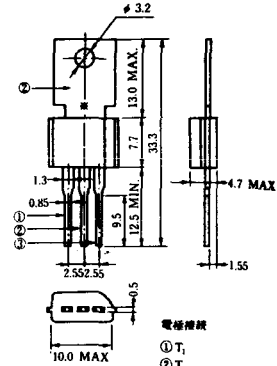
### NT-2



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

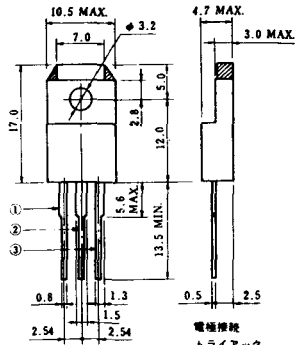
### NT-4



電極接続

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

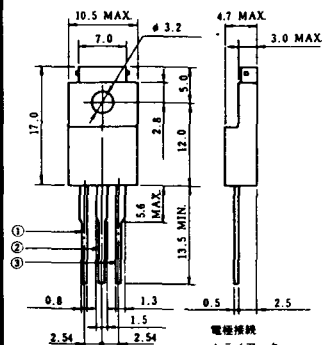
### NT-5



電極接続  
トライアック

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

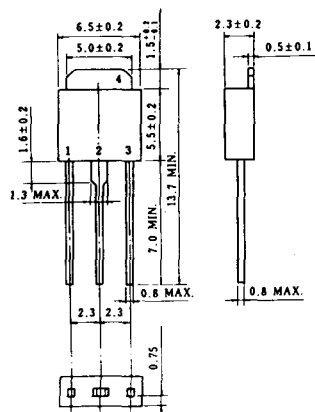
### NT-6



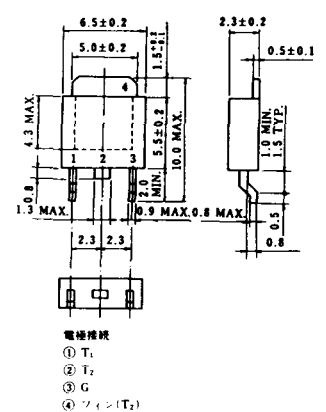
電極接続  
トライアック

- 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 シェン(T<sub>2</sub>)



SA-1



SA-2



SA-3



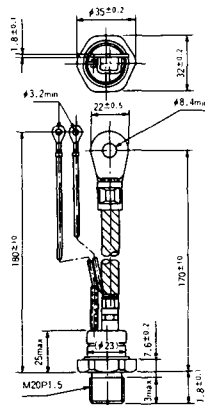
SA-4



SA-5



SA-6

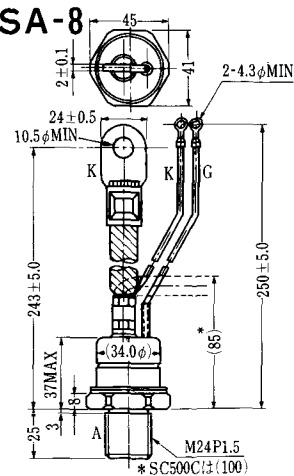


SA-7



\* SC250C(L)(85)

SA-8



\* SC500C(L)(100)

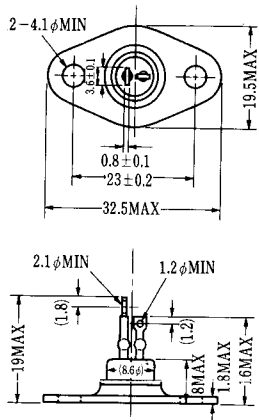
### SA-9



A TAB250(T) 6.35 T 8.25 I 0.8  
 K TAB250(T) 6.35 T 8.25 I 0.8  
 G TAB187(T) 4.75 T 5.7 I 0.5



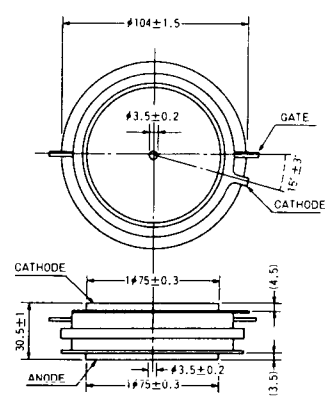
### SA-10



### SA-11



### SA-12



SAT-1



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

SAT-2



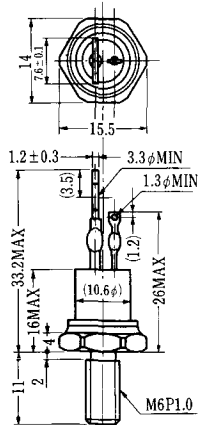
SAT-3



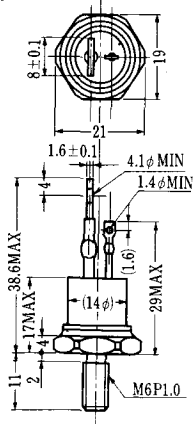
SAT-4



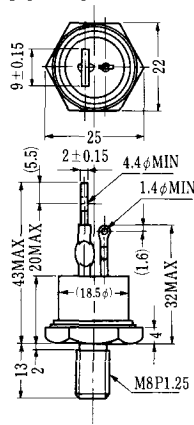
SAT-5



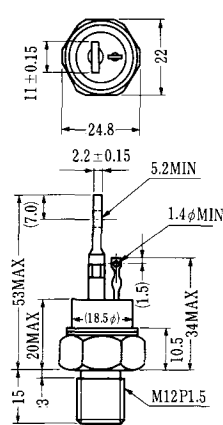
SAT-6



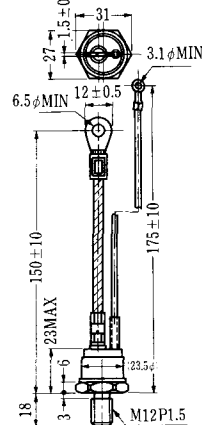
SAT-7



SAT-8



SAT-9



SAT-10



SAT-11



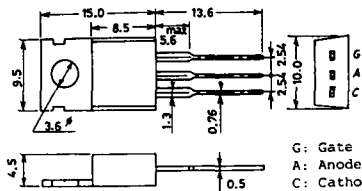


### SY-1 (1096A)



C: Cathode  
A: Anode  
G: Gate

### SY-2 (1151)



G: Gate  
A: Anode  
C: Cathode

### SY-3 (1104)



G: Gate  
A: Anode  
C: Cathode

### SY-4 (1150)



G: Gate  
A: Anode  
C: Cathode

1097A



G: Gate

1102



1141



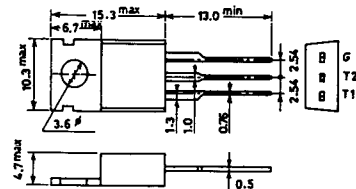
1142



1144



1155



1192A



G: Gate

**T-1 (13-5A1A)**



- 1 ゲート
- 2 アノード
- 3 カソード

**T-2 (13-8A1A)**



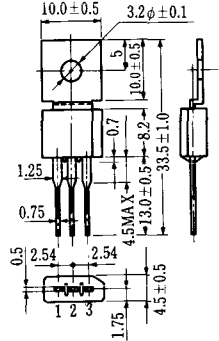
1. カソード
2. ゲート
3. アノード(ケース)

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



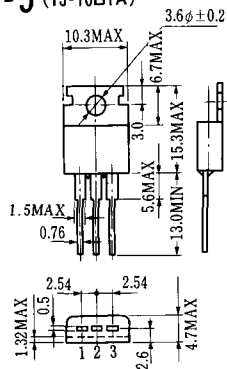
- 1 カソード
- 2 アノード
- 3 ゲート

**T-4 (13-10A1A)**



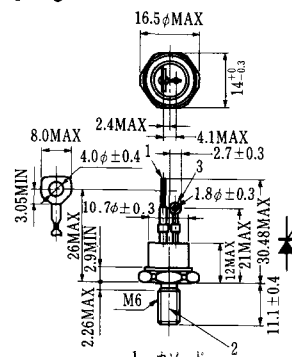
- 1 カソード
- 2 アノード
- 3 ゲート

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



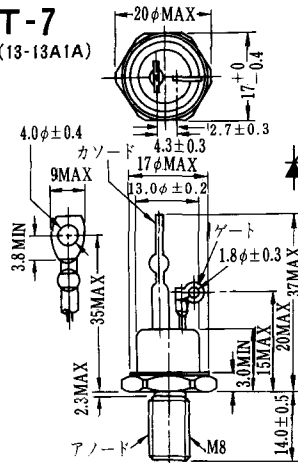
- 1 カソード
- 2 アノード
- 3 ゲート

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



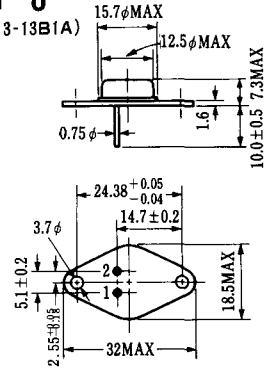
- 1 カソード
- 2 アノード
- 3 ゲート

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



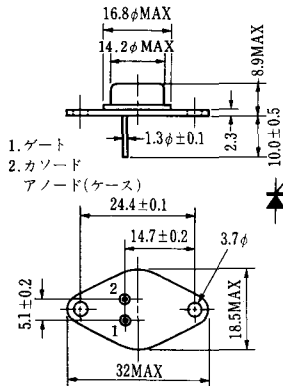
- 1 カソード
- 2 アノード
- 3 ゲート

**T-8 (13-13B1A)**



1. ゲート
2. カソード
3. アノード(ケース)

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



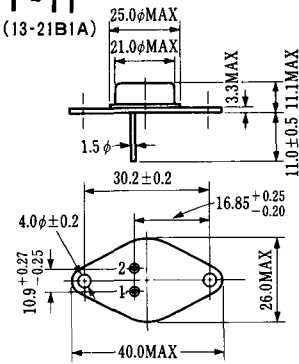
1. ゲート
2. カソード
- アノード(ケース)

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



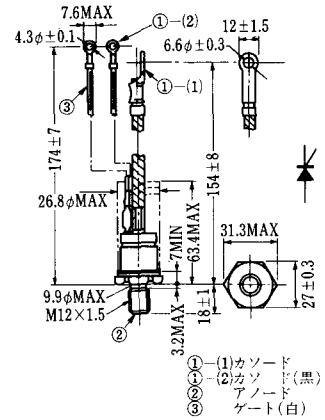
1. カソード
2. アノード
3. ゲート

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



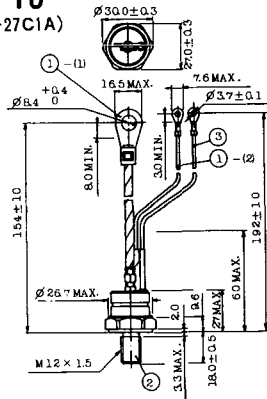
1. ゲート
2. カソード
- アノード(ケース)

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



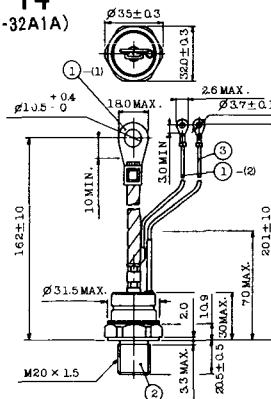
- ① (1) カソード
- ① (2) カソード(黒)
- ② アノード
- ③ ゲート(白)

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



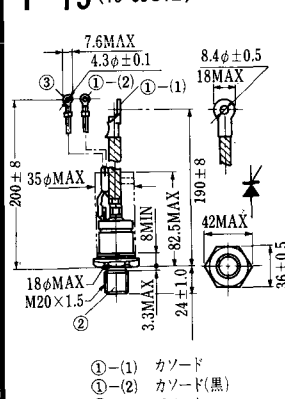
- 1-(1) カソード
- 1-(2) カソード(黒)
- 2 アノード
- 3 ゲート(白)

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



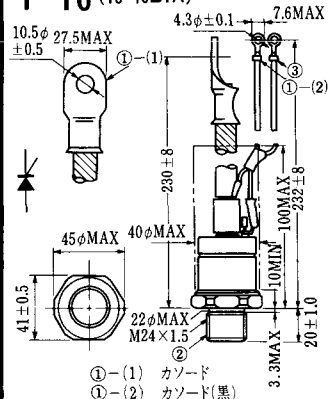
- 1-(1) カソード
- 1-(2) カソード(黒)
- 2 アノード
- 3 ゲート(白)

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



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

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



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

**T-17 (13-42A1A)**



**T-18 (13-45D1A)**



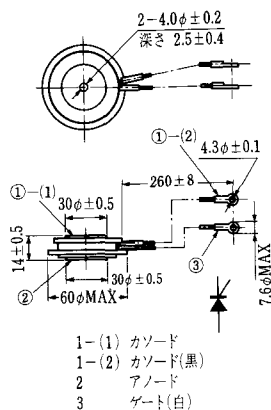
**T-19 (13-52B1A)**



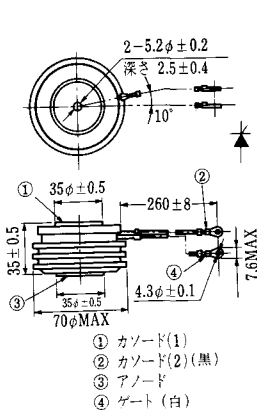
**T-20 (13-52C1A)**



**T-21 (13-60A1A)**



**T-22 (13-70C1A)**



**T-23 (13-78A1A)**



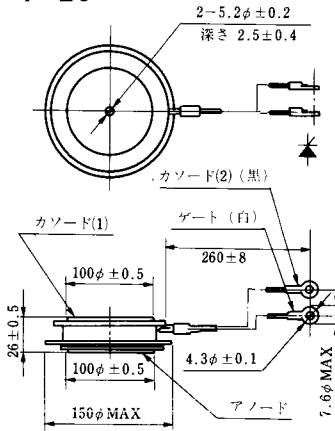
**T-24 (13-100C1A)**



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



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



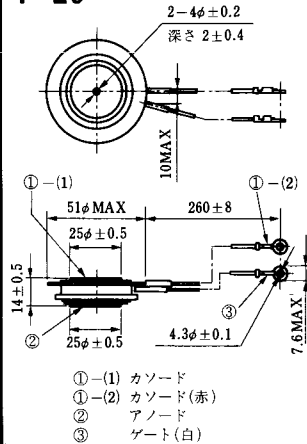
**T-27** (13-37A1A)



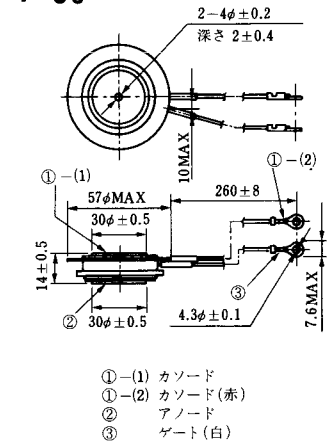
**T-28** (13-45E1A)



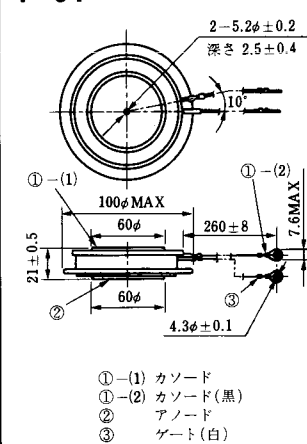
**T-29** (13-51A1A)



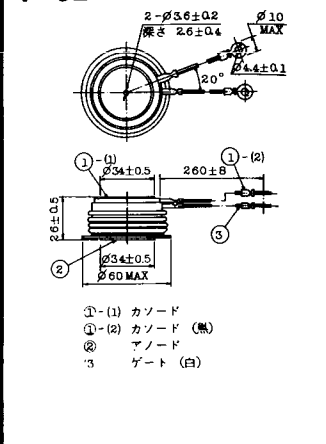
**T-30** (13-57A1A)



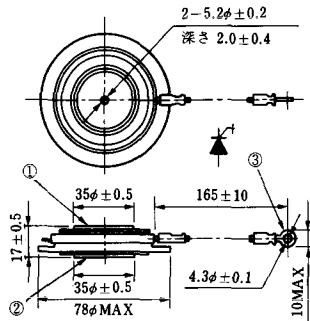
**T-31** (13-100E1A)



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

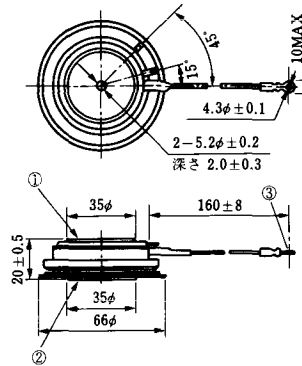


**T-33 (13-78B1A)**



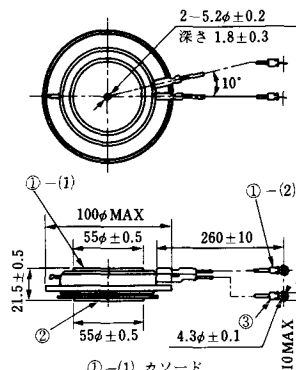
- ① カソード
- ② アノード
- ③ ゲート

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



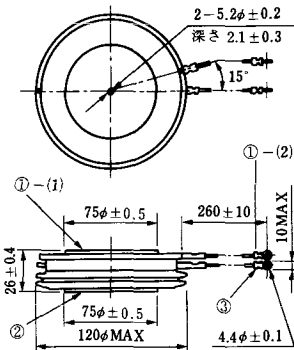
- ① カソード
- ② アノード
- ③ ゲート

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



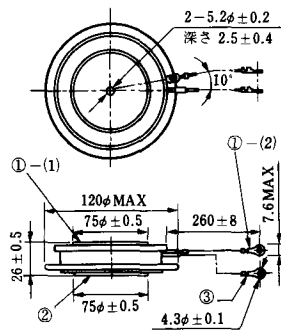
- ①-(1) カソード
- ①-(2) カソード(黒)
- ② アノード
- ③ ゲート(白)

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



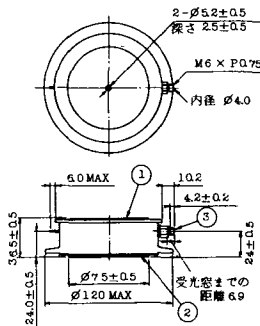
- ①-(1) カソード
- ①-(2) カソード(黒)
- ② アノード
- ③ ゲート(白)

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



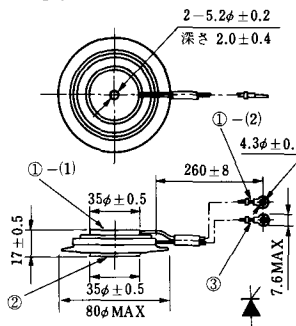
- ①-(1) カソード
- ①-(2) カソード(黒)
- ② アノード
- ③ ゲート(白)

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



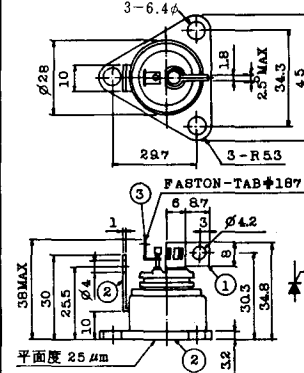
- ① カソード
- ② アノード
- ③ ゲート

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



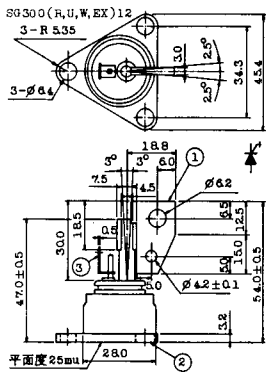
- ①-(1) カソード
- ①-(2) カソード(黒)
- ② アノード
- ③ ゲート(白)

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



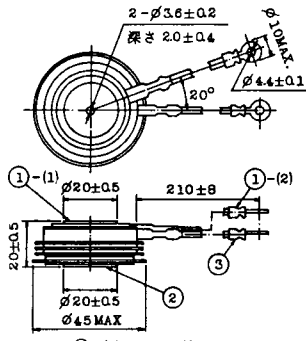
- 1. カソード
- 2. アノード
- 3. ゲート

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



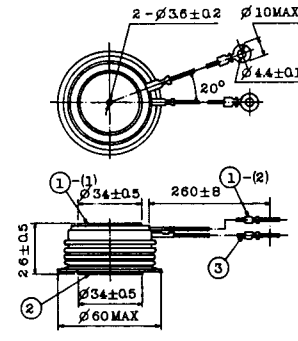
- 1 カソード
- 2 アノード
- 3 ゲート

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



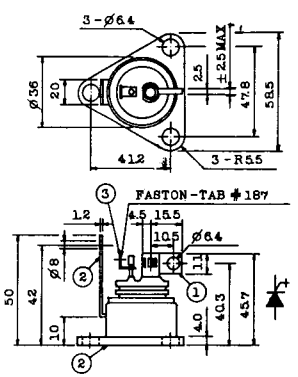
- ①-(1) カソード
- ①-(2) カソード(黒)
- ② アノード
- ③ ゲート(白)

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



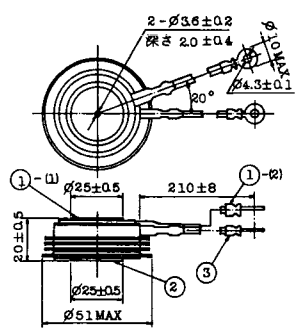
- ①-(1) カソード
- ①-(2) カソード(黒)
- ② アノード
- ③ ゲート(白)

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



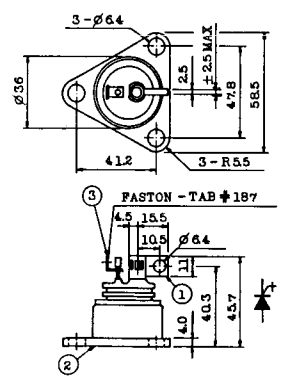
- 1 カソード
- 2 アノード
- 3 ゲート

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



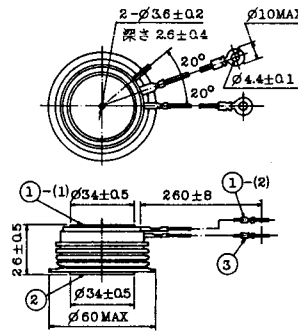
- ①-(1) カソード
- ①-(2) カソード(黒)
- ② アノード
- ③ ゲート(白)

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



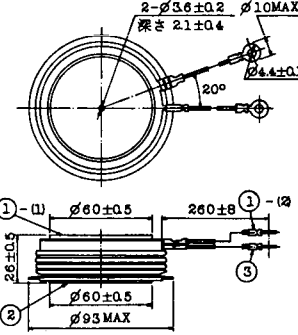
- 1 カソード
- 2 アノード
- 3 ゲート

### T-47 (13-60E1A)



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

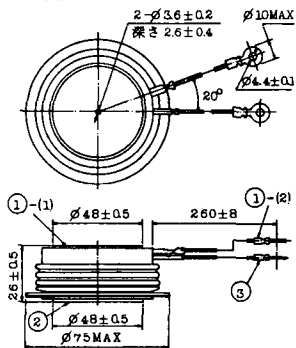
### T-48 (13-93C1A)



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

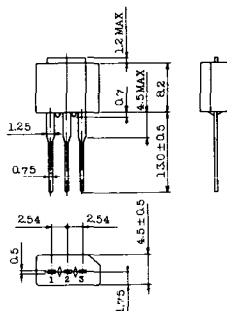


T-49 (13-75A1A)



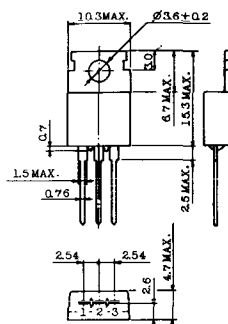
- 1-(1) カソード
- 1-(2) カソード(黒)
- 2 アノード
- 3 ゲート(白)

T-50 (13-10A3A)



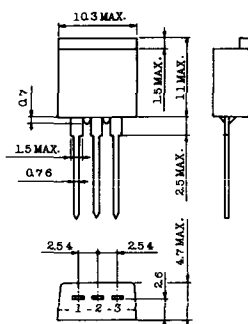
- 1 カソード
- 2 アノード
- 3 ゲート

T-51 (13-10D1A)



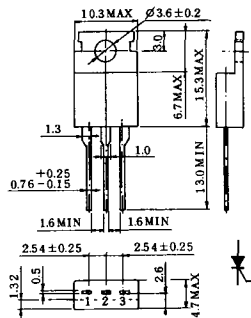
- 1 カソード
- 2 アノード
- 3 ゲート

T-52 (13-10D2A)



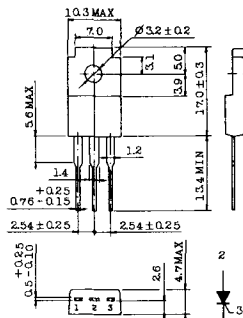
- 1 カソード
- 2 アノード
- 3 ゲート

T-53 (13-10E1B)



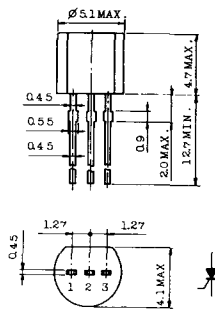
- 1 カソード
- 2 アノード
- 3 ゲート

T-54 (13-10F1B)



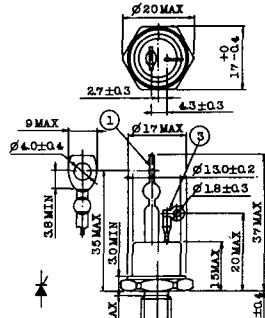
- 1 カソード
- 2 アノード
- 3 ゲート

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)



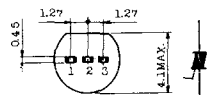
1. カソード
2. アノード
3. ゲート

T-63 (13-16A1B)



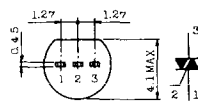
1. カソード
2. アノード
3. ゲート

TT-1



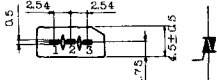
- 1 ゲート
- 2 T<sub>2</sub>
- 3 T<sub>1</sub>

TT-2



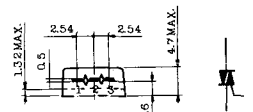
- 1 T<sub>1</sub>
- 2 ゲート
- 3 T<sub>2</sub>

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



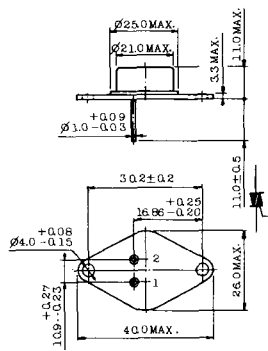
- 1 T<sub>1</sub>
- 2 T<sub>2</sub>
- 3 ゲート

TT-8



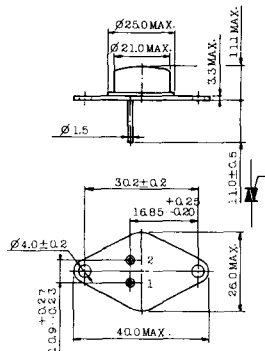
- 1 ゲート
- 2 T<sub>1</sub>
- T<sub>2</sub> (ケース)

TT-9



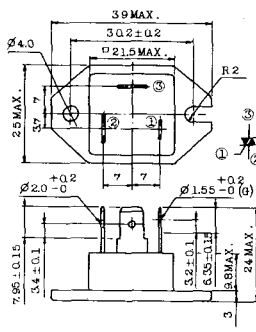
1. ゲート
2. T<sub>1</sub>
3. T<sub>2</sub> (ケース)

TT-10



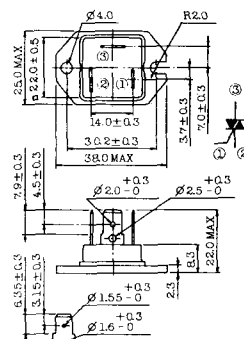
1. ゲート
2. T<sub>1</sub>
3. T<sub>2</sub> (ケース)

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)

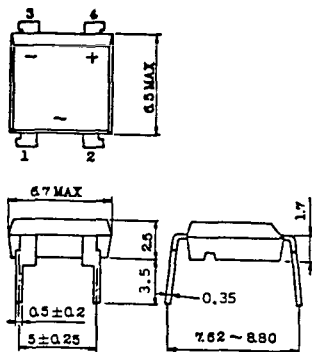
TT-12



ゲート端子詳細

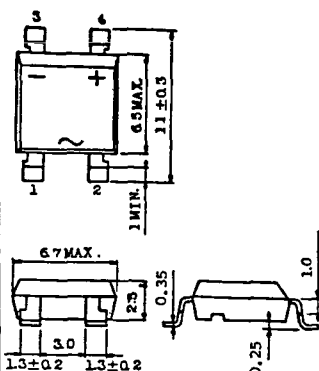
- ① ゲート (フーストン端子 # 187)
- ② T<sub>1</sub> ( " # 250)
- ③ T<sub>2</sub> ( " # 250)

TT-13



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

TT-14



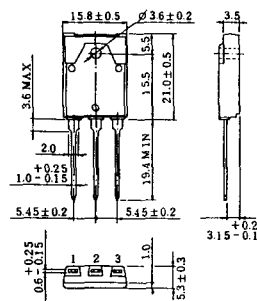
- 1, 2: T<sub>2</sub>
- 3: GATE
- 4: T<sub>1</sub>

TT-15 (13-14A1B)



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

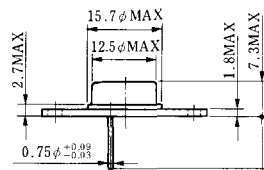
TT-16 (13-16A1A)



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

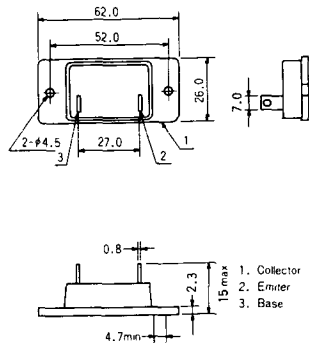


TS-8



1. ベース
2. エミッタ  
コレクタ  
(ケース)

### S-62A1A



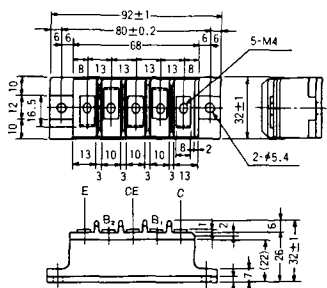
### S-80A1A



### S-88D1A



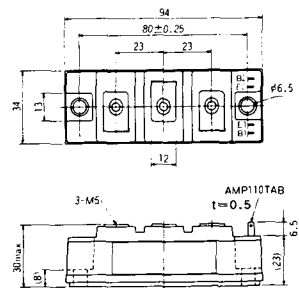
### S-92B1A



### S-94B1A



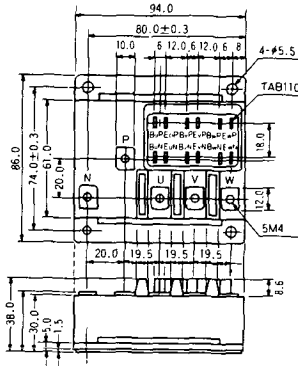
### S-94B1B



S-94B2A



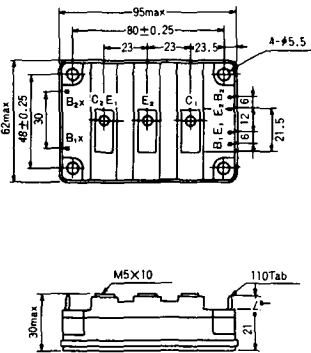
S-94D1A



S-95A1A



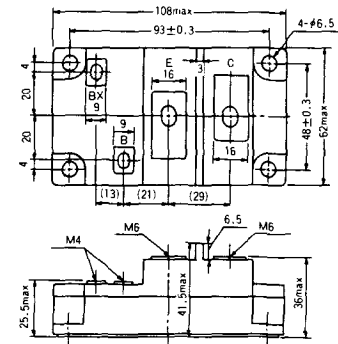
S-95B1A



S-98B1B



S-108A2A





S-108B1A



S-108B1B



S-108B1C



S-108B2A



S-108B2B



### 2-22B1A



### 2-27A4A



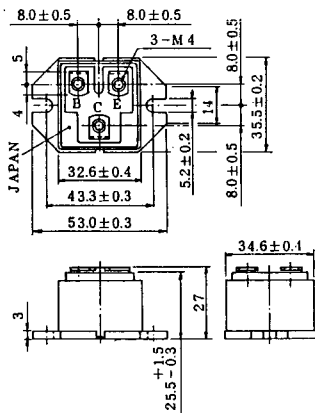
### 2-33C1A



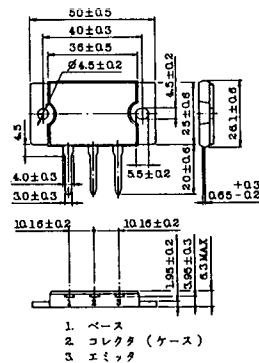
### 2-33D1A



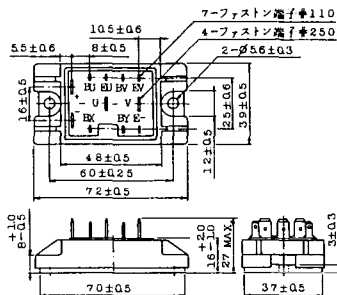
### 2-33F1A



### 2-37A1A



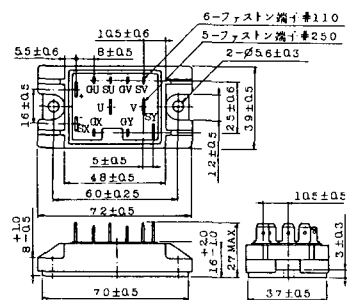
2-48A3A



2-48A3B



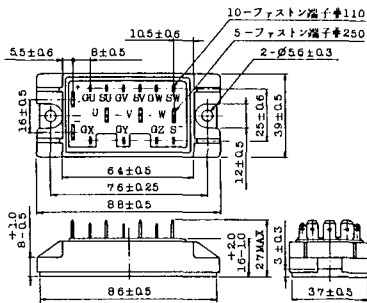
2-48A4A



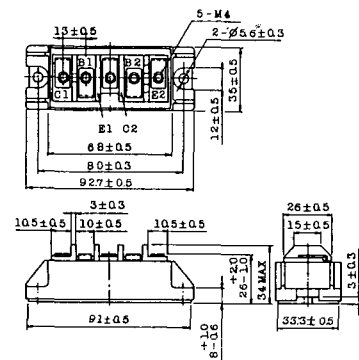
2-64A2A



2-64A2B



2-68A2A



2-68B2A



2-68C1A



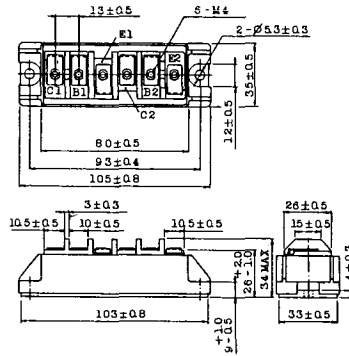
2-68D2A



2-72A3A



2-80A1A



2-80B1A





### 2-94D1A



### 2-96A3A



### 2-96A4A



### 2-98B1A



### 2-98C2A



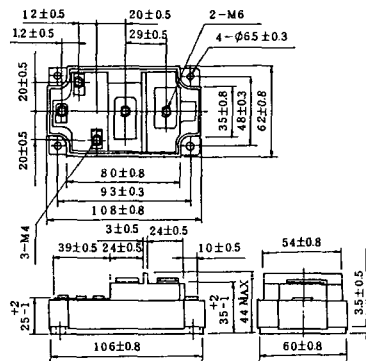
### 2-108A2A



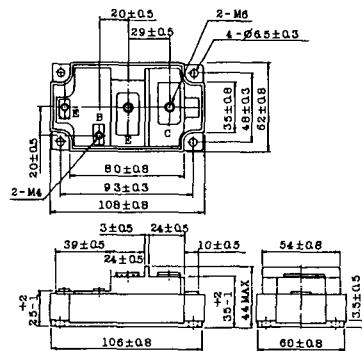
### 2-108B1A



### 2-109A3A



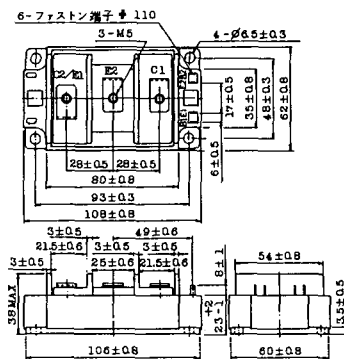
### 2-109A4A



### 2-109B3A



### 2-109B4A



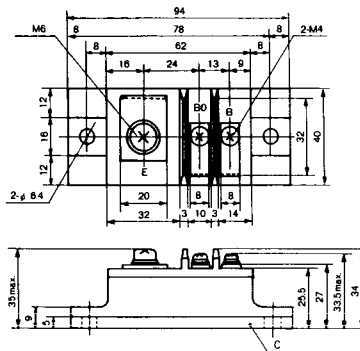
### BBT-II

BBTII  
1D200A-020



### BBT-III

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



### BBT-III

BBTIII  
ETN01-055  
ET1257



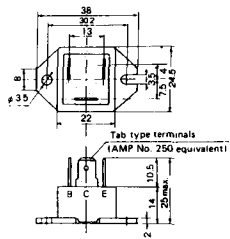
### BBT-IV

BBTIV  
1D500A-030

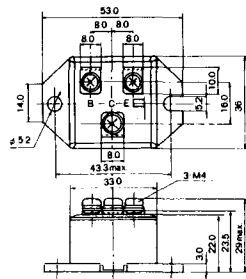




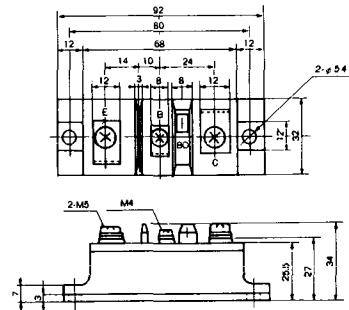
### M-101



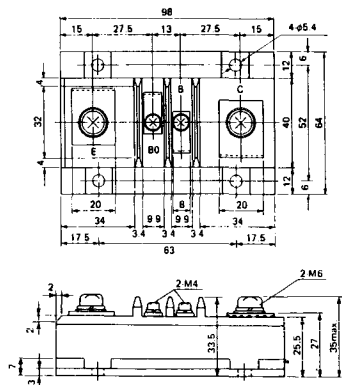
### M-102



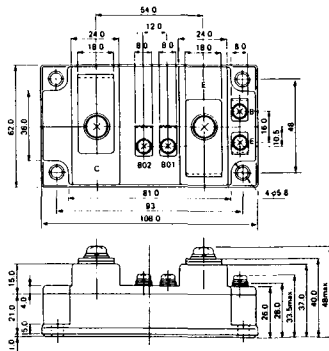
### M-103



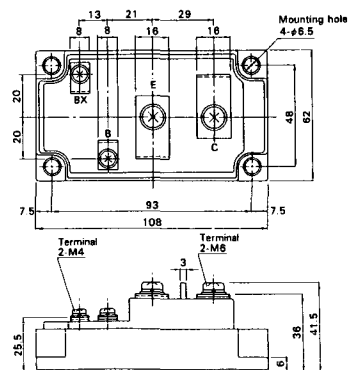
### M-104



### M-105



### M-106



### M-107



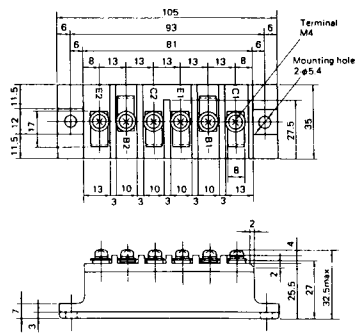
### M-116



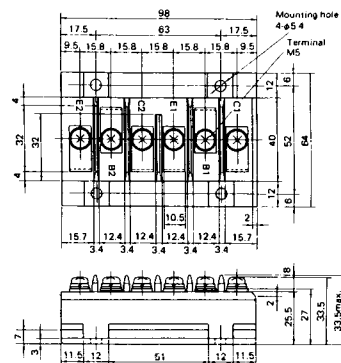
### M-201



### M-202



### M-203



### M-204



### M-205



### M-206



M-207



M-208



M-209



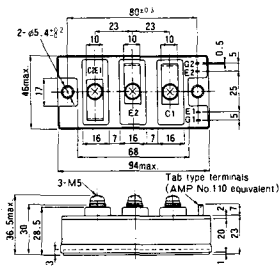
M-210



M-211



M-212



M-213



M-214

M-215



M-216



M-217



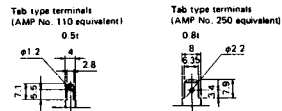
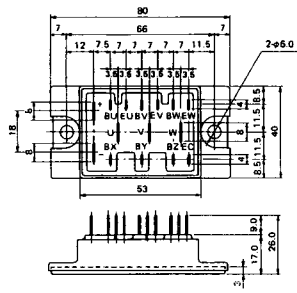
M-218



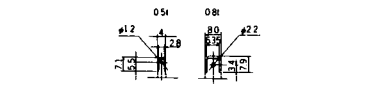
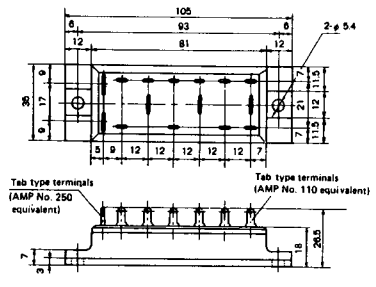
M-219



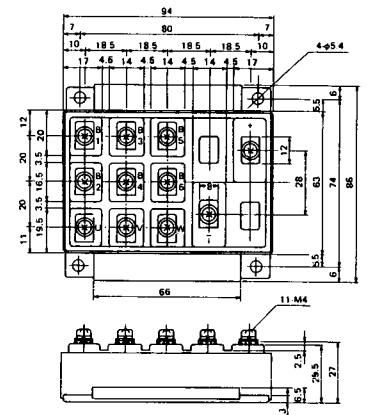
M-601



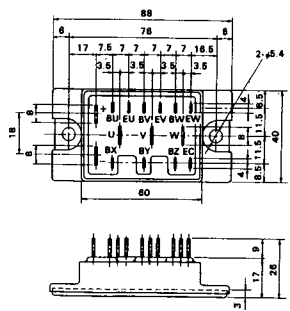
M-602



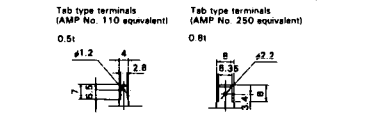
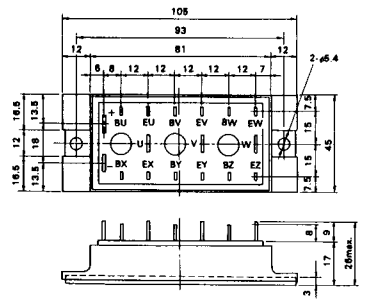
M-603



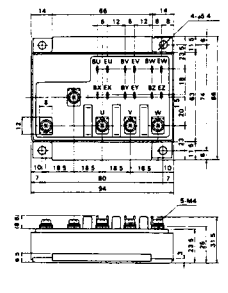
M-604



M-605



M-606



M-607



M-608



M-609



M-610

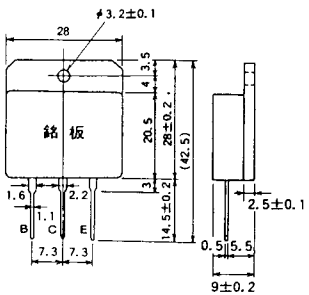


M-616

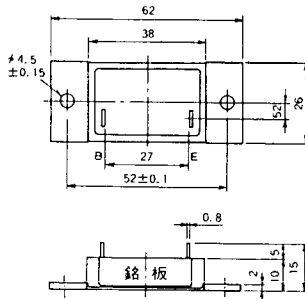




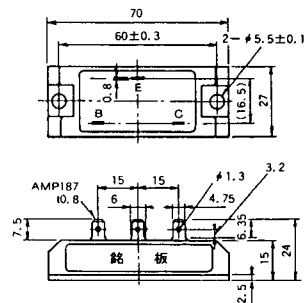
M-1A1A



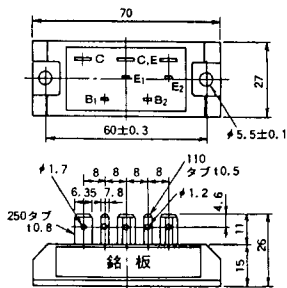
M-2A1A



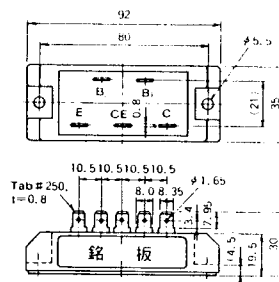
M-2B1A



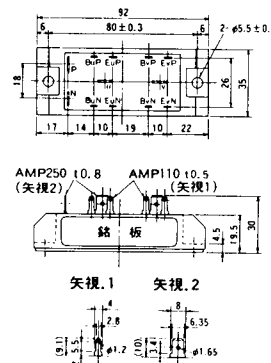
M-2B2A



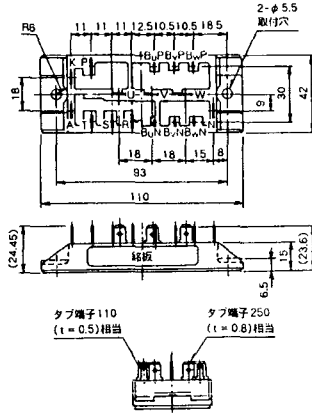
M-2C2A



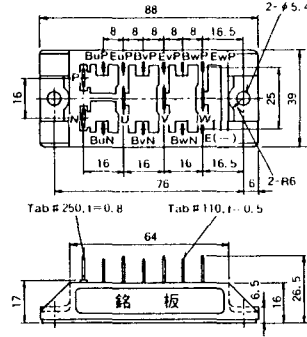
M-2D4A



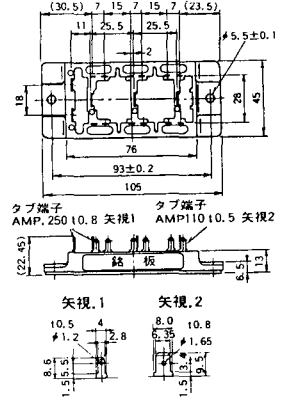
### M-2E6A



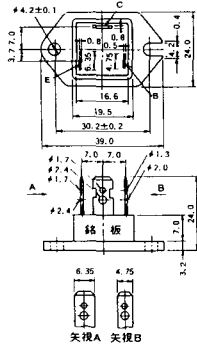
### M-2F6A



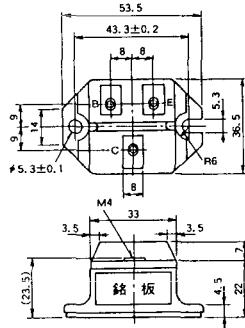
### M-2G6A



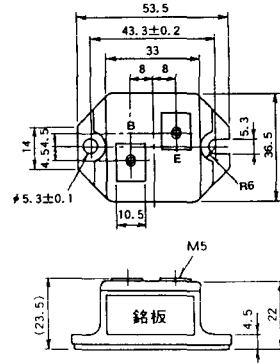
### M-3A1A



### 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



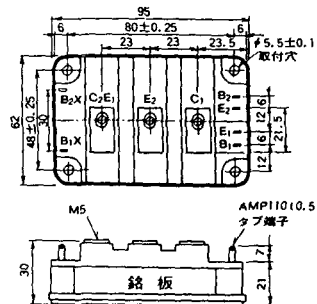
### M-8A1A



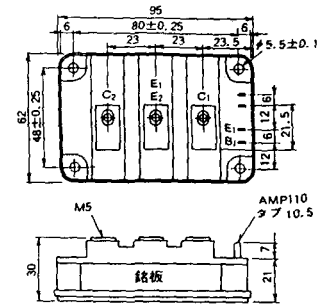
M-8A1B



M-8A2A



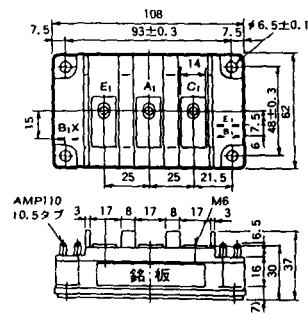
M-8A2B



M-8B2A



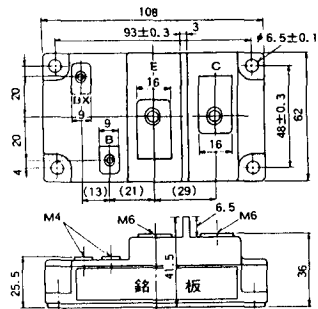
M-9A1A



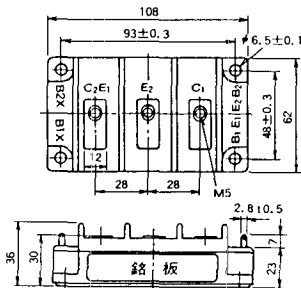
M-9A2A



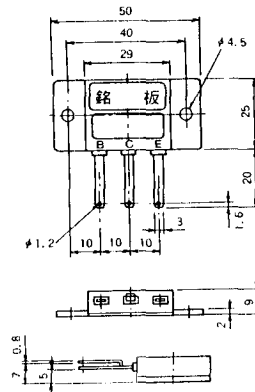
M-9B1A



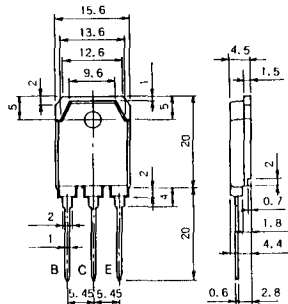
M-9C2A



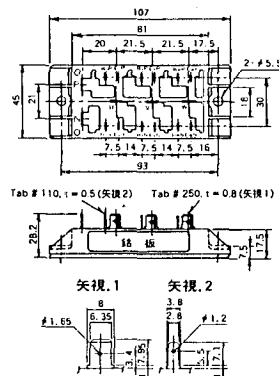
M-1A1B



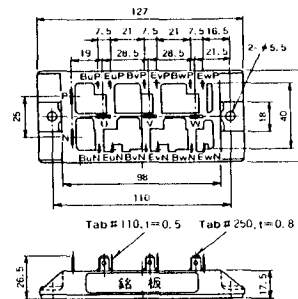
M-1A1C



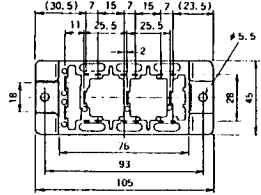
M-2E6B



M-2E6C



### M-2G6B



Tab # 250, t=0.8 (矢視 1) Tab # 110, t=0.5 (矢視 2)

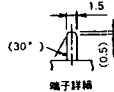
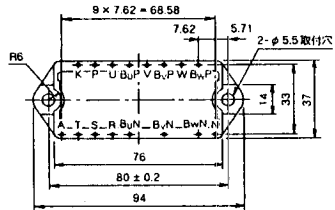


矢視 1

矢視 2

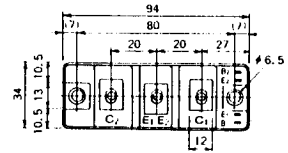


### M-3D6B

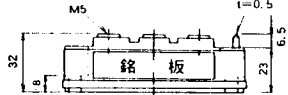


隅子詳細

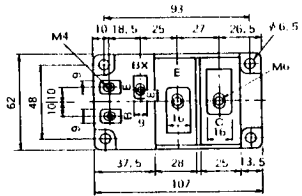
### M-4A2C



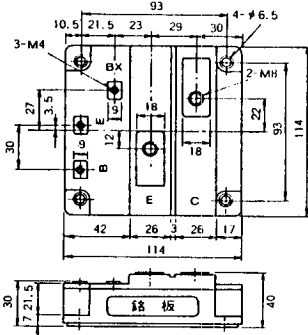
Tab # 110, t=0.5



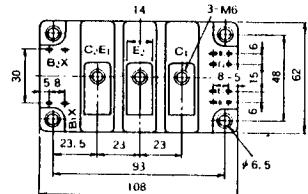
### M-7A1B



### M-7C1A



### M-8A2C



Tab # 110, t=0.5





M-10A2A



M-10A2B



M-11A2A



M-12A6A



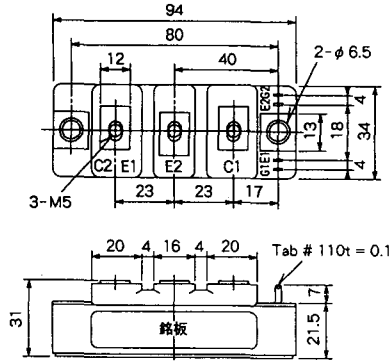
M-12B6A



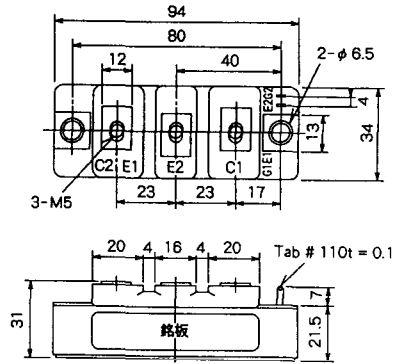
M-12B6B



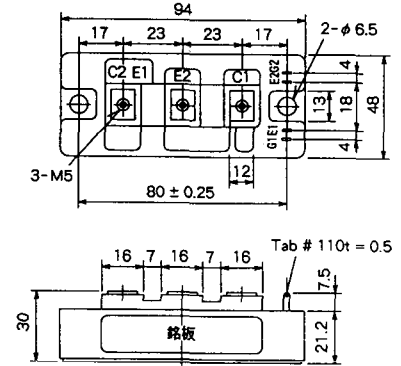
M-4A2D



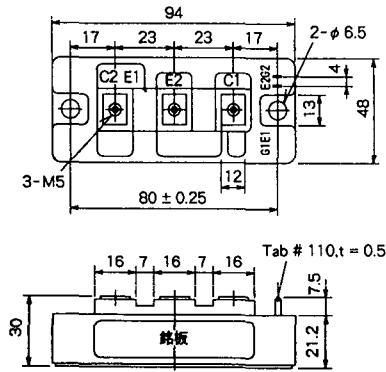
M-4A2E



M-4C2A



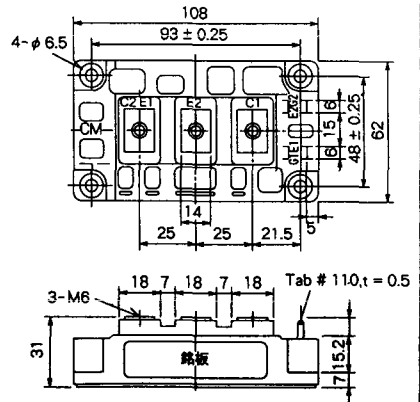
M-4C2B



M-9B1C



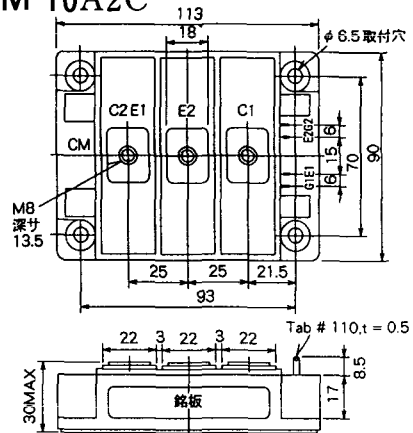
M-9D2A



M-9D2B



M-10A2C



H-101



Weight :480g

### H-201



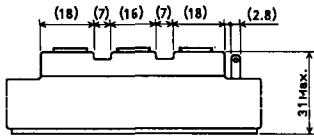
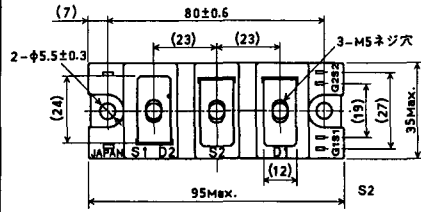
Weight: 200g

### H-202



Weight: 360g

### LF-J



### LF-K

