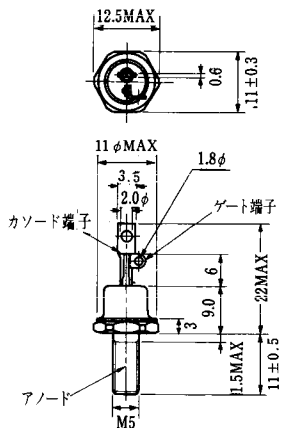


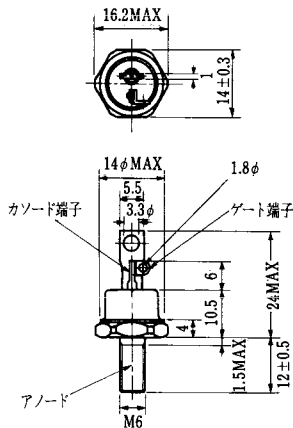
SG300 <sup>○</sup> R, U, W, EX <sub>1</sub> 11 SG300 <sup>○</sup> R, U, W, EX <sub>1</sub> 12 ○チョップパ、インバータ用		■外形図番号 SG300G <sup>○</sup> 11: T-40 (13-28A1A) SG300G <sup>○</sup> 12: T-41 (13-28A2A)		■電気的特性			
<b>■最大定格</b>							
記号	SG300R11 SG300R12	SG300U11 SG300U12	SG300W11 SG300W12	SG300EX11 SG300EX12	単位		
$V_{RRM}$	15						
$V_{DRM}$	1300	1600	1800	2500			V
$I_{TQRM}$	300 ( $V_D = \frac{1}{2} V_{DRM}$ , $V_{DM} = \frac{2}{5} V_{DRM}$ , $C_s = 1 \mu F$ , $R_s = 20 \Omega$ , $T_j = 125^\circ C$ )						A
$I_{T(RMS)}$	120 ( $T_j = 70^\circ C$ )						A
$I_{TSM}$	2000/2200 (50Hz/60Hz, 正弦半波1サイクル)						A
$I^2 \cdot t$							A <sup>2</sup> S
$di/dt$	200 ( $I_{GP} = 7 A$ , $t_r = 1 \mu s$ , $V_D = \frac{1}{2} V_{DRM}$ , $I_{TM} = 300 A$ , $f = 50 Hz$ , $T_j = 125^\circ C$ )						A/ $\mu s$
$I_{GFM}$	20 (パルス幅: max. 20 $\mu s$ , duty: max. 20%)						A
$P_{GFAV}$	4						W
$I_{GR(RMS)}$	20						A
$P_{GRM}$	2000 (パルス幅: max. 20 $\mu s$ , duty: max. 2%)						W
$V_{GRM}$	15						V
$T_j$	125						°C
$T_{HB}$	-40~125						°C
記号	測定条件		Min	Typ	Max	単位	
$I_{RRM}$	$T_j = 125^\circ C$ , $V_D = V_{RRM}$				10		
$I_{DRM}$	$T_j = 125^\circ C$ , $V_D = V_{DRM}$ , $R_{GK} = 20 \Omega$				10	mA	
$I_{CRM}$	$T_j = 125^\circ C$ , $V_D = V_{CRM}$				10		
$V_{TM}$	$T_j = 25^\circ C$ , $I_{TM} = 300 A$				2.4	V	
$V_{GT}$	$T_j = 25^\circ C$ , $V_D = 12 V$			0.75	1.0		
$I_{GT}$	$R_L = 0.5 \Omega$			200	500	mA	
$V_{GD}$	$T_j = 125^\circ C$ , $V_D = \frac{1}{2} V_{DRM}$		0.3			V	
$I_{GD}$				5		mA	
$t_d$	$T_j = 25^\circ C$ , $V_D = \frac{1}{2} V_{DRM}$				2.5		
$t_{st}$	$I_{TM} = 300 A$				7.6	$\mu s$	
	$di/dt = 200 A/\mu s$				7.0		
	$I_{GP} = 7 A$ , $t_r = 1 \mu s$				6.8		
					6.0		
$dv/dt$	$T_j = 125^\circ C$ , $V_D = \frac{1}{2} V_{DRM}$		600			V/ $\mu s$	
$I_H$	$T_j = 25^\circ C$ , $R_L = 0.5 \Omega$			10		A	
$t_s$	$T_j = 120^\circ C$ , $I_{FM} = 300 A$				12		
$t_{ex}$	$V_D = \frac{1}{2} V_{DRM}$				14	$\mu s$	
	$V_{DM} = \frac{2}{5} V_{DRM}$				62		
	$C_s = 1 \mu F$				58		
$t_{hol}$	$R_s = 20 \Omega$				56	$\mu s$	
	$dig/dt = -12 A/\mu s$				50		
					80		
$I_{GR}$					110	A	
$R_{th}$	接合-フィン間, DC				0.13	°C/W	

SG400 <sup>○</sup> R, U, W, EX <sub>1</sub> 11 ○チョップパ、インバータ用		■外形図番号 T-40 (13-28A1A)		■電気的特性			
<b>■最大定格</b>							
記号	SG400R11	SG400U11	SG400W11	SG400EX11	単位		
$V_{RRM}$	15						
$V_{DRM}$	1300	1600	1800	2500			V
$I_{TQRM}$	400 ( $V_D = \frac{1}{2} V_{DRM}$ , $V_{DM} = \frac{2}{5} V_{DRM}$ , $C_s = 1 \mu F$ , $R_s = 20 \Omega$ , $T_j = 125^\circ C$ )						A
$I_{T(RMS)}$	150 ( $T_j = 70^\circ C$ )						A
$I_{TSM}$	2600/2860 (50Hz/60Hz, 正弦半波1サイクル)						A
$I^2 \cdot t$							A <sup>2</sup> S
$di/dt$	200 ( $I_{GP} = 7 A$ , $t_r = 1 \mu s$ , $V_D = \frac{1}{2} V_{DRM}$ , $I_{TM} = 400 A$ , $f = 50 Hz$ , $T_j = 125^\circ C$ )						A/ $\mu s$
$I_{GFM}$	20 (パルス幅: max. 20 $\mu s$ , duty: max. 20%)						A
$P_{GFAV}$	4						W
$I_{GR(RMS)}$	20						A
$P_{GRM}$	4000 (パルス幅: max. 20 $\mu s$ , duty: max. 2%)						W
$V_{GRM}$	15						V
$T_j$	125						°C
$T_{HB}$	-40~125						°C
記号	測定条件		Min	Typ	Max	単位	
$I_{RRM}$	$T_j = 125^\circ C$ , $V_D = V_{RRM}$				10		
$I_{DRM}$	$T_j = 125^\circ C$ , $V_D = V_{DRM}$ , $R_{GK} = 20 \Omega$				10	mA	
$I_{CRM}$	$T_j = 125^\circ C$ , $V_D = V_{CRM}$				10		
$V_{TM}$	$T_j = 25^\circ C$ , $I_{TM} = 400 A$				2.4	V	
$V_{GT}$	$T_j = 25^\circ C$ , $V_D = 12 V$			0.75	1.0		
$I_{GT}$	$R_L = 0.5 \Omega$			200	500	mA	
$V_{GD}$	$T_j = 125^\circ C$ , $V_D = \frac{1}{2} V_{DRM}$		0.3			V	
$I_{GD}$				5		mA	
$t_d$	$T_j = 25^\circ C$ , $V_D = \frac{1}{2} V_{DRM}$				2.5		
$t_{st}$	$I_{TM} = 400 A$				7.6	$\mu s$	
	$di/dt = 200 A/\mu s$				7.0		
	$I_{GP} = 7 A$ , $t_r = 1 \mu s$				6.8		
					6.0		
$dv/dt$	$T_j = 125^\circ C$ , $V_D = \frac{1}{2} V_{DRM}$		600			V/ $\mu s$	
$I_H$	$T_j = 25^\circ C$ , $R_L = 0.5 \Omega$			10		A	
$t_s$	$T_j = 120^\circ C$ , $I_{FM} = 400 A$				13		
$t_{ex}$	$V_D = \frac{1}{2} V_{DRM}$				15	$\mu s$	
	$V_{DM} = \frac{2}{5} V_{DRM}$				62		
	$C_s = 1 \mu F$				58		
$t_{hol}$	$R_s = 20 \Omega$				56	$\mu s$	
	$dig/dt = -12 A/\mu s$				50		
					95		
$I_{GR}$					125	A	
$R_{th}$	接合-ケース間, DC				0.13	°C/W	

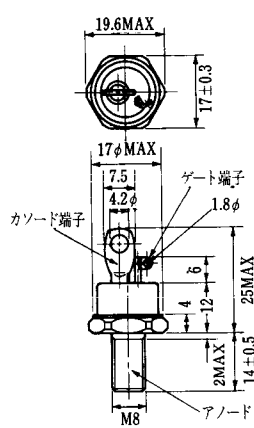
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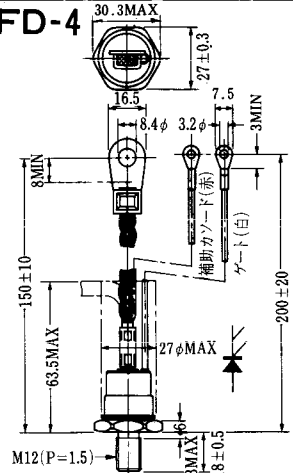
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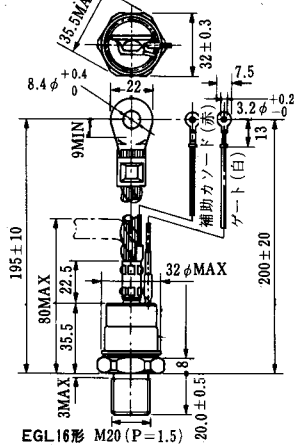
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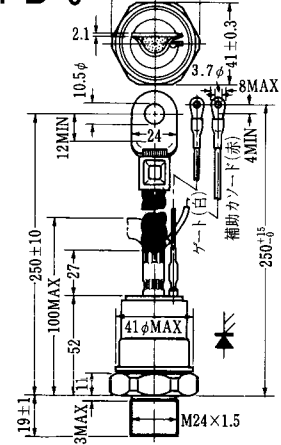
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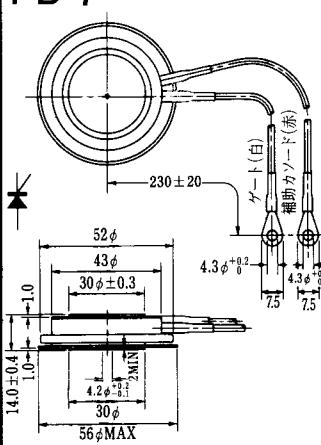
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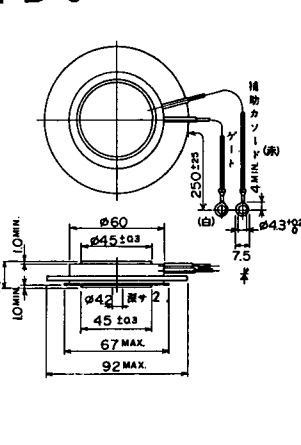
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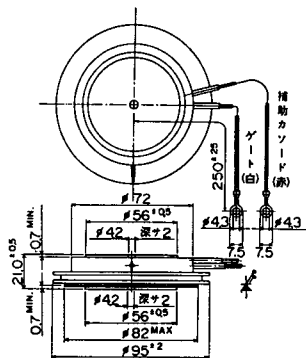
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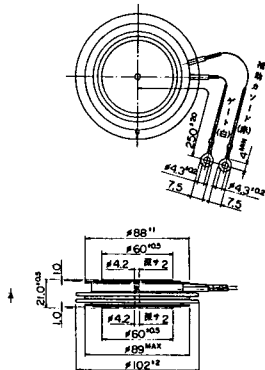
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FD-9

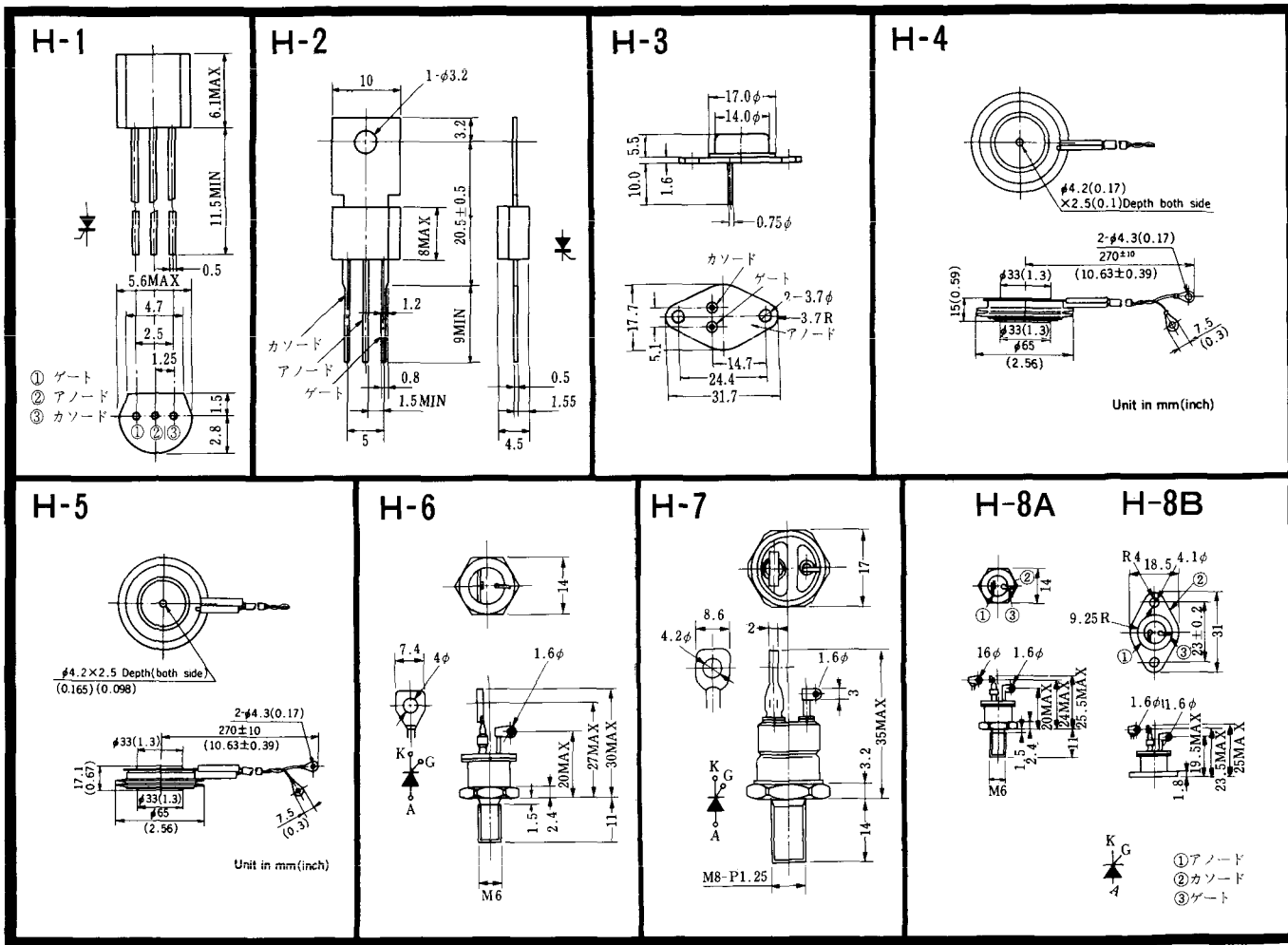


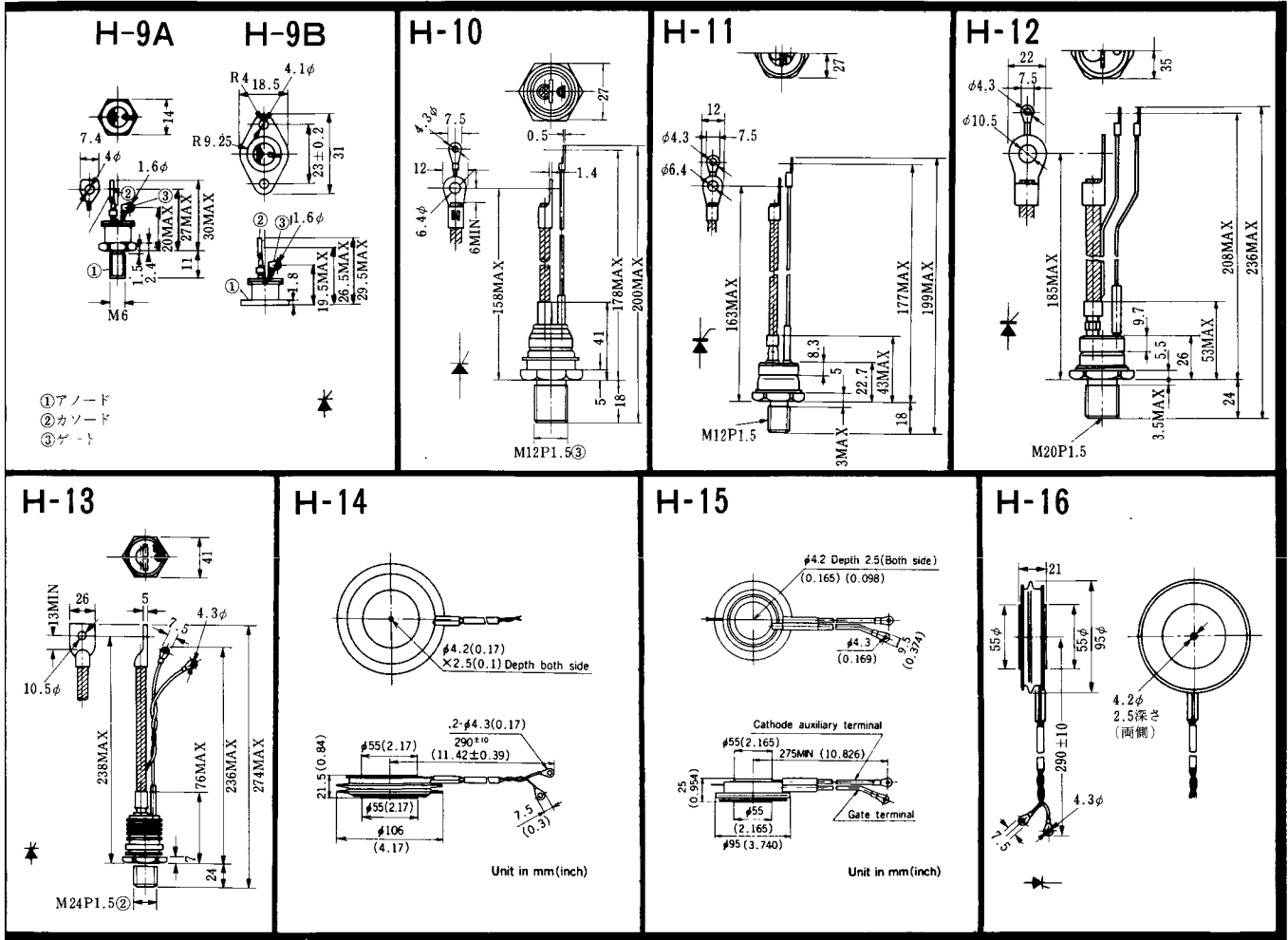
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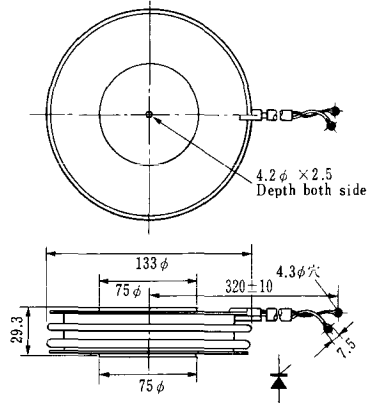
FD-11

FD-12

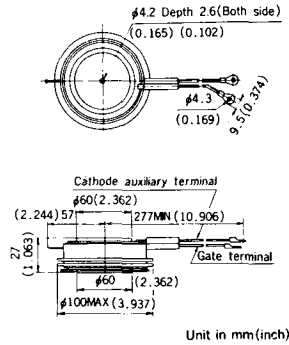




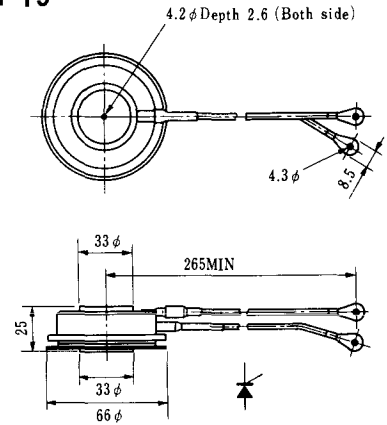
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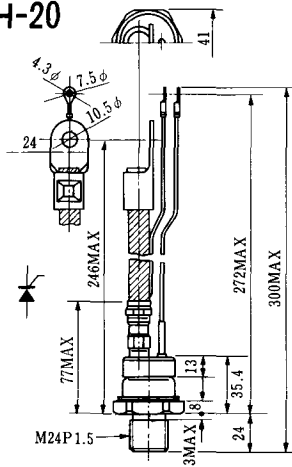
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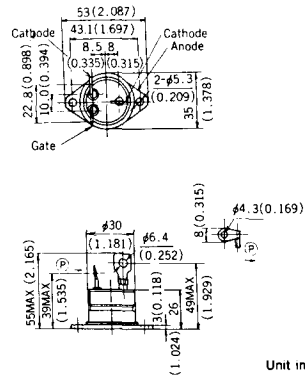
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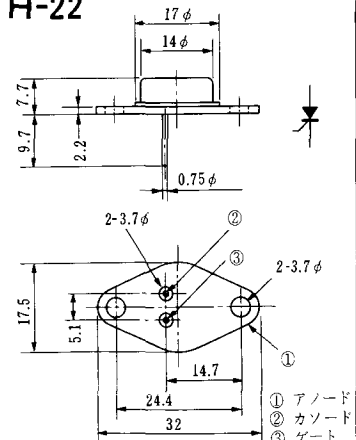
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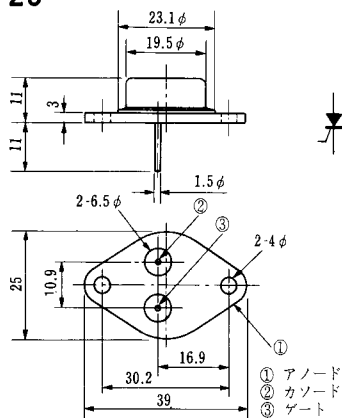
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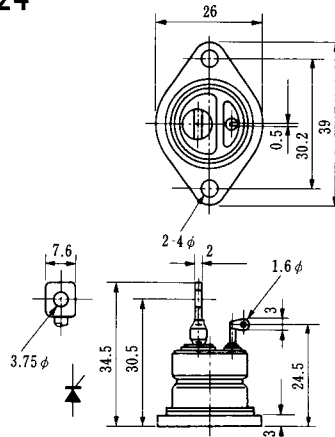
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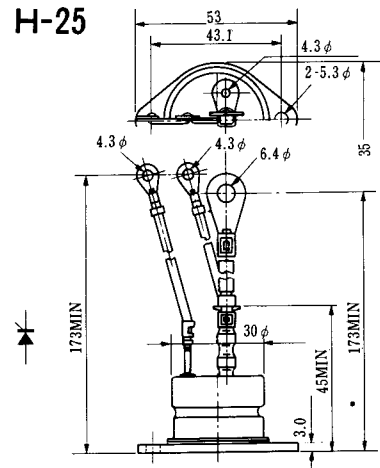
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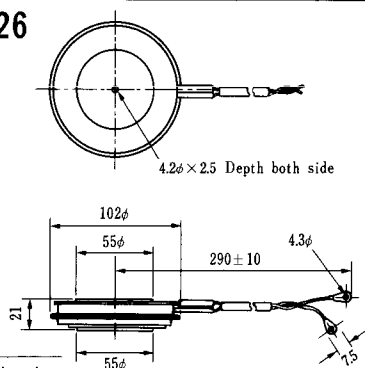
### H-24



### H-25



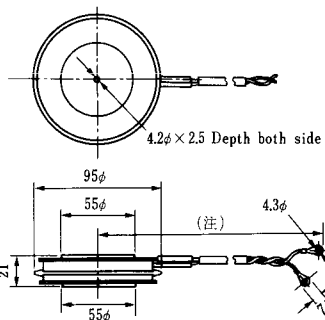
### H-26



Type	Direction of polarity
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CA12	
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### H-27

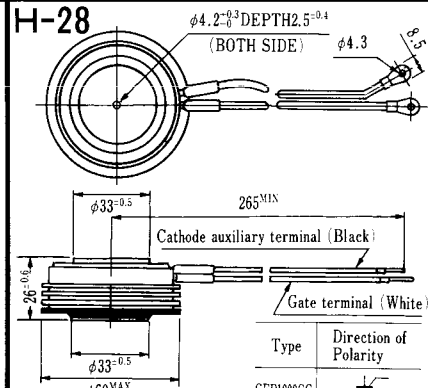


Type	Direction of polarity
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CF11V	
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(注) CC11V : 400 ± 10  
CF11V : 250 ± 10

### H-28

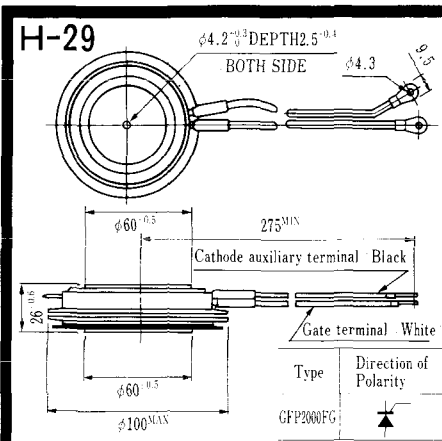


Type	Direction of Polarity
------	-----------------------

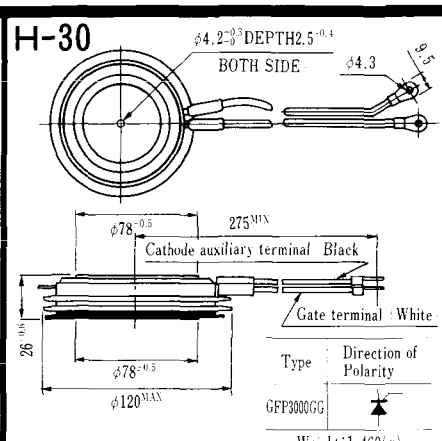
GFP100GG	
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Weight: 360(g)

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



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

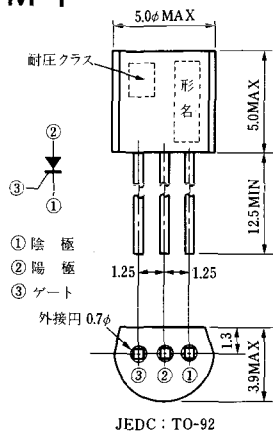


Note : The thickness is a dimension in press at the rated mounting force. Weight: 1,460(g)

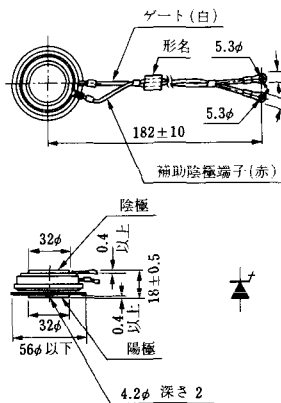




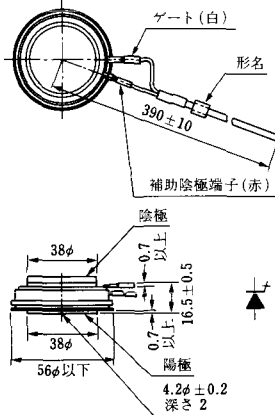
### M-1



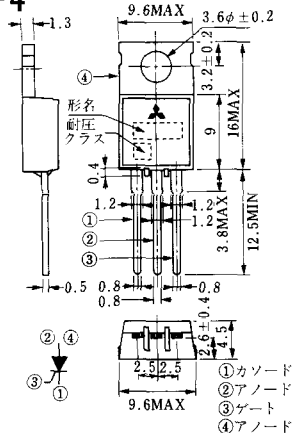
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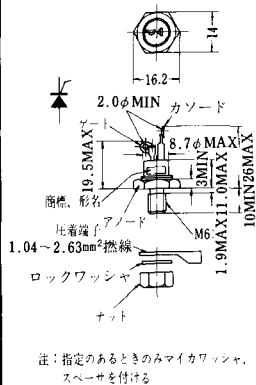
### M-3



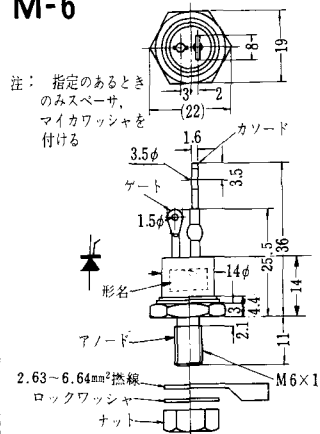
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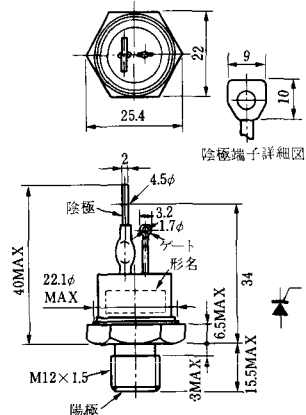
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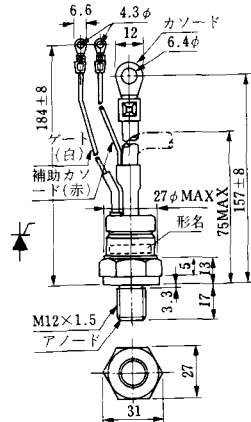
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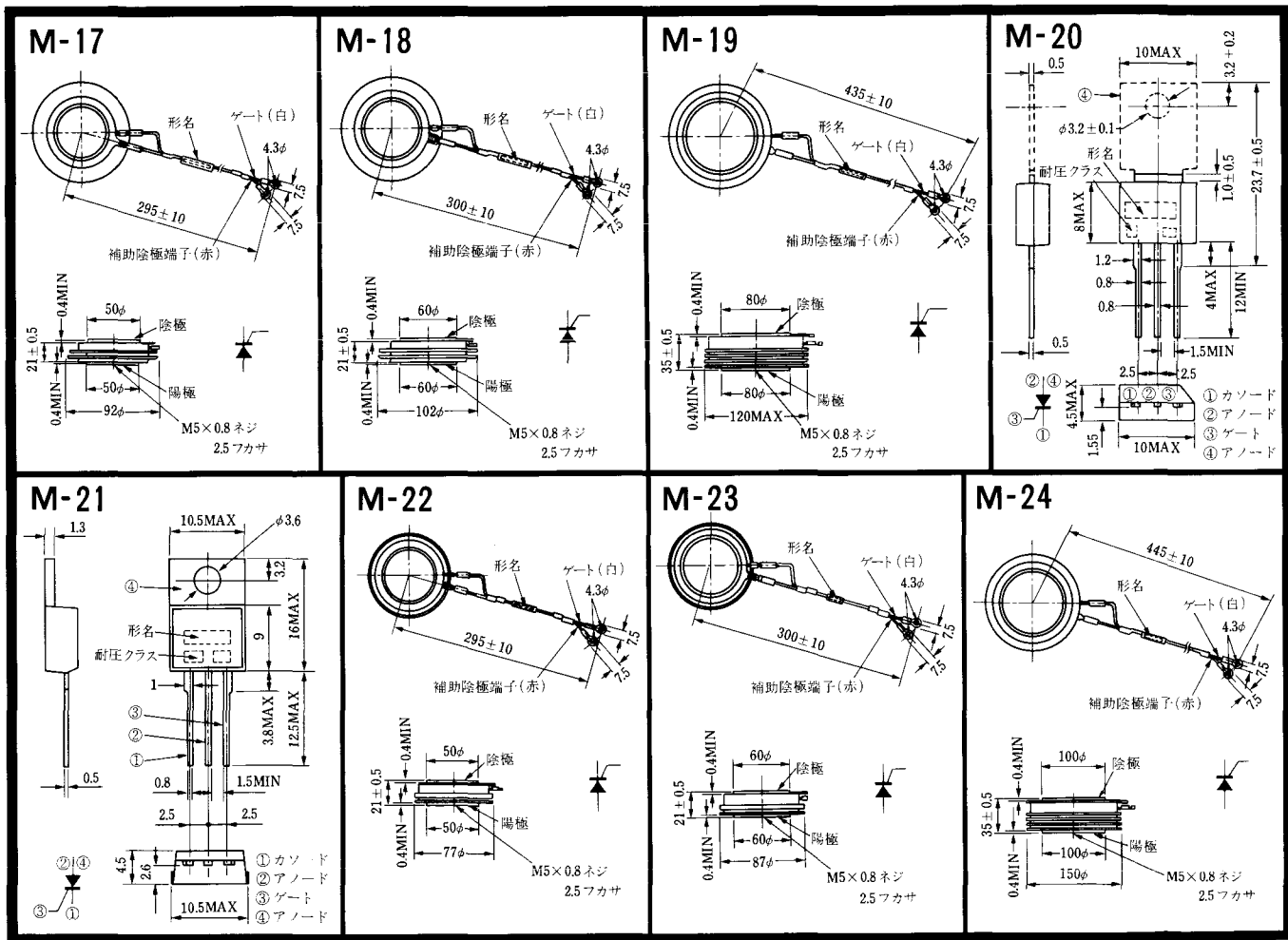
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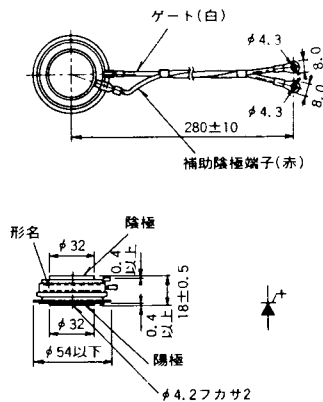
### M-8



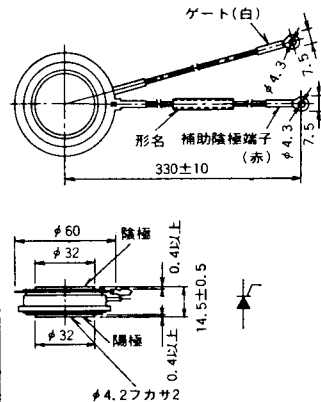




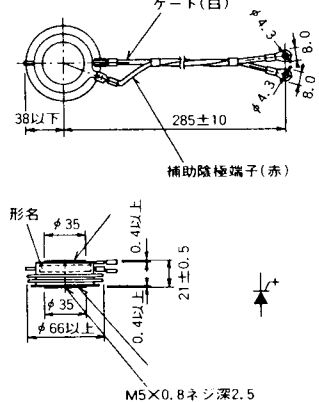
M-25



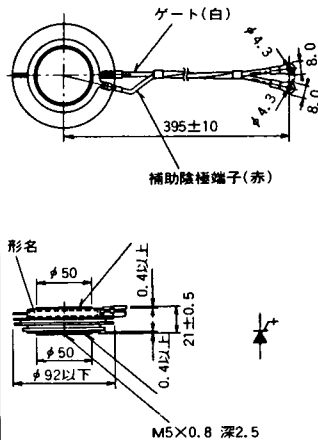
M-26



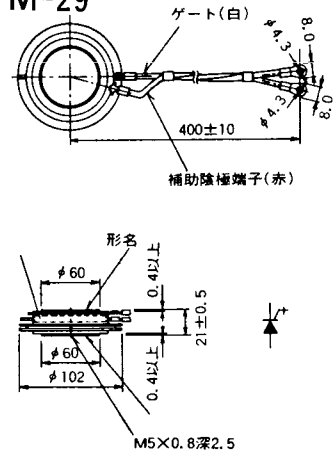
M-27



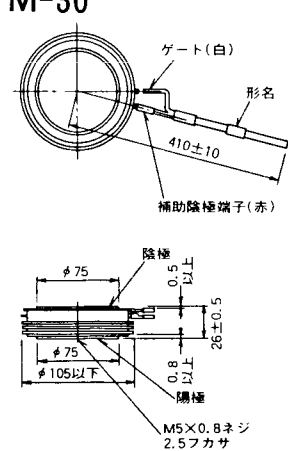
M-28



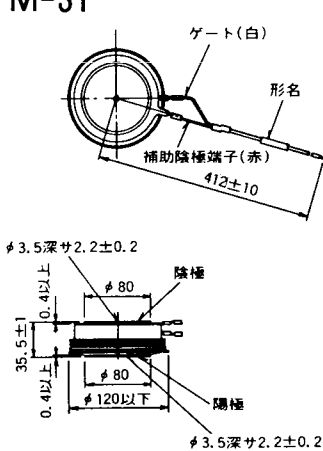
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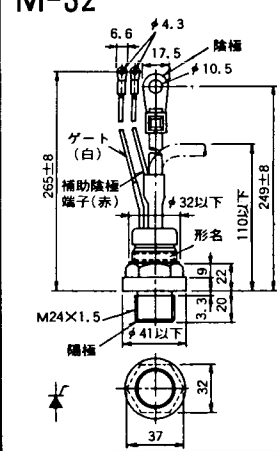
M-30



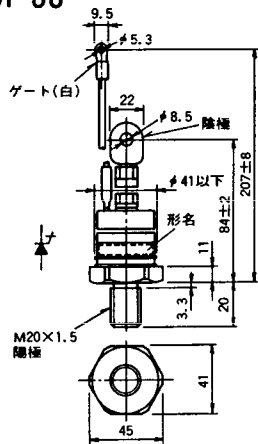
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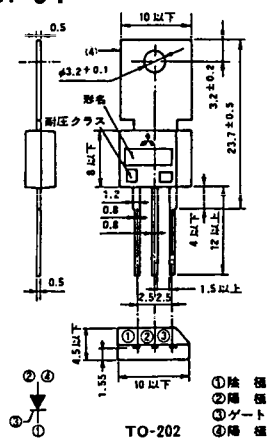
M-32



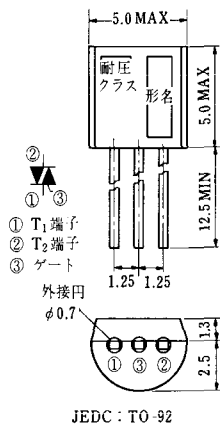
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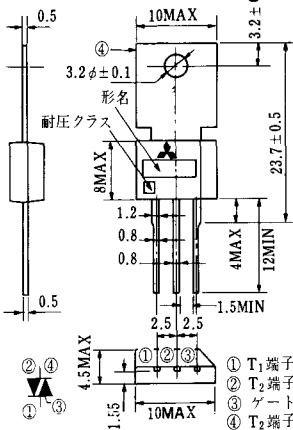
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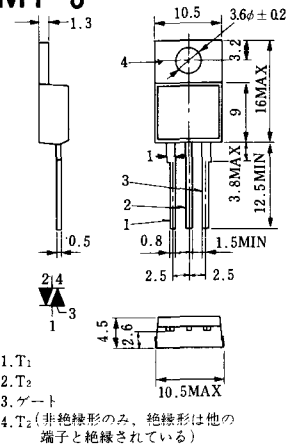
### MT-1



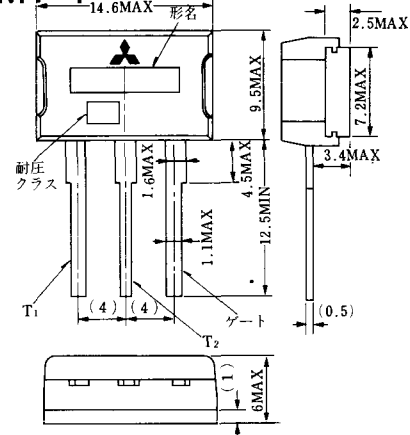
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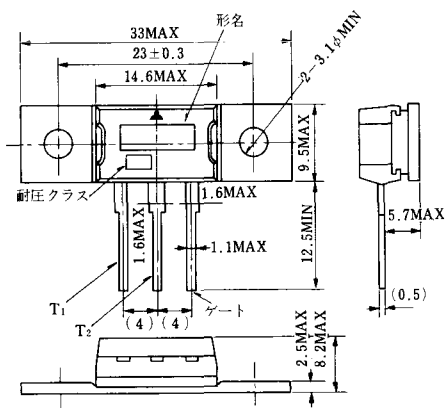
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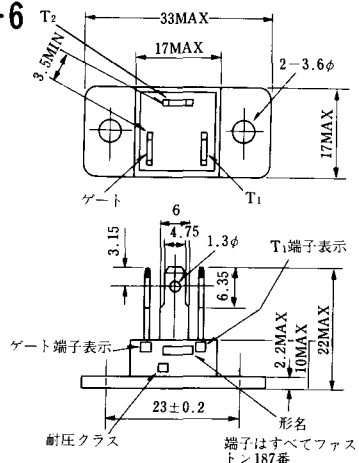
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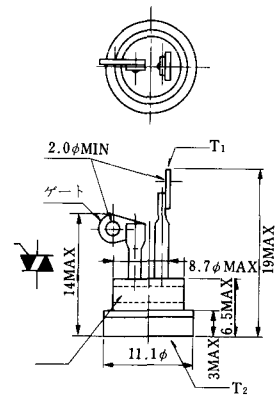
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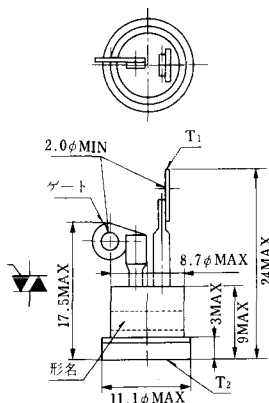
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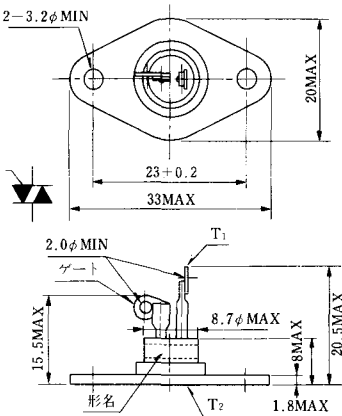
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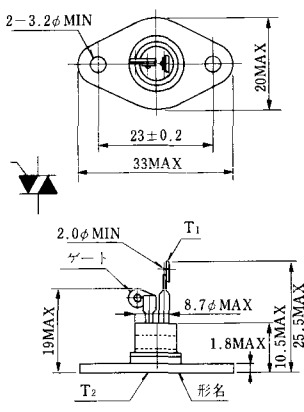
MT-8



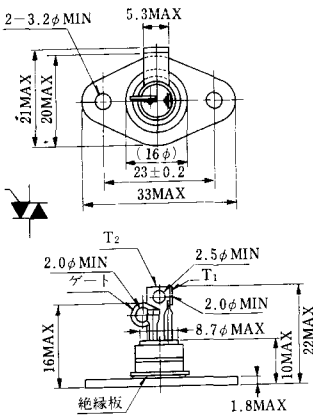
MT-9



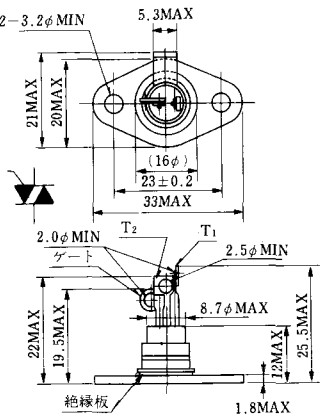
MT-10



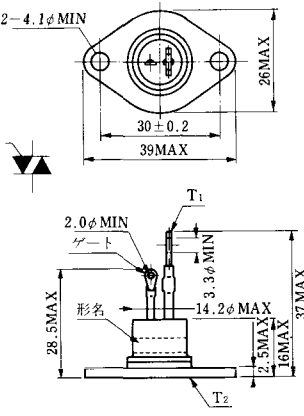
MT-11



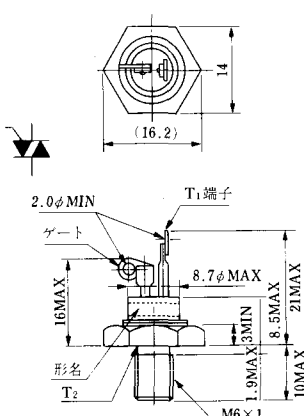
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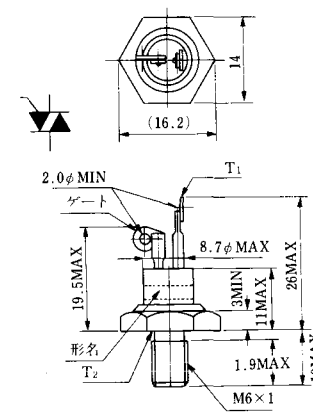
MT-13



MT-14

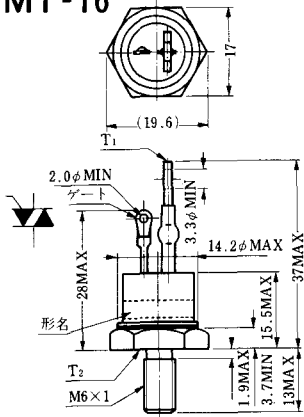


MT-15

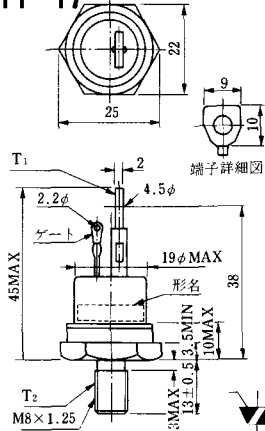




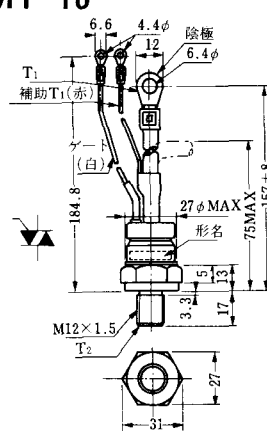
MT-16



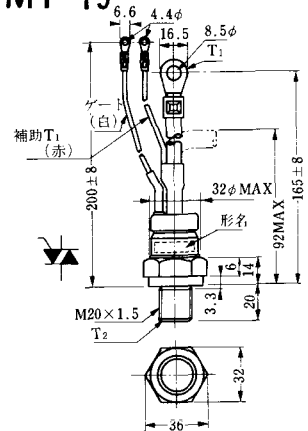
MT-17



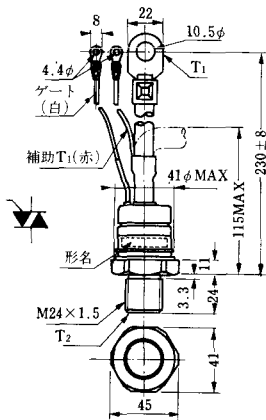
MT-18



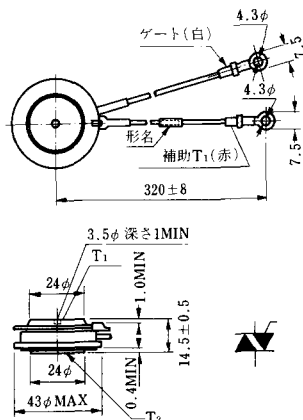
MT-19



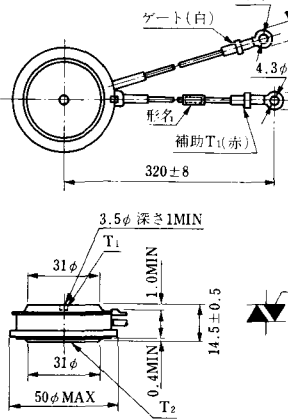
MT-20



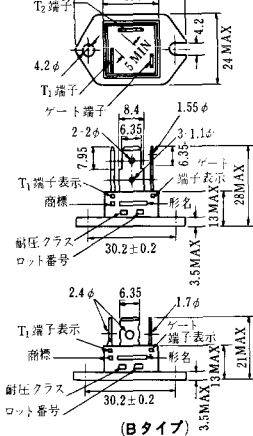
MT-21



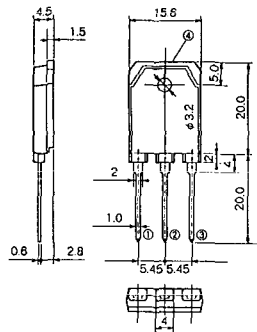
MT-22



MT-23

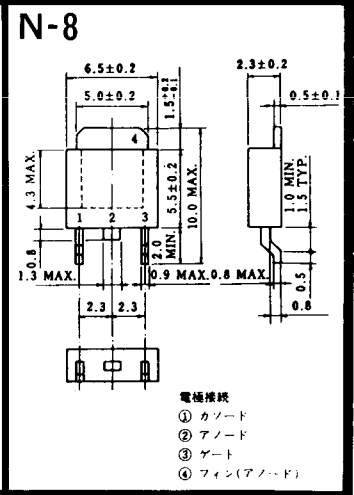
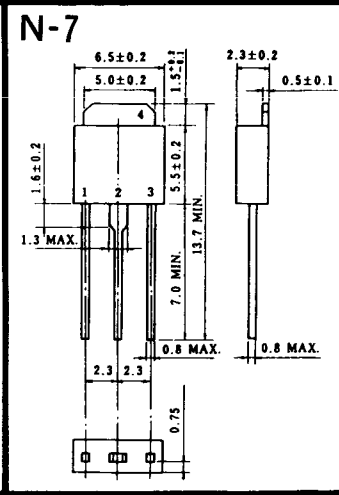
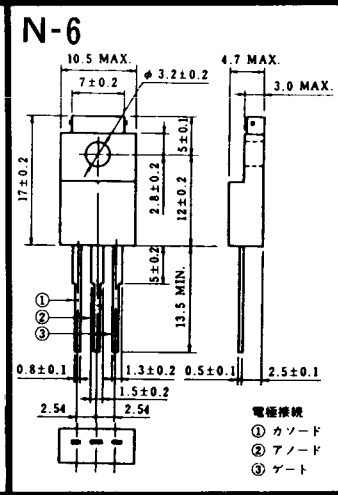
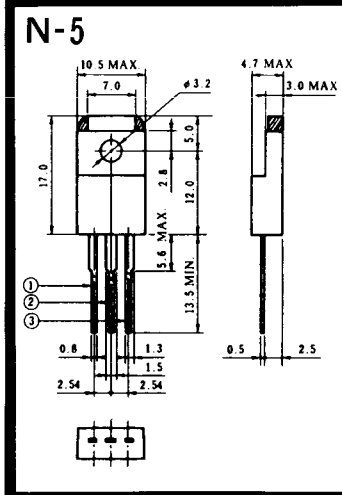
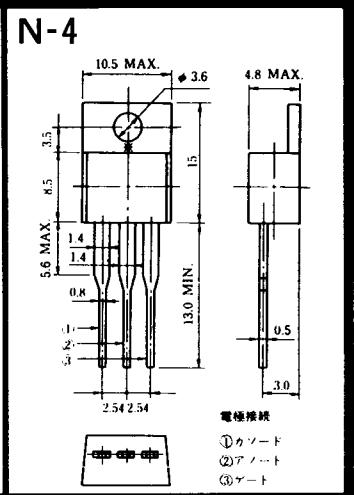
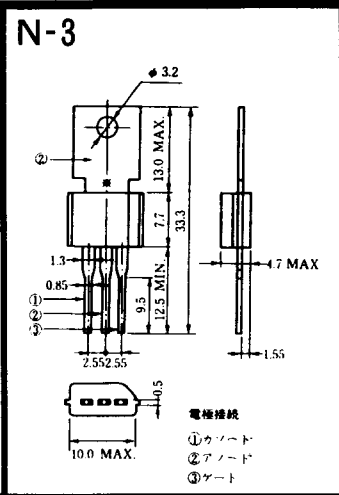
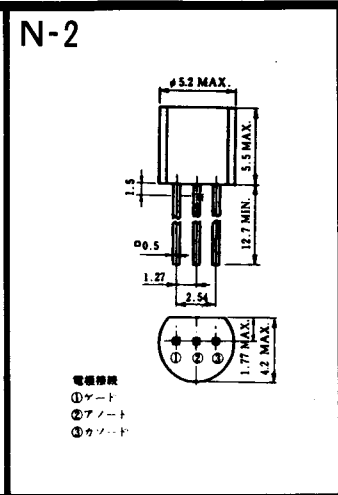
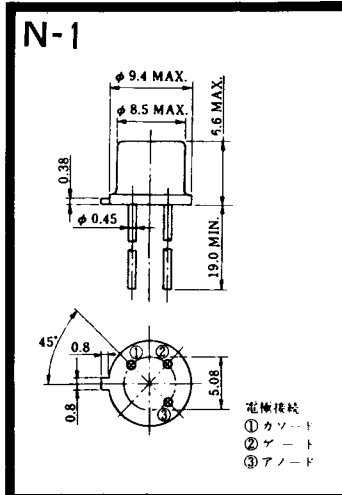


# MT-24

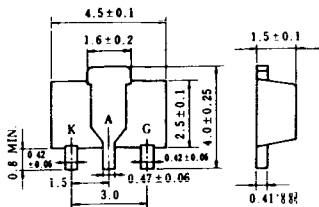


TO-3P

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



N-9



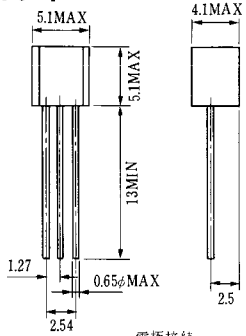
電極接続

K : カソード

A : アノード

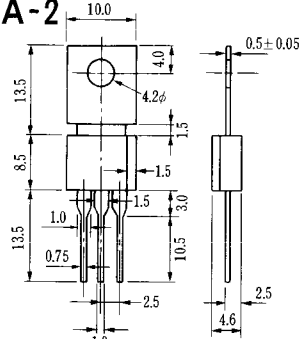
G : ギャート

### NA-1



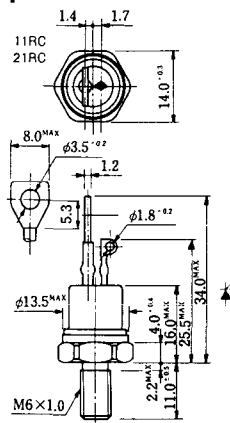
電極接続  
1. ゲート  
2. アノード  
3. カソード  
JEDEC : TO-92

### NA-2



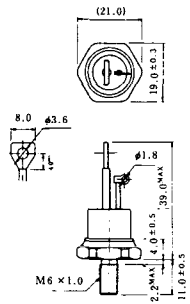
電極接続  
1. カソード  
2. アノード  
3. ゲート  
JEDEC : TO-202AA

### NI-1



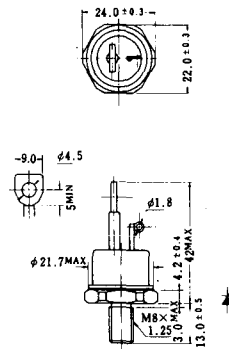
### NI-2

29RD



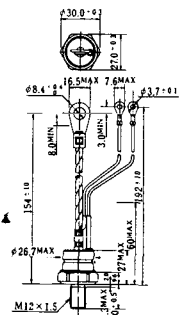
### NI-3

39RC  
59RC  
39RF  
59RF



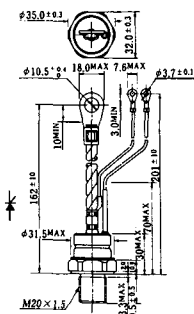
### NI-4

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



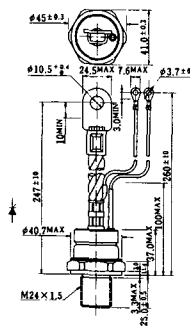
### NI-5

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



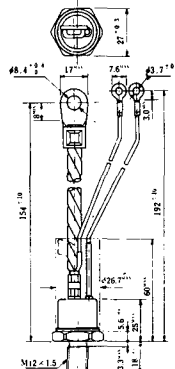
### NI-6

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



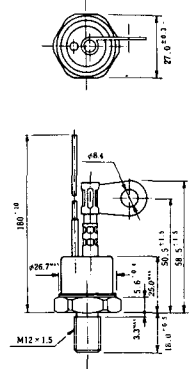
### NI-7

89RW<sub>J</sub>L  
129RW<sub>J</sub>L



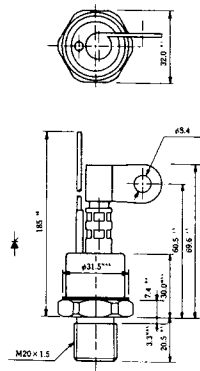
### NI-8

89RW  
129RW



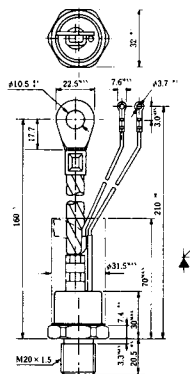
### NI-9

259RW  
309RW



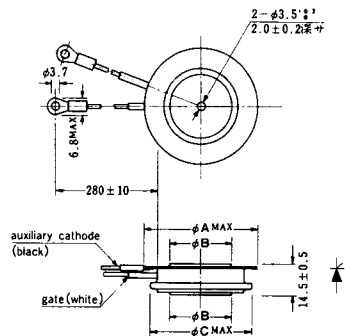
### NI-10

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



### NI-11

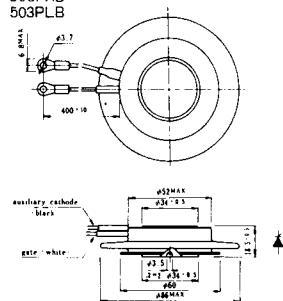
103PA  
253PA  
503PA  
553PA  
803PA  
103PLE  
103PLG  
103PLH  
203PLG  
253PLE  
253PLH  
353PLG  
403PLE  
403PLH



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

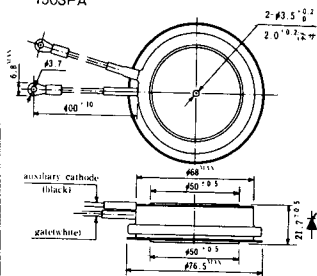
### NI-12

403PAB  
503PAB  
503PLB



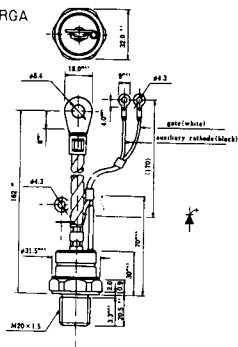
### NI-13

1003PA  
1003PAB  
1003PLF  
1003PLH  
1503PA



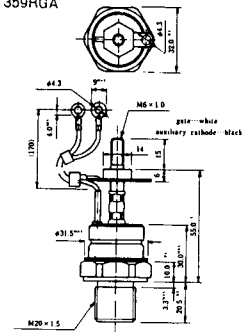
### NI-14

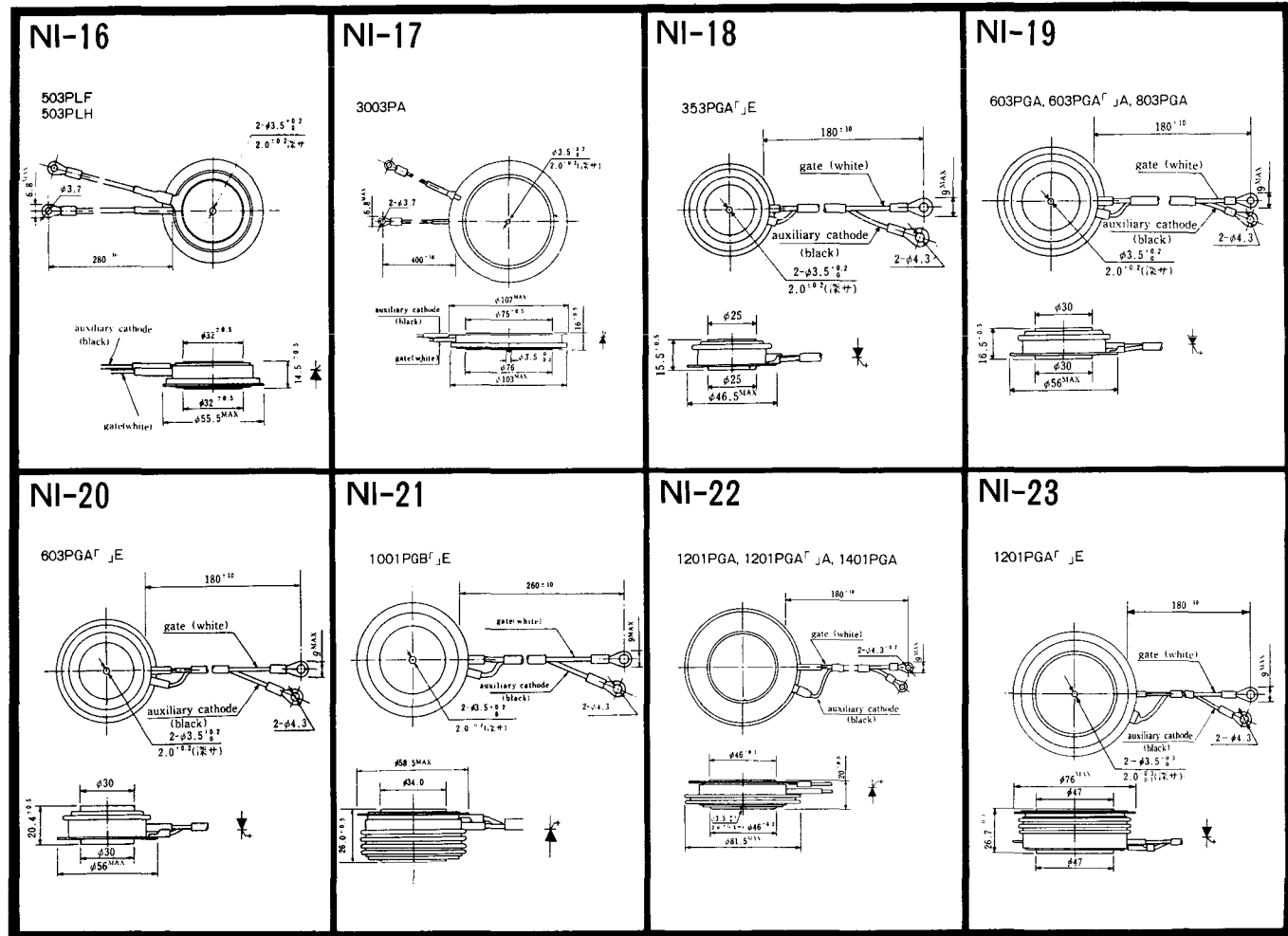
358RGA



### NI-15

359RGA

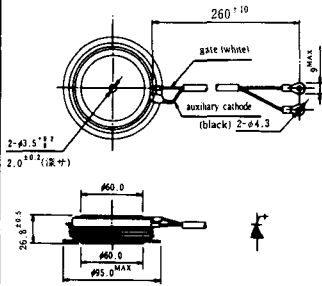






NI-24

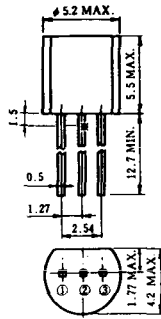
2001PGB<sup>r</sup> JE



NI-25

NI-26

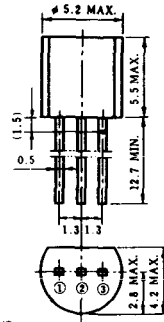
### NT-1



電極接続

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

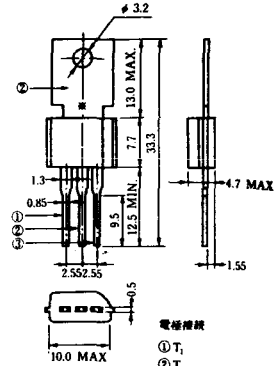
### NT-2



電極接続

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

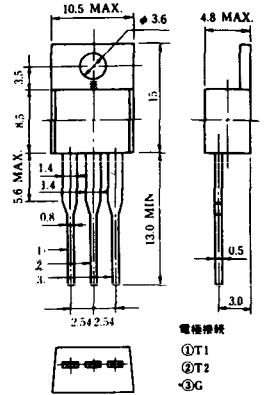
### NT-3



電極接続

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

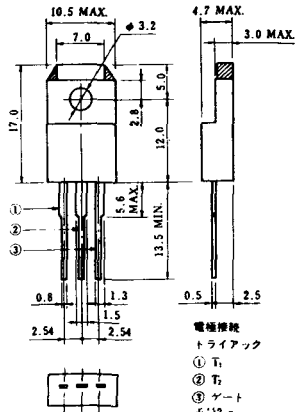
### NT-4



電極接続

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

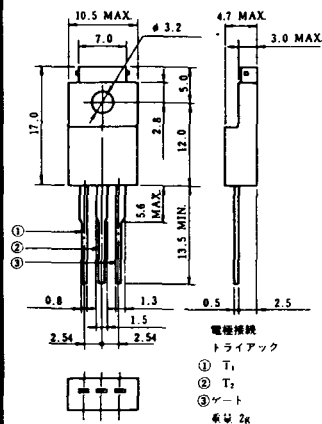
### NT-5



電極接続  
トライアック

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

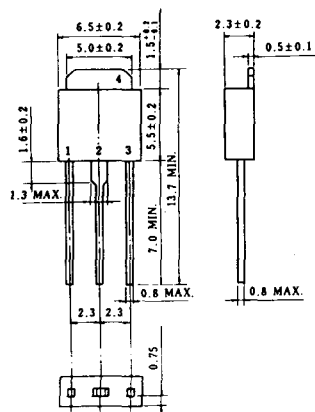
### NT-6



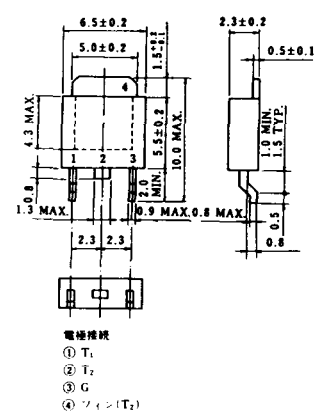
電極接続  
トライアック

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

### NT-7



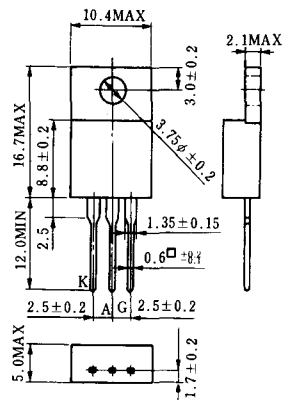
### NT-8



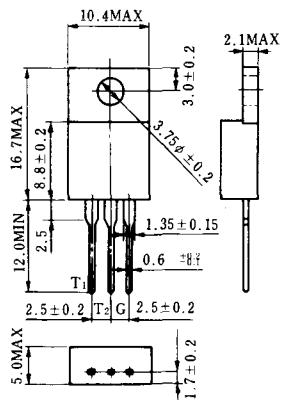
電極接続

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

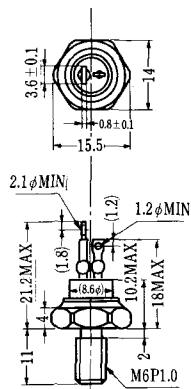
S-1



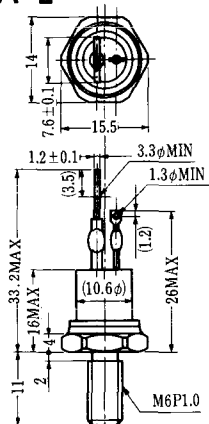
ST-1



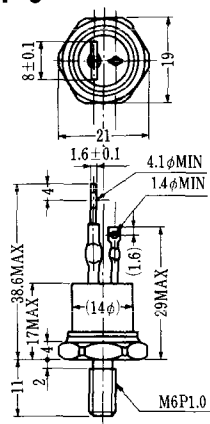
SA-1



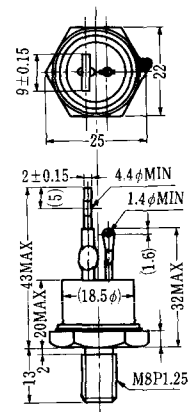
SA-2



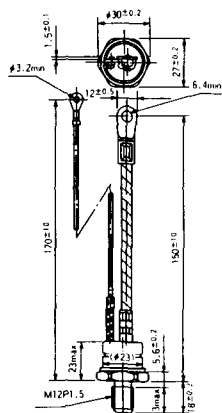
SA-3



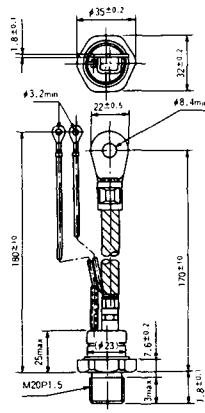
SA-4



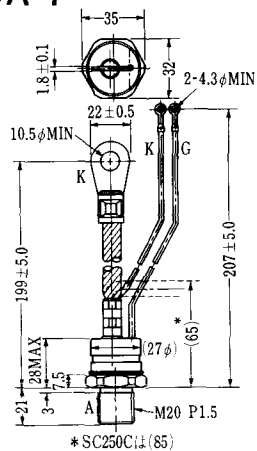
SA-5



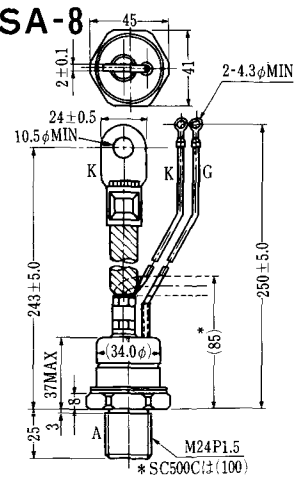
SA-6



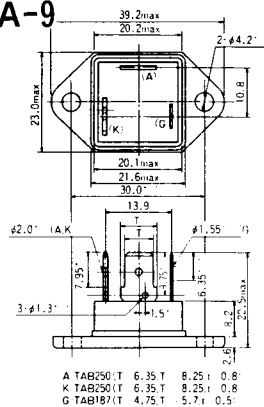
SA-7



SA-8



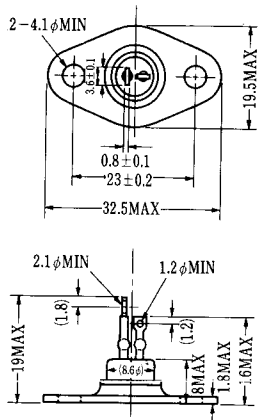
### SA-9



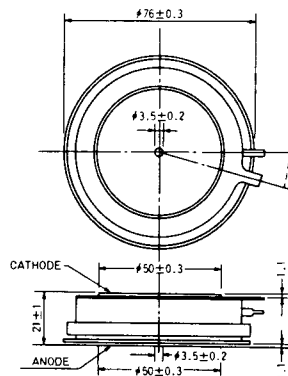
A TAB250(T) 6.35 T 8.25 I 0.8  
 K TAB250(T) 6.35 T 8.25 I 0.8  
 G TAB187(T) 4.75 T 5.7 I 0.5



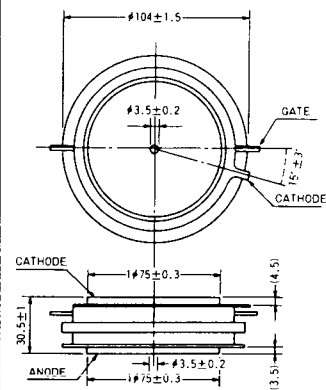
### SA-10



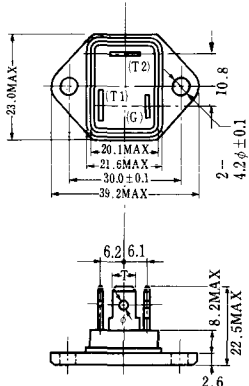
### SA-11



### SA-12

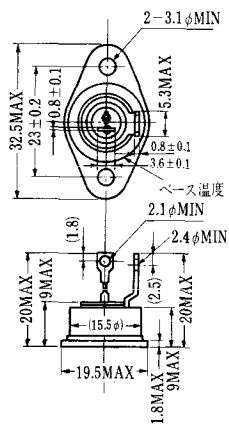


### SAT-1

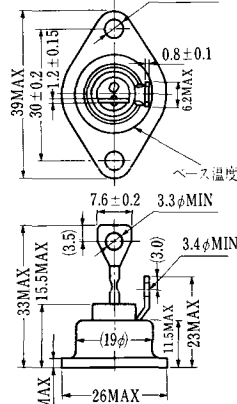


T1端子: フラスト > 250 (T=6.35, t=0.8, φ=1.65)  
 T2端子: フラスト > 250 (T=6.35, t=0.8, φ=1.65)  
 C端子: フラスト > 187 (T=4.75, t=0.5, φ=1.3)

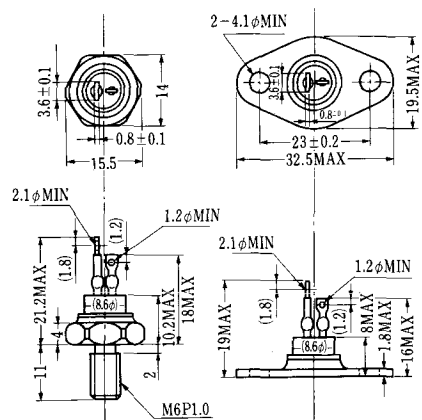
### SAT-2



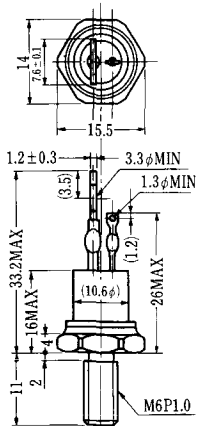
### SAT-3



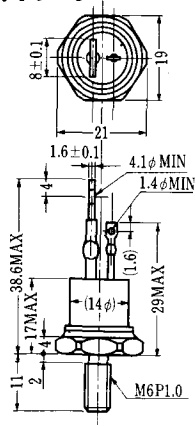
### SAT-4



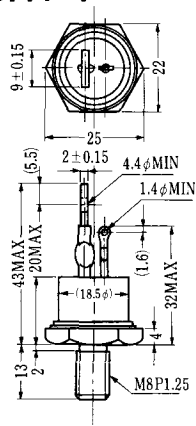
### SAT-5



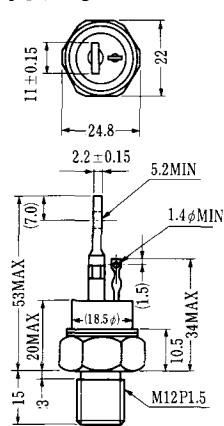
### SAT-6



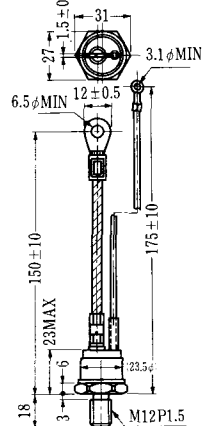
### SAT-7



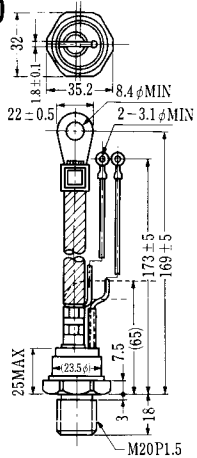
### SAT-8



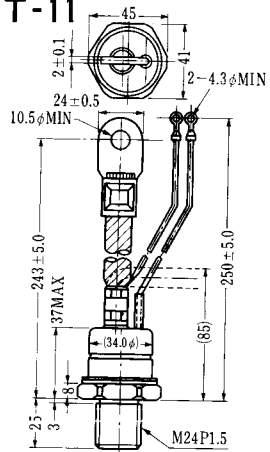
### SAT-9



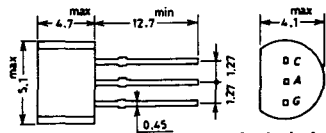
SAT-10



SAT-11

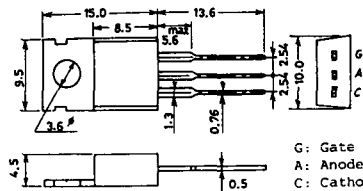


### SY-1 (1096A)



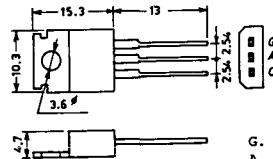
C: Cathode  
A: Anode  
G: Gate

### SY-2 (1151)



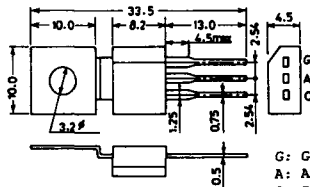
G: Gate  
A: Anode  
C: Cathode

### SY-3 (1104)



G: Gate  
A: Anode  
C: Cathode

### SY-4 (1150)

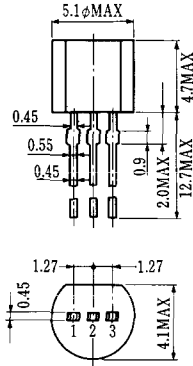


G: Gate  
A: Anode  
C: Cathode



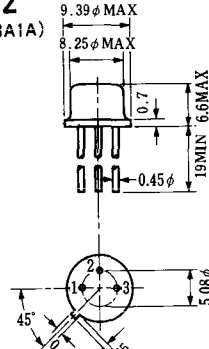


**T-1 (13-5A1A)**



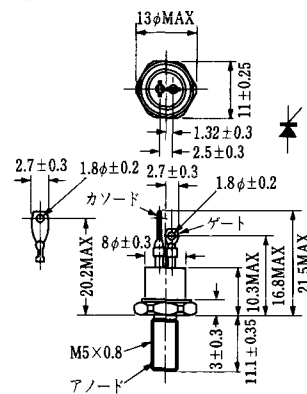
- 1 ゲート
- 2 アノード
- 3 カソード

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



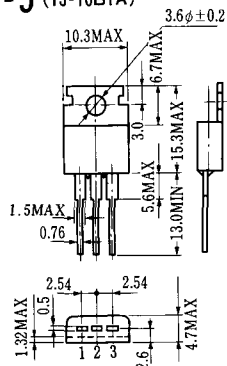
1. カソード
2. ゲート
3. アノード(ケース)

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



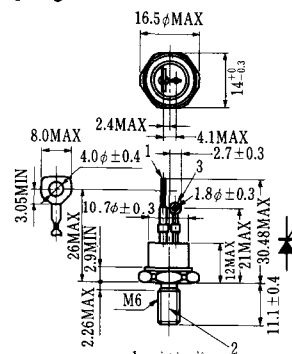
- 1 カソード
- 2 アノード
- 3 ゲート

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



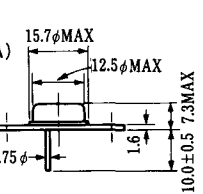
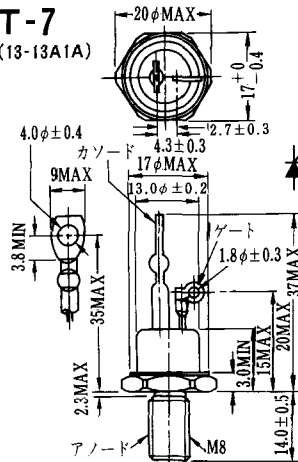
- 1 カソード
- 2 アノード
- 3 ゲート

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



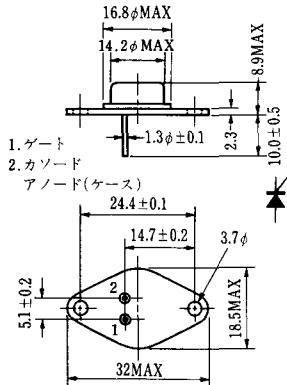
- 1 カソード
- 2 アノード
- 3 ゲート

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



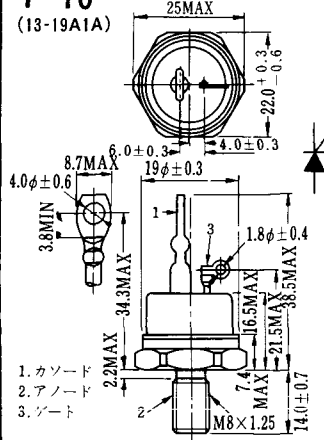
1. ゲート
2. カソード
3. アノード(ケース)

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



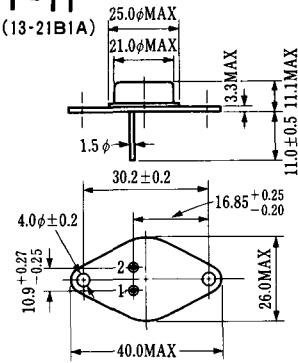
1. ゲート
2. カソード
- アノード(ケース)

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



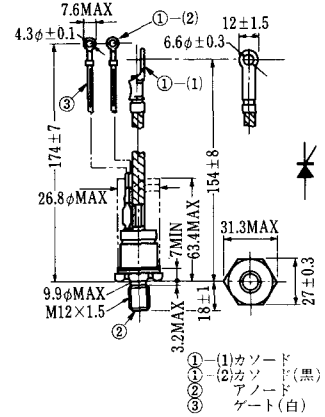
1. カソード
2. アノード
3. ゲート

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



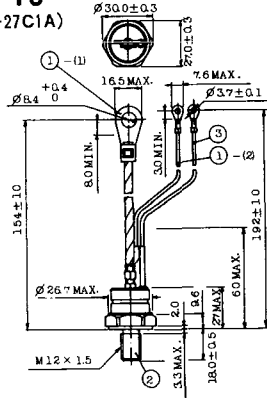
1. ゲート
2. カソード
- アノード(ケース)

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



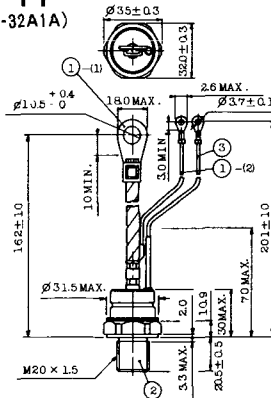
- ① (1) カソード
- ① (2) カソード(黒)
- ② アノード
- ③ ゲート(白)

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



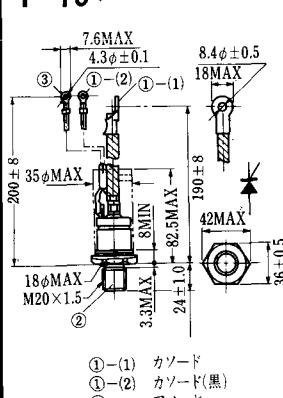
- 1-(1) カソード
- 1-(2) カソード(黒)
- 2 アノード
- 3 ゲート(白)

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



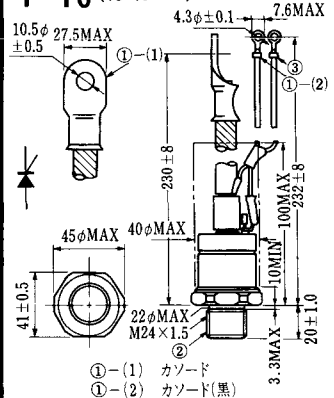
- 1-(1) カソード
- 1-(2) カソード(黒)
- 2 アノード
- 3 ゲート(白)

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



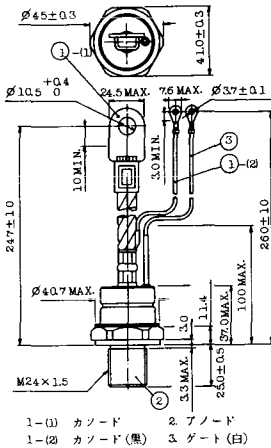
- ① (1) カソード
- ① (2) カソード(黒)
- ② アノード
- ③ ゲート(白)

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

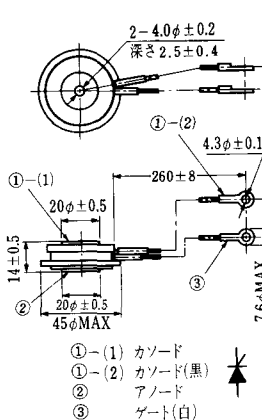


- ① (1) カソード
- ① (2) カソード(黒)
- ② アノード
- ③ ゲート(白)

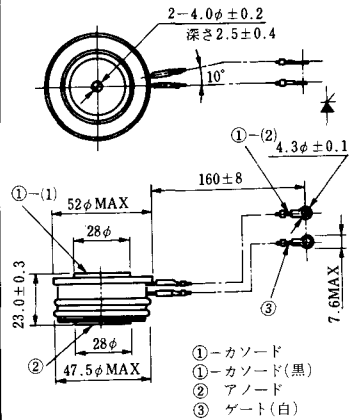
**T-17 (13-42A1A)**



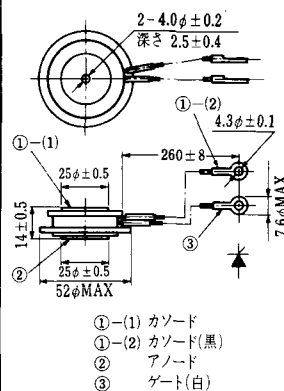
**T-18 (13-45D1A)**



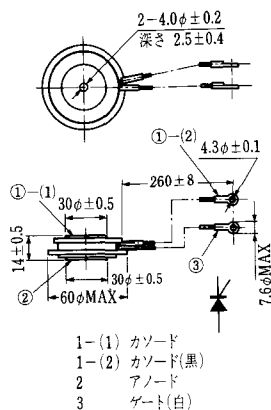
**T-19 (13-52B1A)**



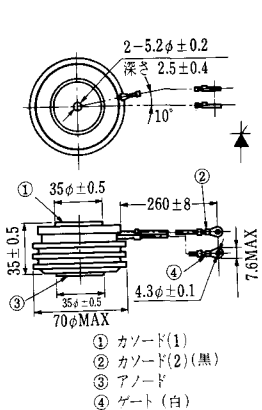
**T-20 (13-52C1A)**



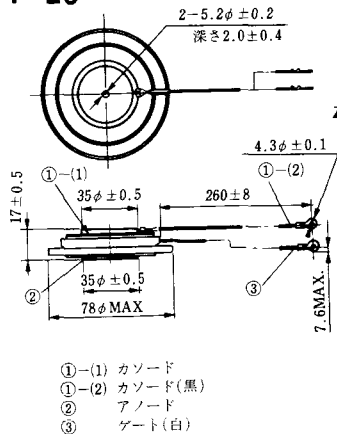
**T-21 (13-60A1A)**



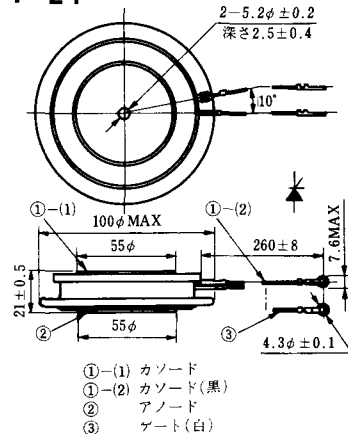
**T-22 (13-70C1A)**



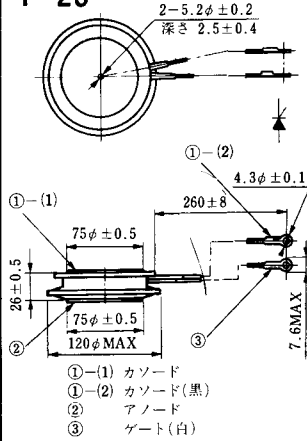
**T-23 (13-78A1A)**



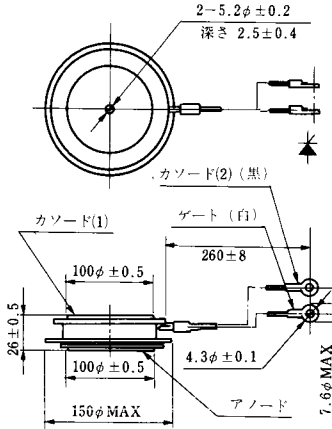
**T-24 (13-100C1A)**



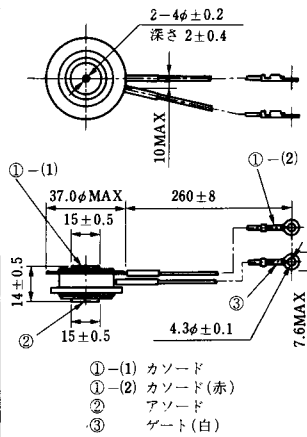
**T-25** (13-120A2A)



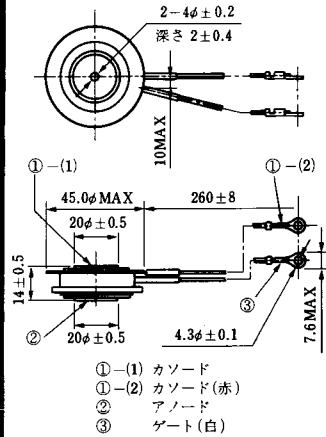
**T-26** (13-150A1A)



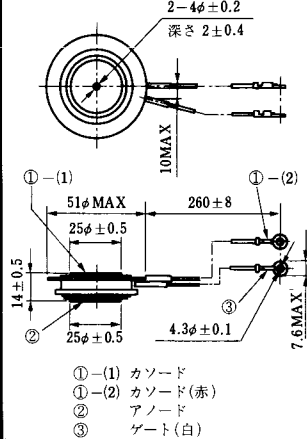
**T-27** (13-37A1A)



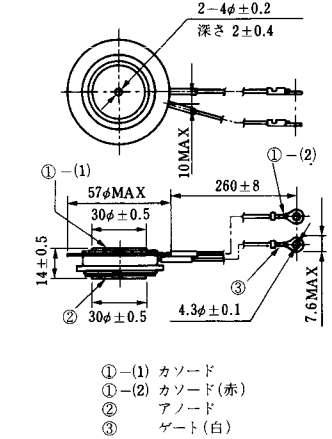
**T-28** (13-45E1A)



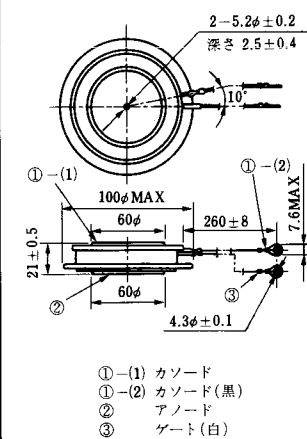
**T-29** (13-51A1A)



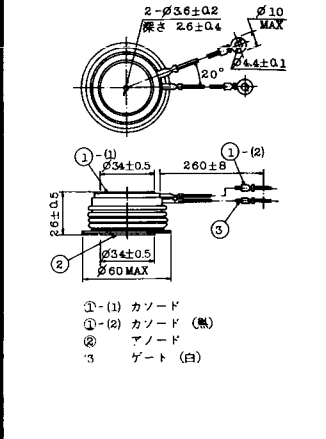
**T-30** (13-57A1A)



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

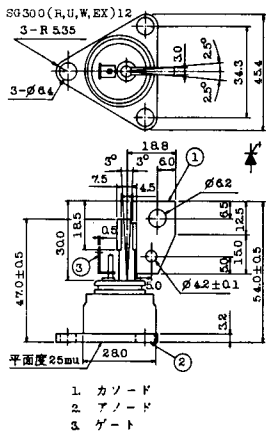


**T-32** (13-60E3A)

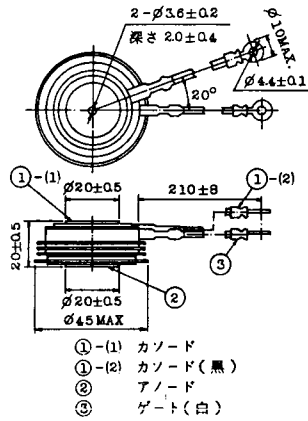




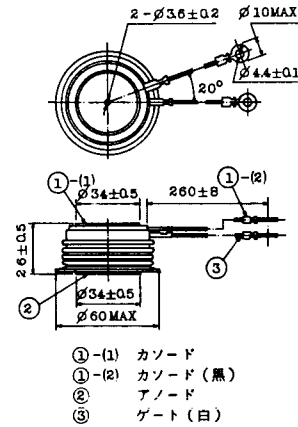
### T-41 (13-28A2A)



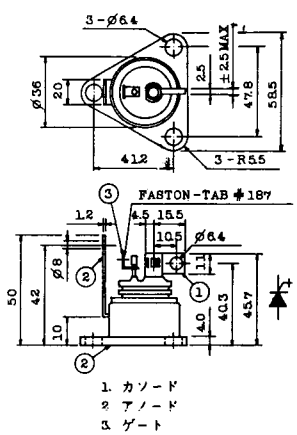
### T-42 (13-45F1A)



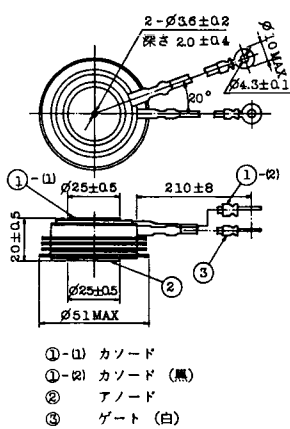
### T-43 (13-60E2A)



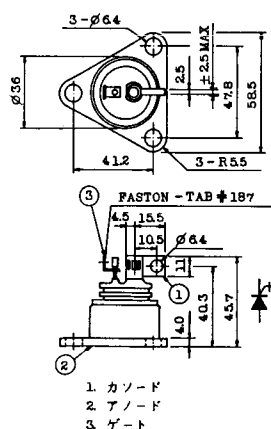
### T-44 (13-36A1A)



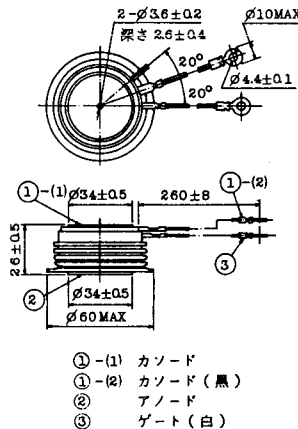
### T-45 (13-51B1A)



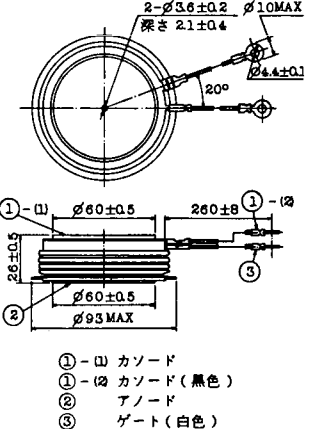
### T-46 (13-36B1A)



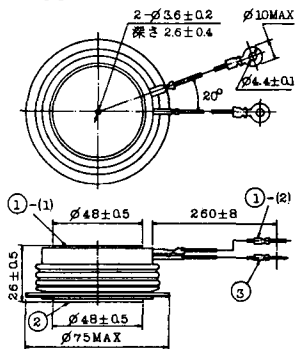
### T-47 (13-60E1A)



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

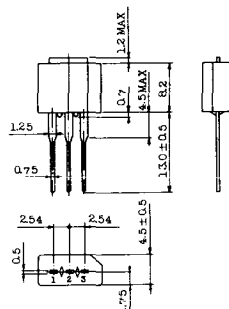


**T-49** (13-75A1A)



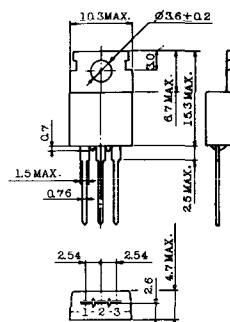
- 1-(1) カソード
- 1-(2) カソード(黒)
- 2 アノード
- 3 ゲート(白)

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



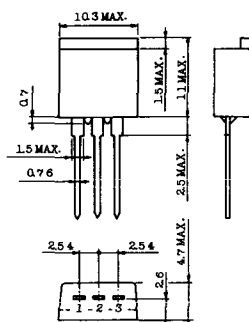
- 1 カソード
- 2 アノード
- 3 ゲート

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



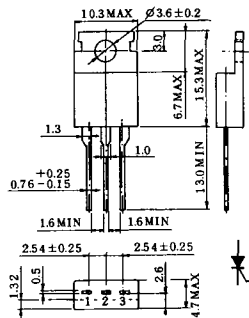
- 1 カソード
- 2 アノード
- 3 ゲート

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



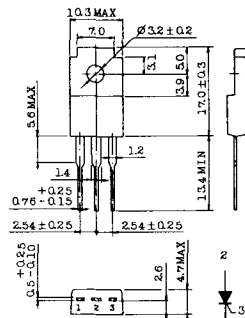
- 1 カソード
- 2 アノード
- 3 ゲート

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



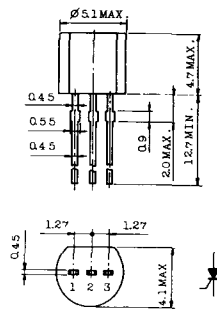
- 1 カソード
- 2 アノード
- 3 ゲート

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



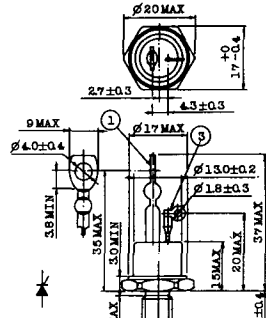
- 1 カソード
- 2 アノード
- 3 ゲート

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



- 1 カソード
- 2 アノード
- 3 アノード

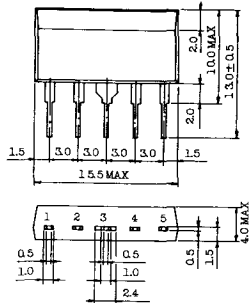
**T-56** (13-13C1A)



- 1 カソード
- 2 アノード
- 3 ゲート

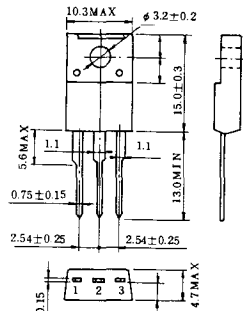


T-57 (12-16C1A)



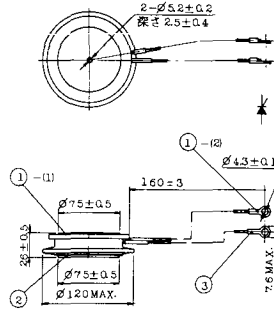
1. アノード (主)
2. ゲート (主)
3. カソード (共通)
4. ゲート (補助)
5. アノード (補助)

T-58 (13-10H1B)



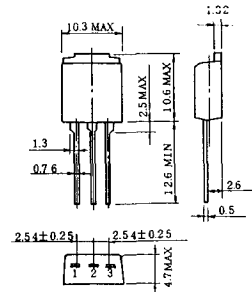
1. カソード
2. アノード
3. ゲート

T-59 (13-120A1A)



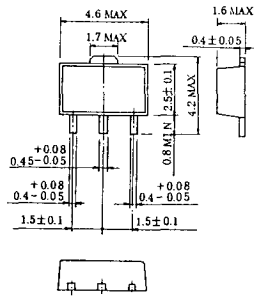
- 1-(1) カソード
- 1-(2) カソード (黒)
2. アノード
3. ゲート (白)

T-60



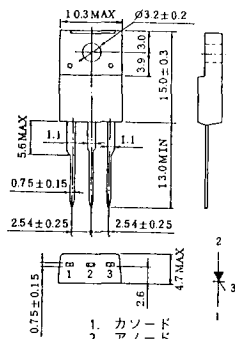
1. カソード
2. アノード
3. ゲート

T-61 (13-5B1A)



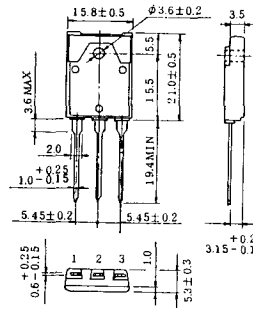
1. ゲート
2. アノード
3. カソード

T-62 (13-10H1A)



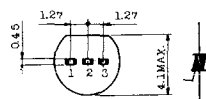
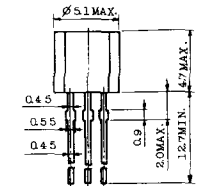
1. カソード
2. アノード
3. ゲート

T-63 (13-16A1B)



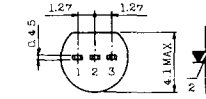
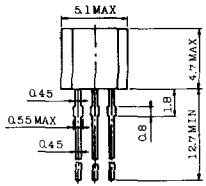
1. カソード
2. アノード
3. ゲート

TT-1



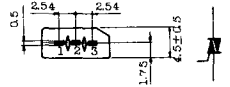
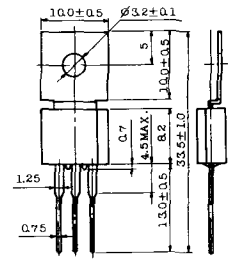
- 1 ゲート
- 2 T<sub>2</sub>
- 3 T<sub>1</sub>

TT-2



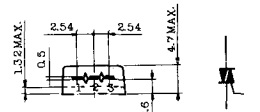
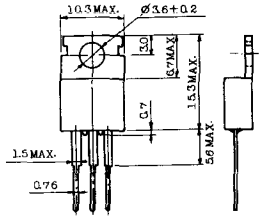
- 1 T<sub>1</sub>
- 2 ゲート
- 3 T<sub>2</sub>

TT-3



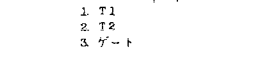
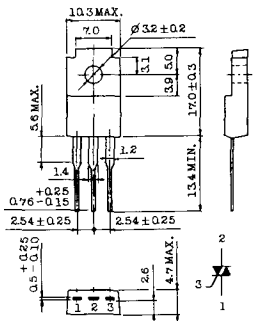
- 1 T<sub>1</sub>
- 2 T<sub>2</sub>
- 3 ゲート

TT-4



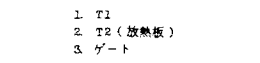
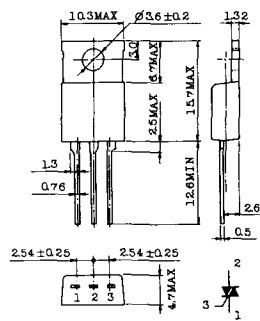
- 1 T<sub>1</sub>
- 2 T<sub>2</sub>
- 3 ゲート

TT-5



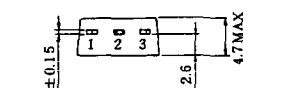
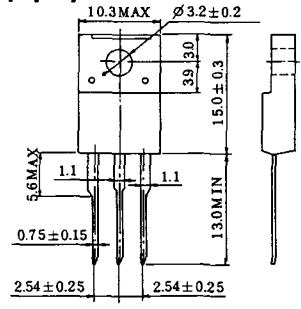
- 1 T<sub>1</sub>
- 2 T<sub>2</sub>
- 3 ゲート

TT-6



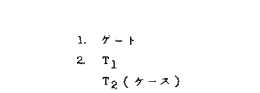
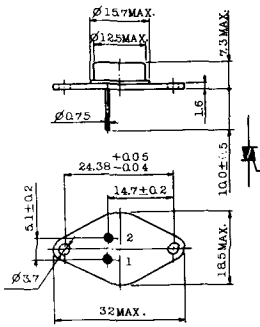
- 1 T<sub>1</sub>
- 2 T<sub>2</sub> (放熱板)
- 3 ゲート

TT-7



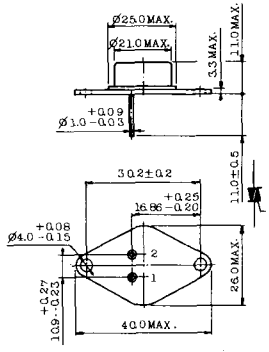
- 1 T<sub>1</sub>
- 2 T<sub>2</sub>
- 3 ゲート

TT-8



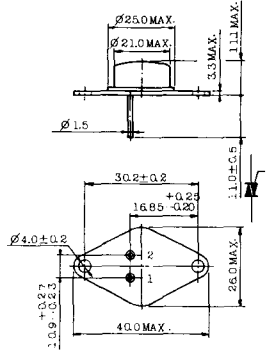
- 1 ゲート
- 2 T<sub>1</sub>
- T<sub>2</sub> (ケース)

TT-9



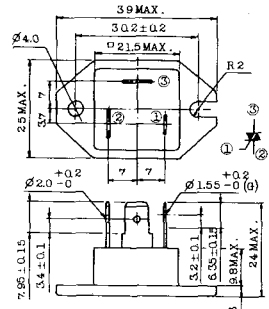
- 1. ゲート
- 2. T<sub>1</sub>
- 3. T<sub>2</sub> (ケース)

TT-10



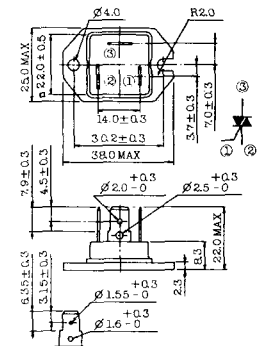
- 1. ゲート
- 2. T<sub>1</sub>
- 3. T<sub>2</sub> (ケース)

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)

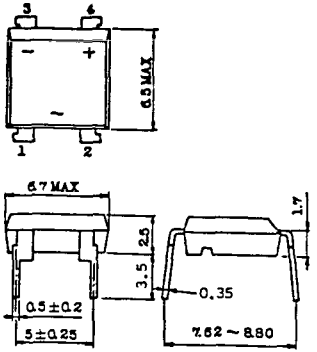
TT-12



ゲート端子詳細

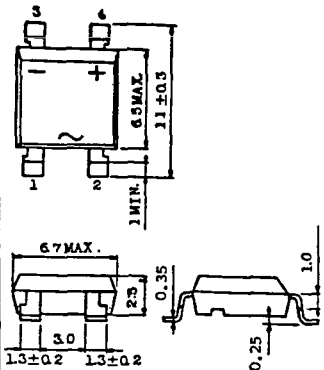
- ① ゲート (フーストン端子 #187)
- ② T<sub>1</sub> ( " #250)
- ③ T<sub>2</sub> ( " #250)

TT-13



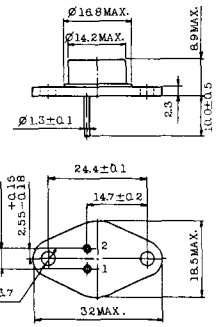
- 1, 2: T<sub>2</sub>
- 3: GATE
- 4: T<sub>1</sub>

TT-14



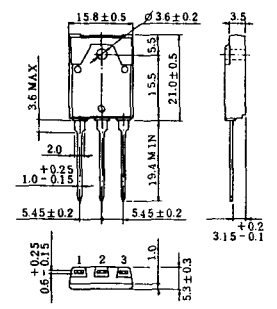
- 1, 2: T<sub>2</sub>
- 3: GATE
- 4: T<sub>1</sub>

TT-15 (13-14A1B)

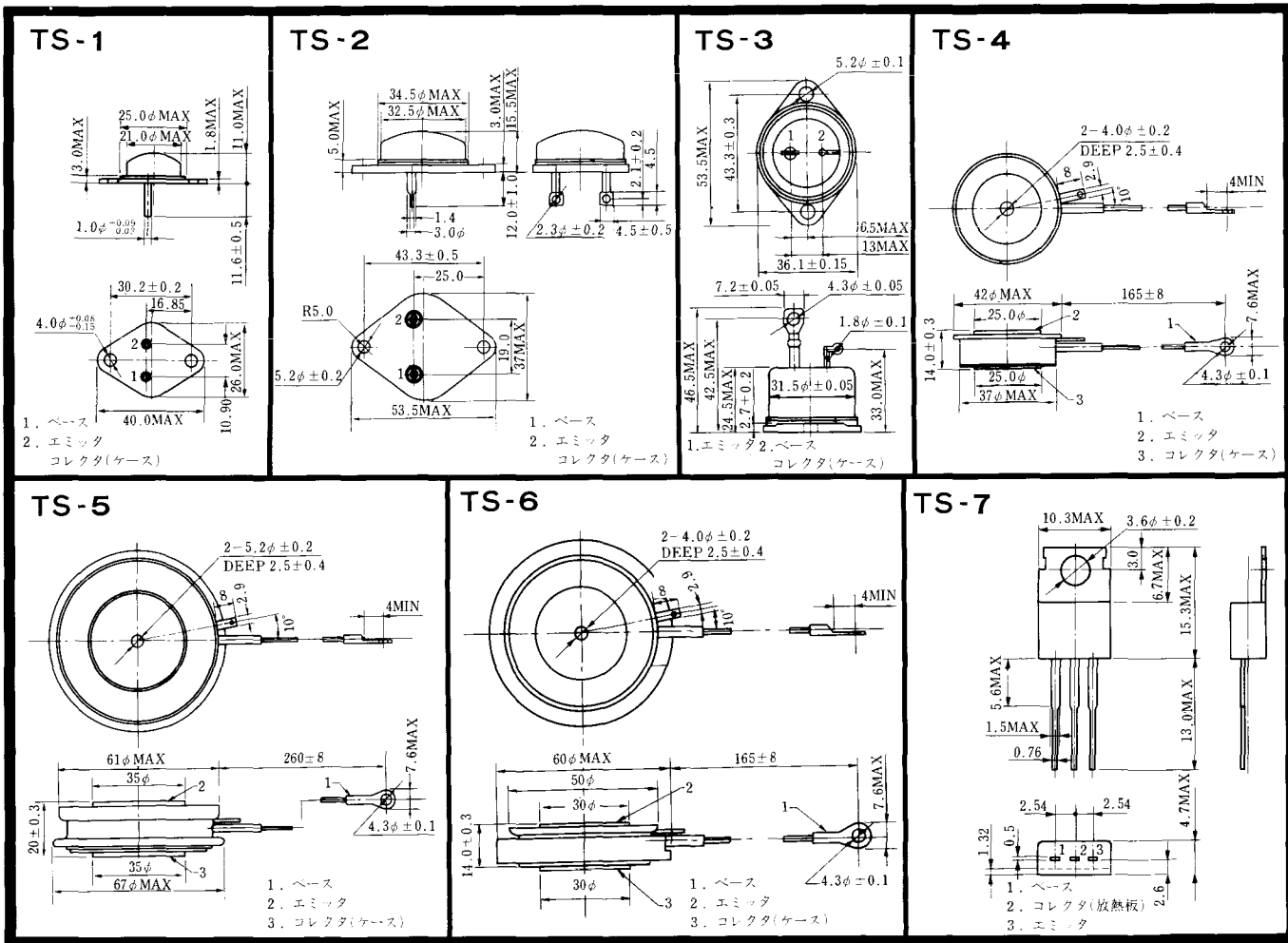


- 1. ゲート
- 2. T<sub>1</sub>
- T<sub>2</sub> (ケース)

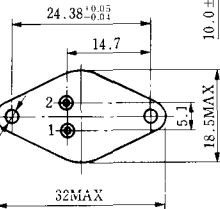
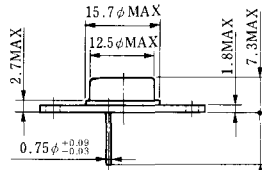
TT-16 (13-16A1A)



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

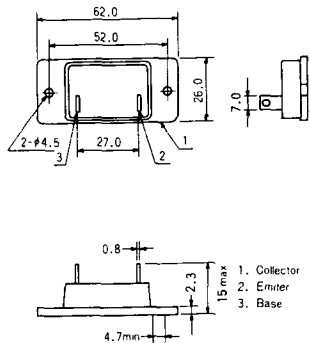


# TS-8

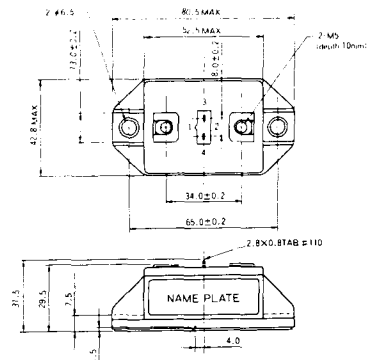


- 1. ベース
- 2. エミッタ  
コレクタ  
(ケース)

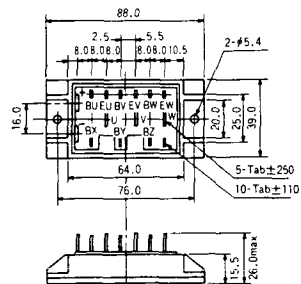
S-62A1A



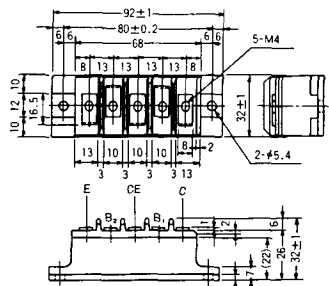
S-80A1A



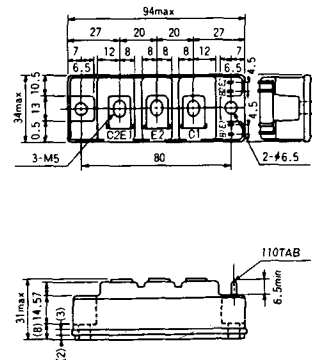
S-88D1A



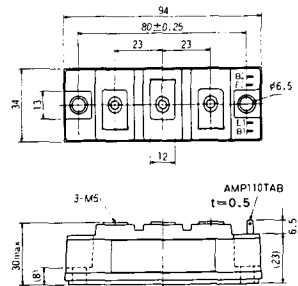
S-92B1A



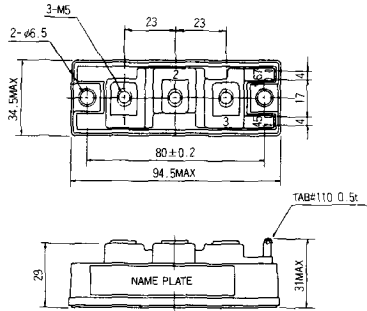
S-94B1A



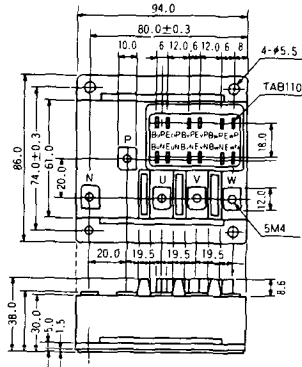
S-94B1B



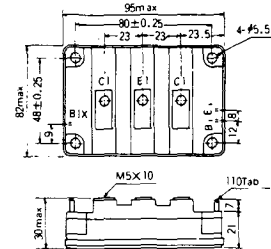
S-94B2A



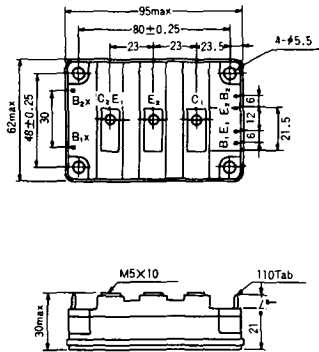
S-94D1A



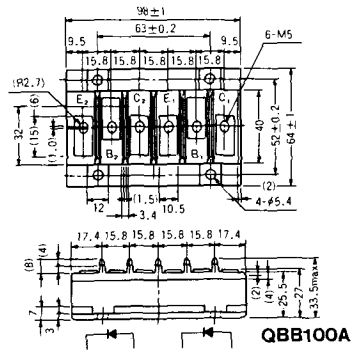
S-95A1A



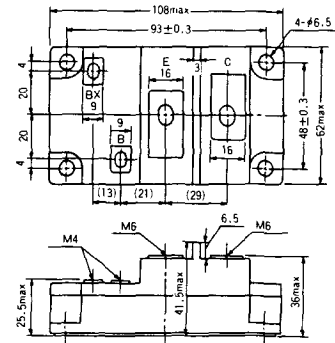
S-95B1A



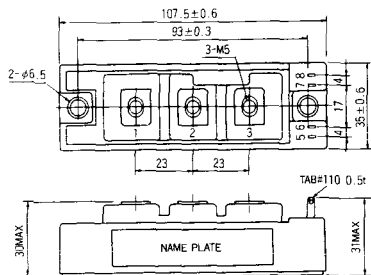
S-98B1B



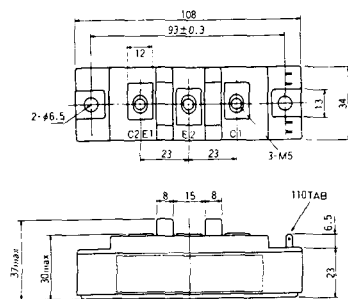
S-108A2A



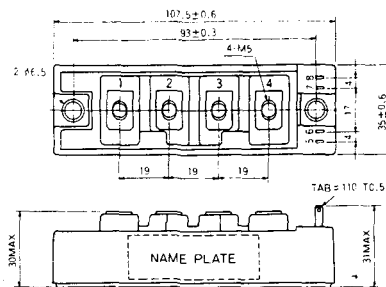
S-108B1A



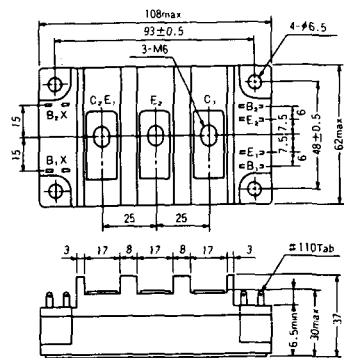
S-108B1B



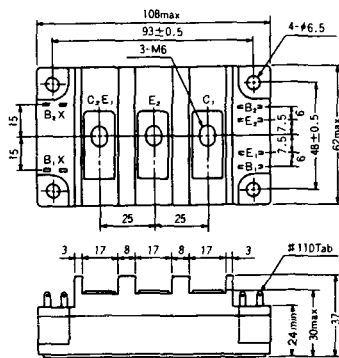
S-108B1C



S-108B2A

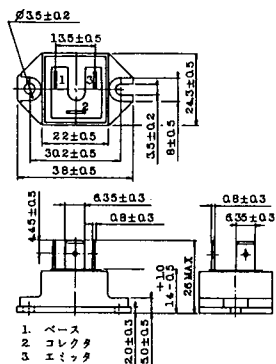


S-108B2B

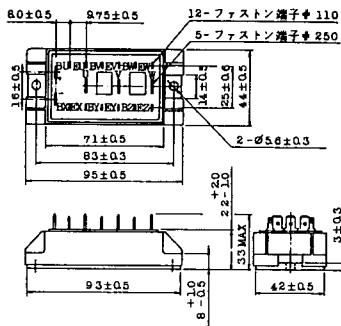




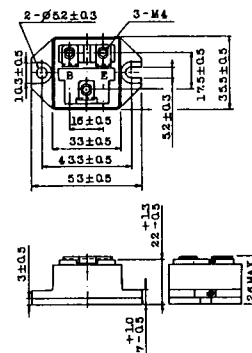
2-22B1A



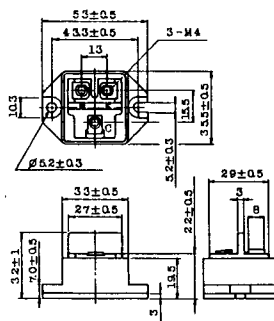
2-27A4A



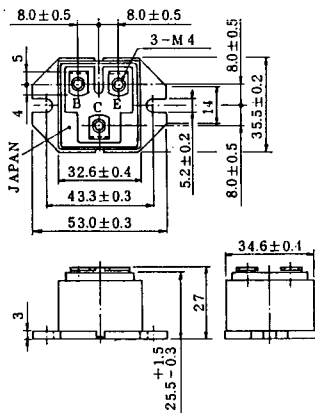
2-33C1A



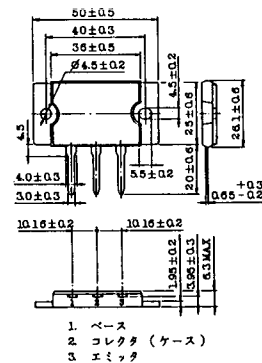
2-33D1A



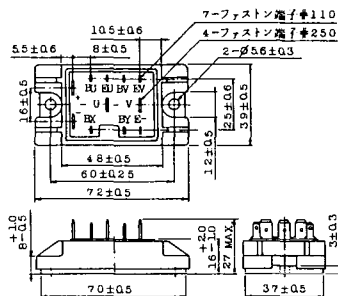
2-33F1A



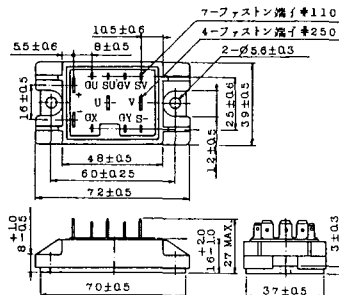
2-37A1A



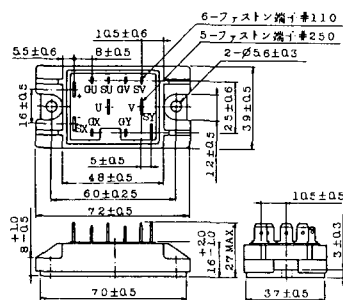
2-48A3A



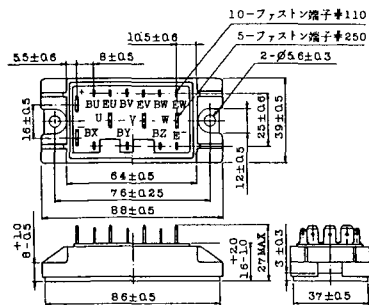
2-48A3B



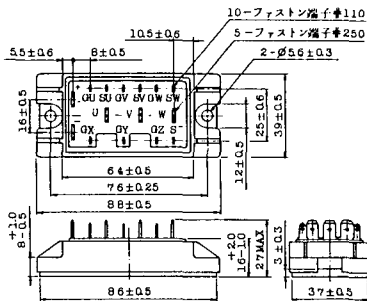
2-48A4A



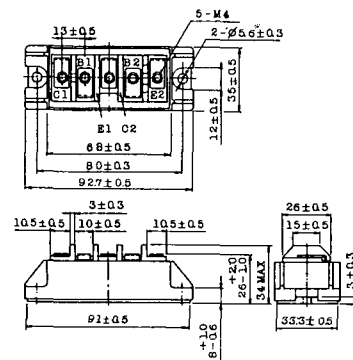
2-64A2A



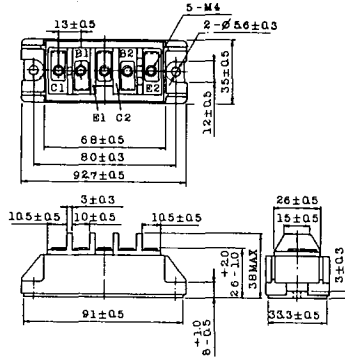
2-64A2B



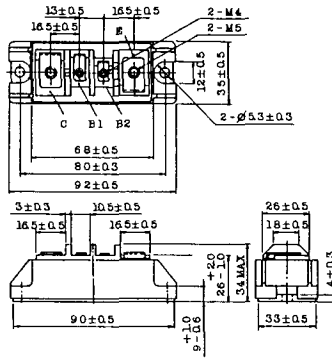
2-68A2A



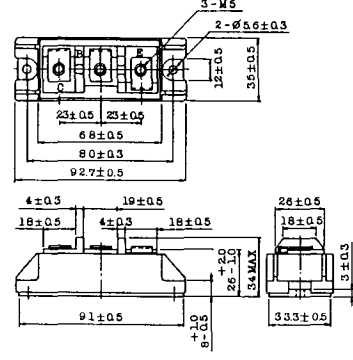
2-68B2A



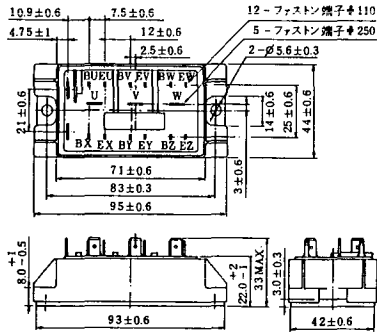
2-68C1A



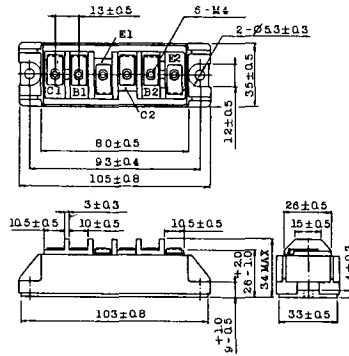
2-68D2A



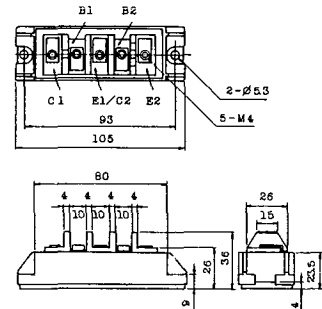
2-72A3A



2-80A1A



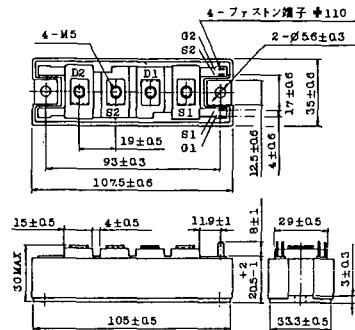
2-80B1A



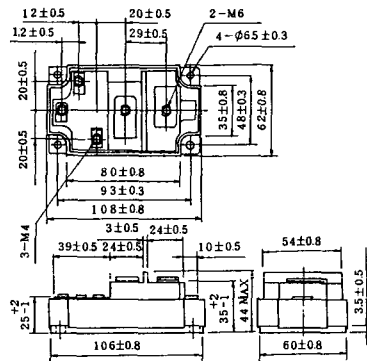




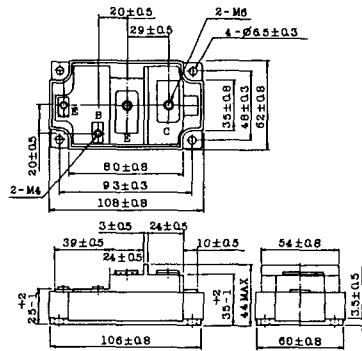
### 2-108B1A



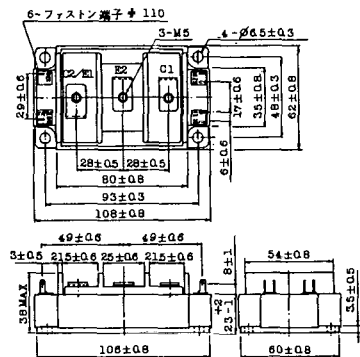
### 2-109A3A



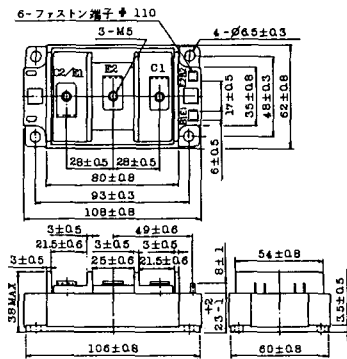
### 2-109A4A



### 2-109B3A

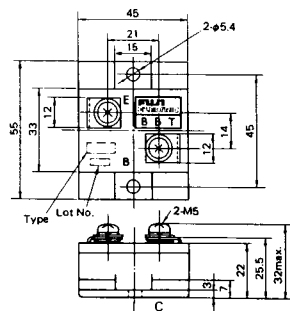


### 2-109B4A



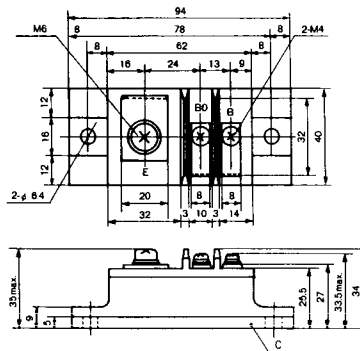
### BBT-II

BBTII  
1D200A-020



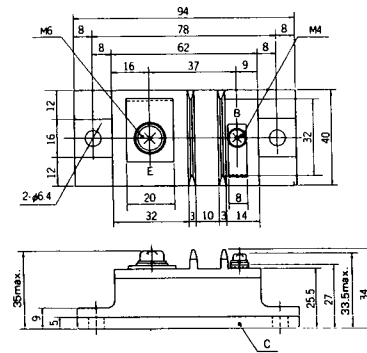
### BBT-III

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



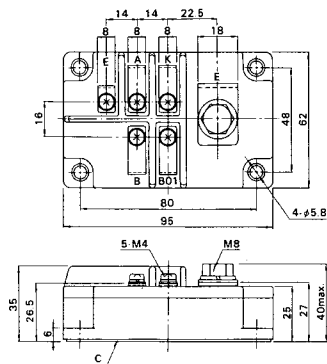
### BBT-III

BBTIII  
ETN01-055  
ET1257

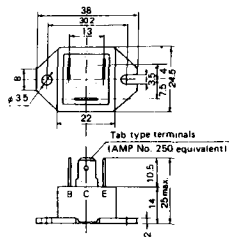


### BBT-IV

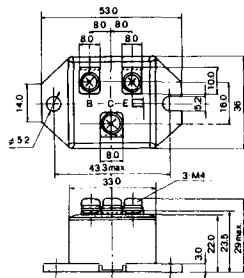
BBTIV  
1D500A-030



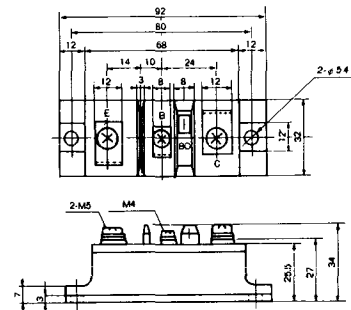
M-101



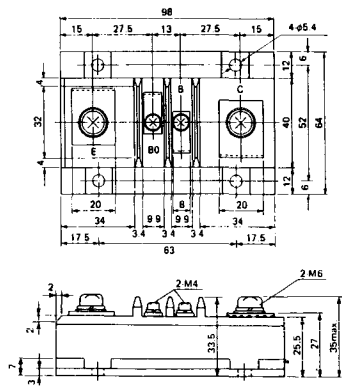
M-102



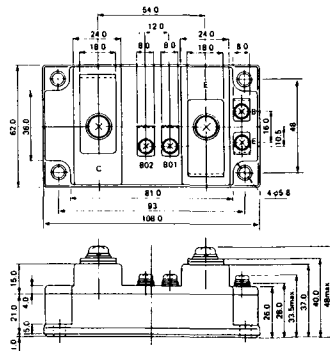
M-103



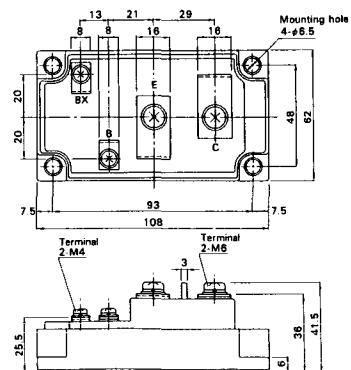
M-104



M-105

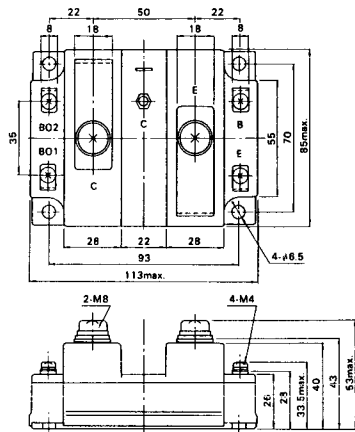


M-106

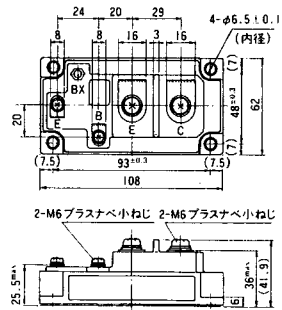




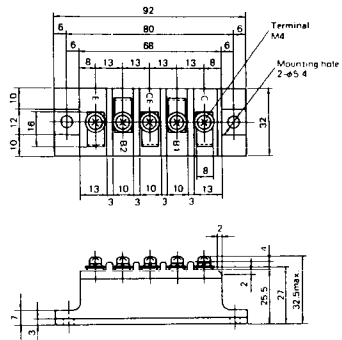
### M-107



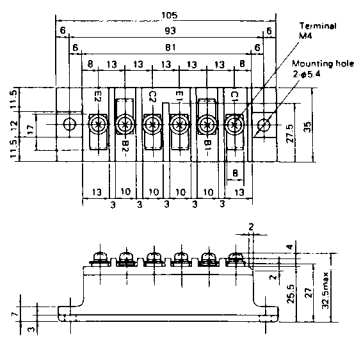
### M-116



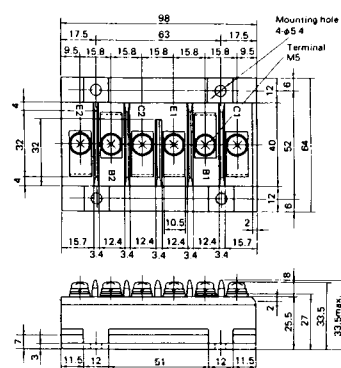
### M-201



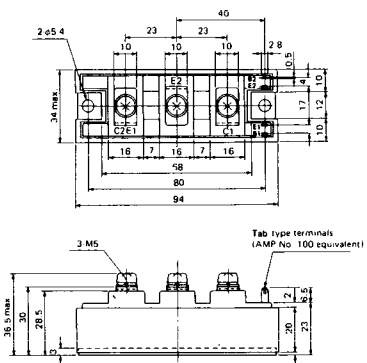
### M-202



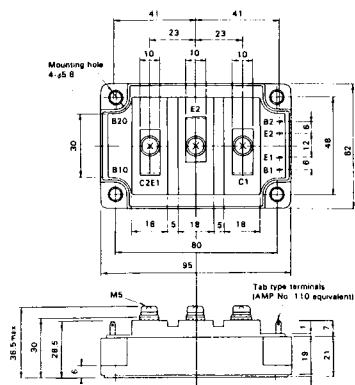
### M-203



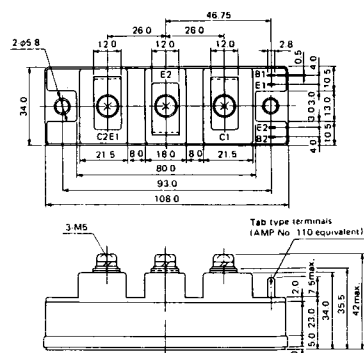
### M-204



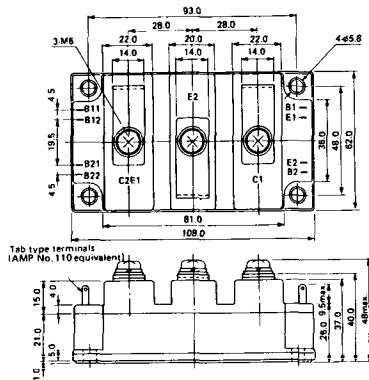
### M-205



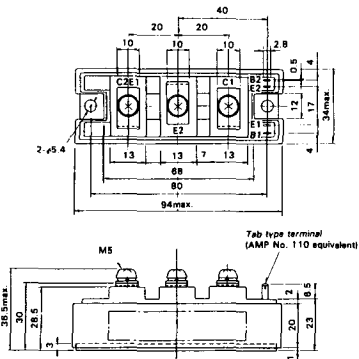
### M-206



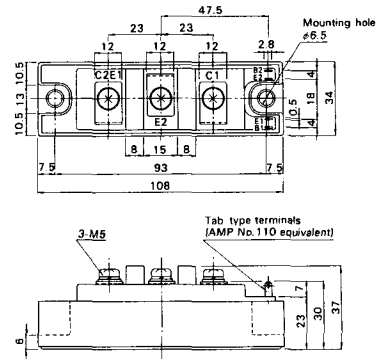
M-207



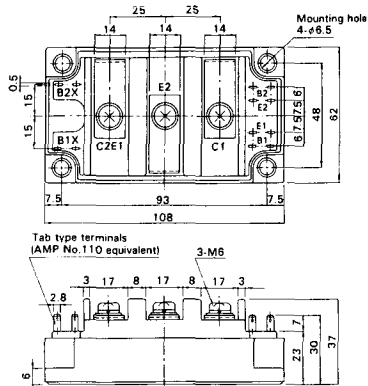
M-208



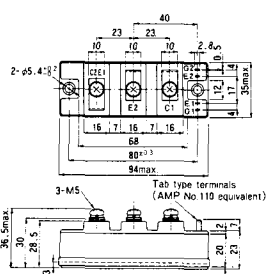
M-209



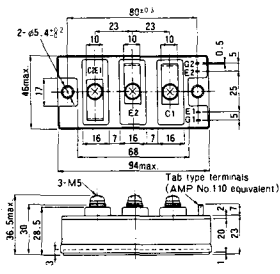
M-210



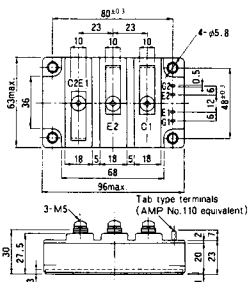
M-211



M-212

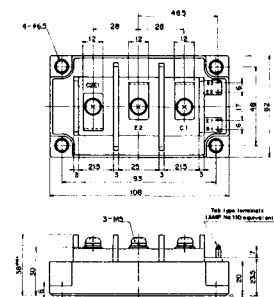


M-213

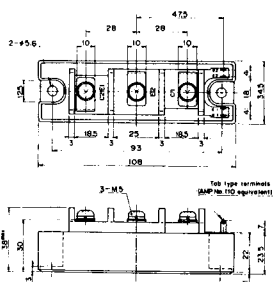


M-214

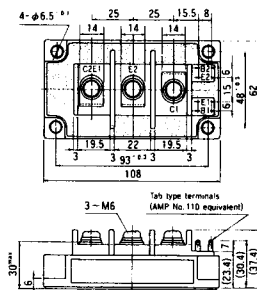
M-215



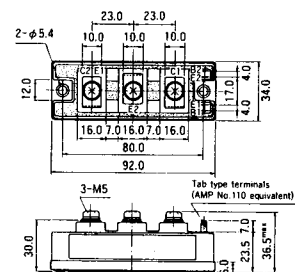
M-216



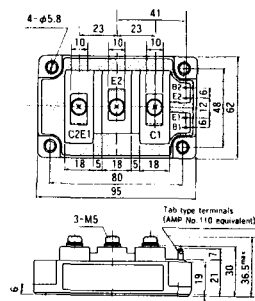
M-217



M-218

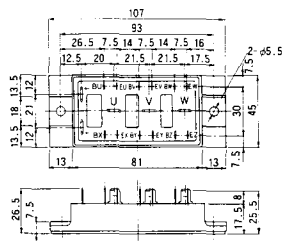


M-219

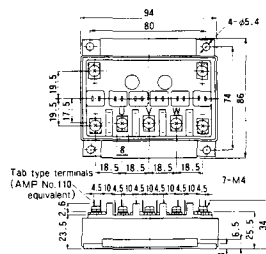




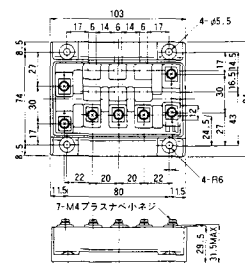
M-607



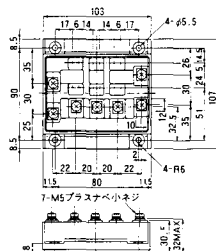
M-608



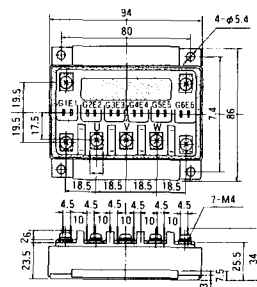
M-609



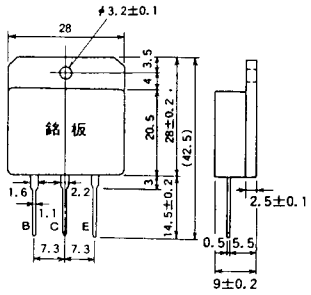
M-610



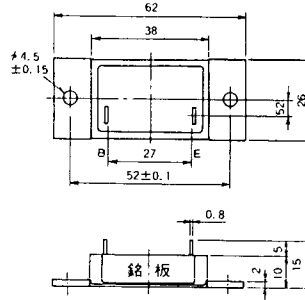
M-616



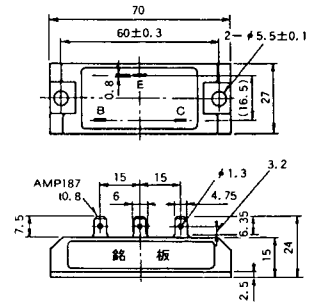
M-1A1A



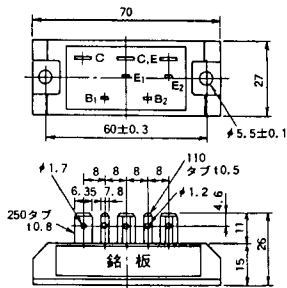
M-2A1A



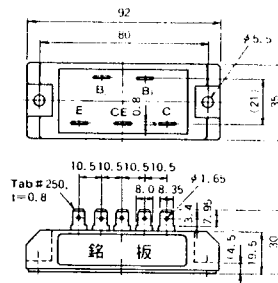
M-2B1A



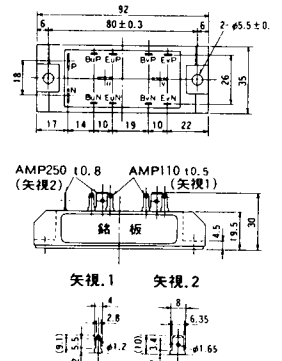
M-2B2A



M-2C2A

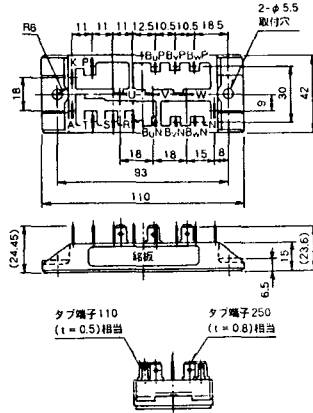


M-2D4A

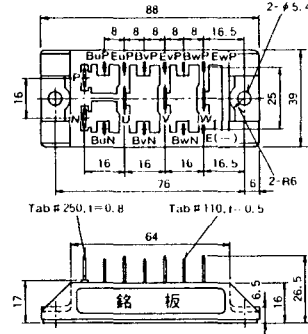




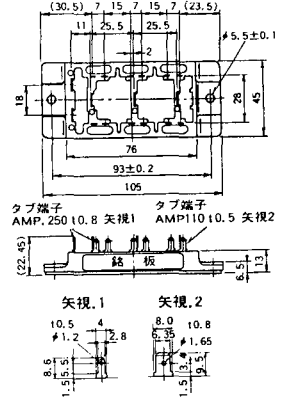
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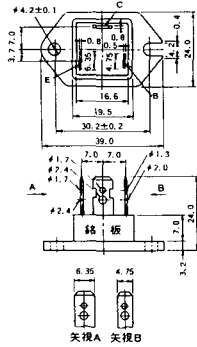
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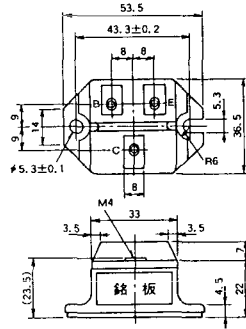
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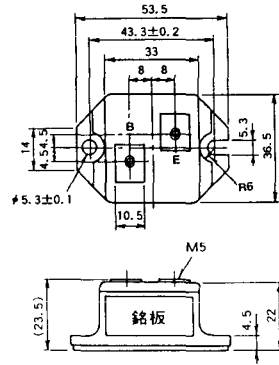
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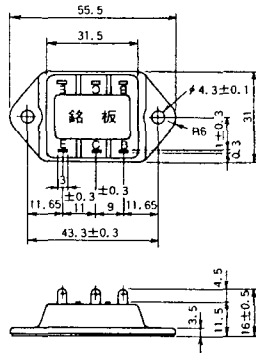
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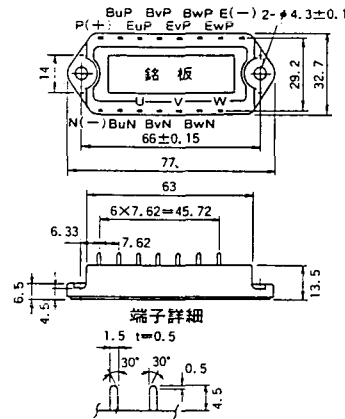
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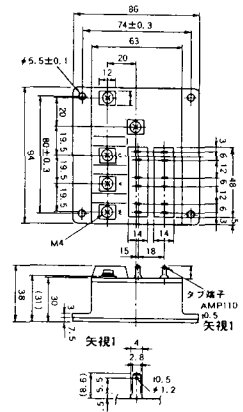
M-3C1A



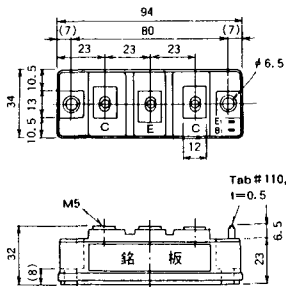
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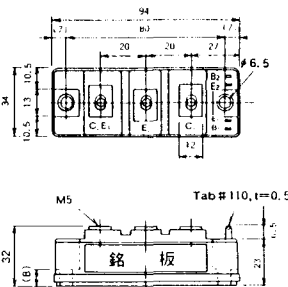
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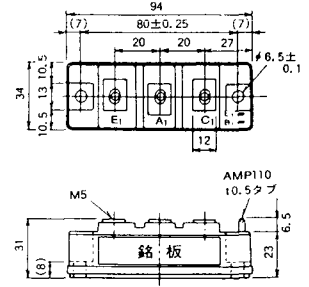
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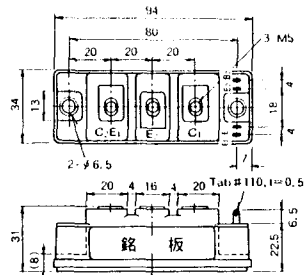
M-4A2A



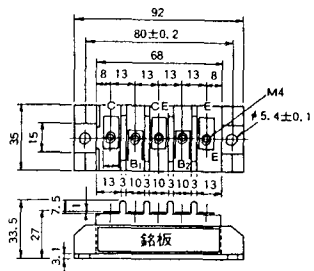
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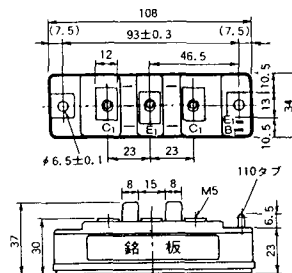
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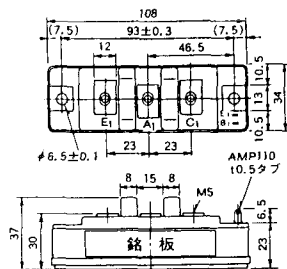
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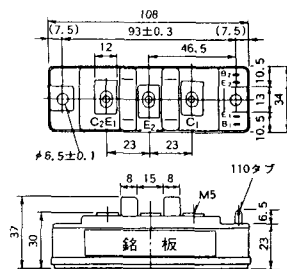
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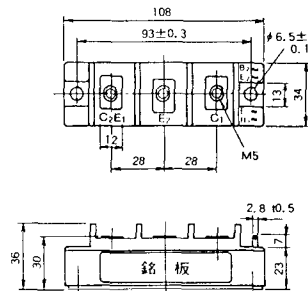
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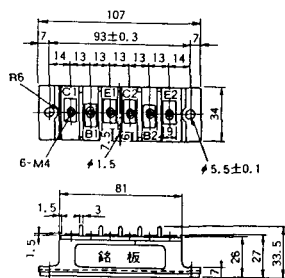
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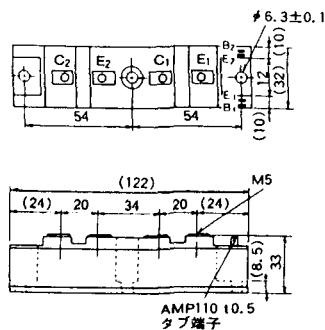
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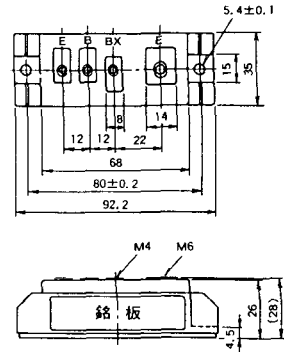
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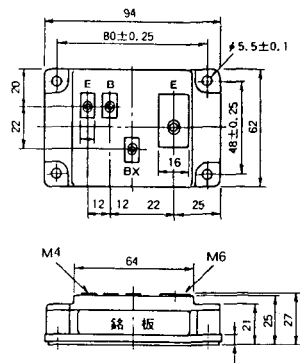
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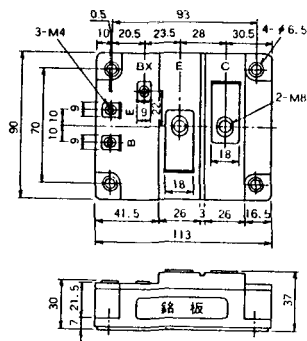
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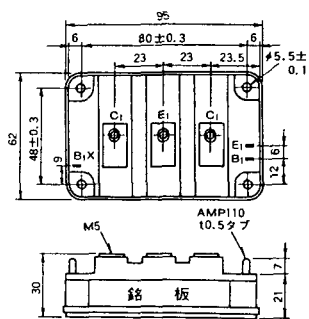
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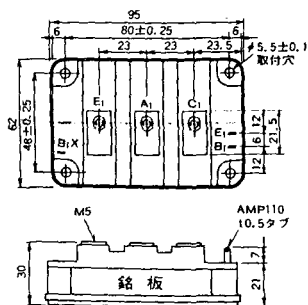
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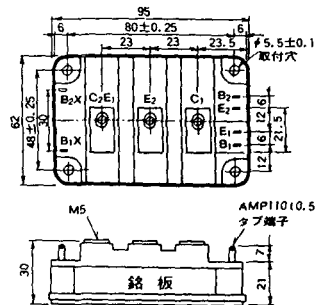
M-8A1A



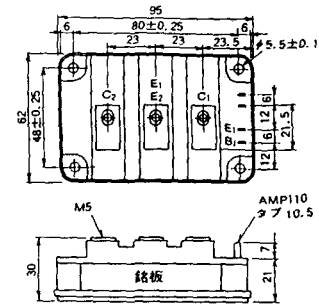
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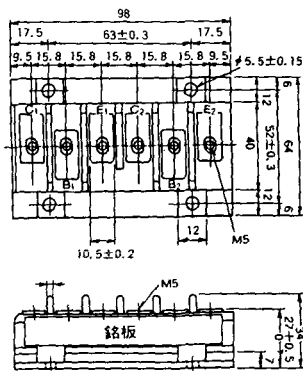
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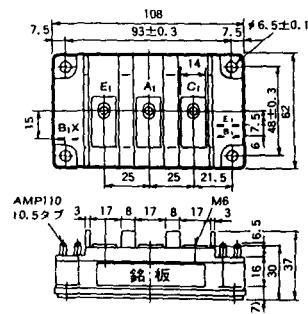
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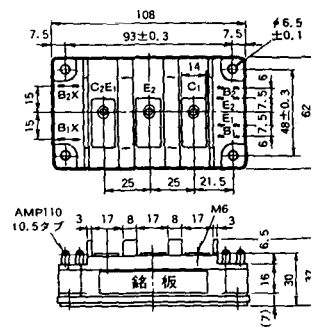
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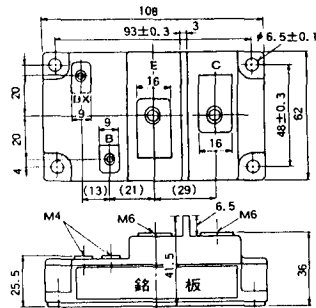
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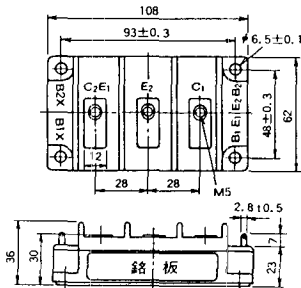
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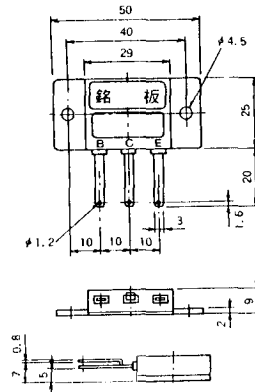
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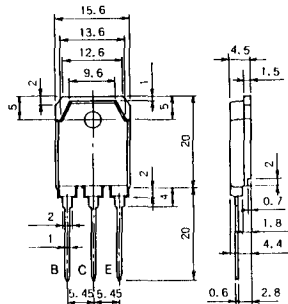
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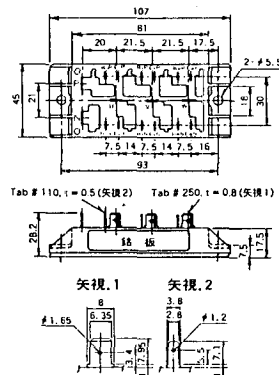
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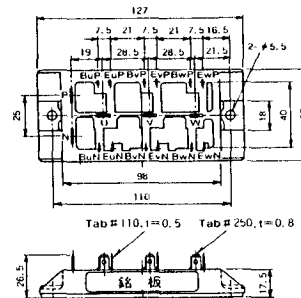
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M-2E6B

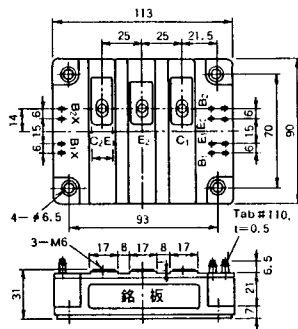


M-2E6C

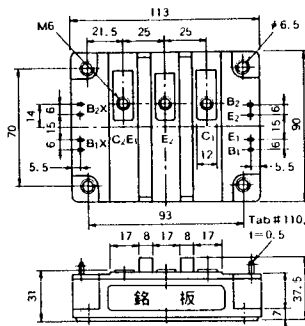




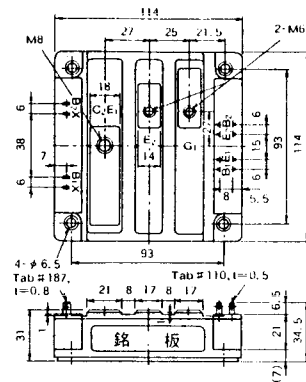
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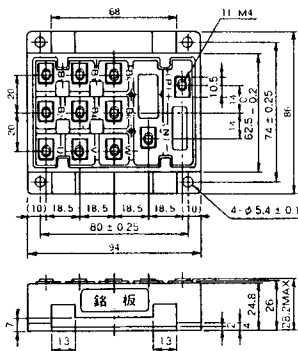
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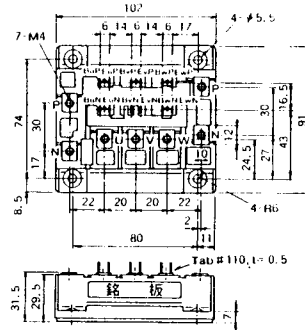
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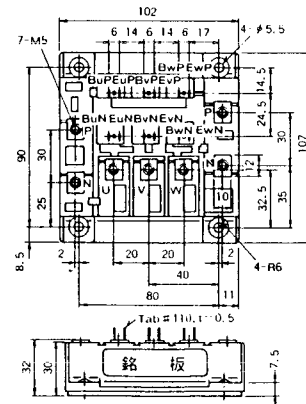
M-12A6A



M-12B6A

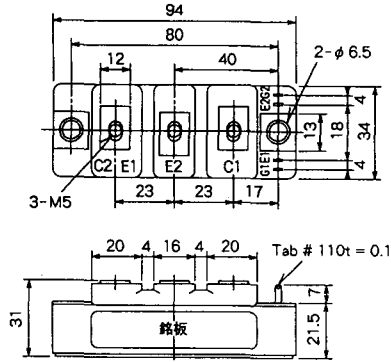


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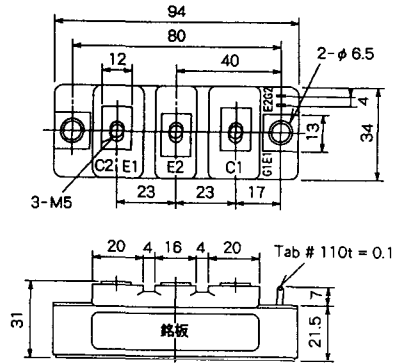




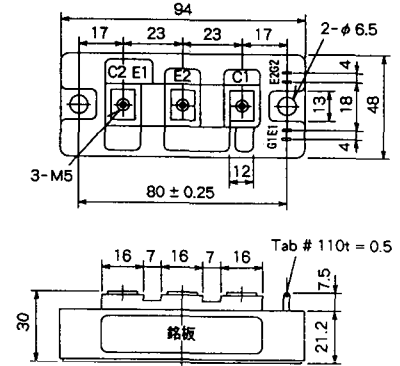
M-4A2D



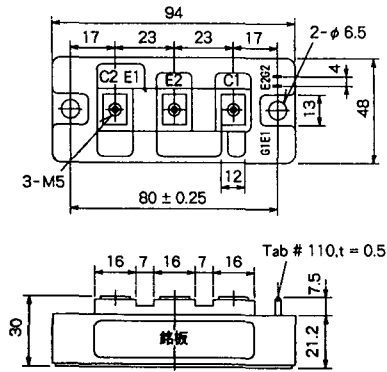
M-4A2E



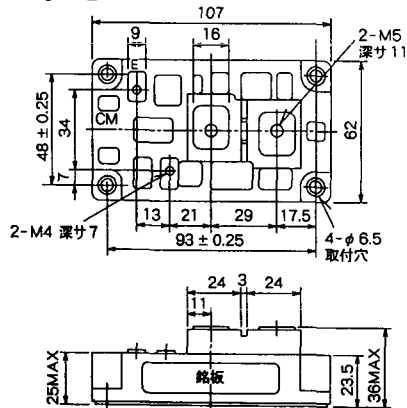
M-4C2A



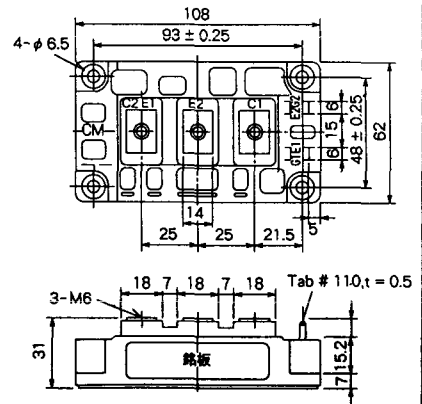
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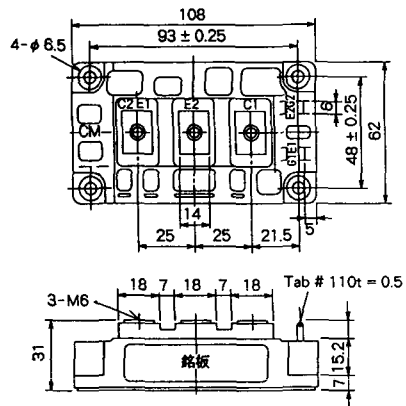
M-9B1C



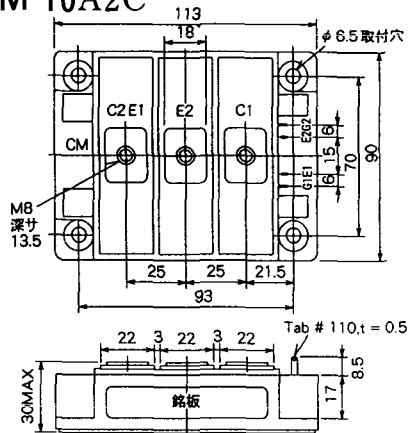
M-9D2A



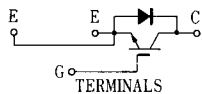
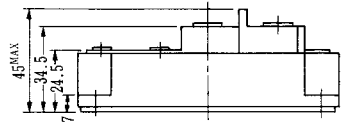
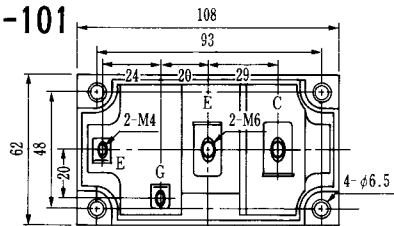
M-9D2B



M-10A2C

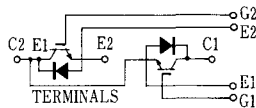
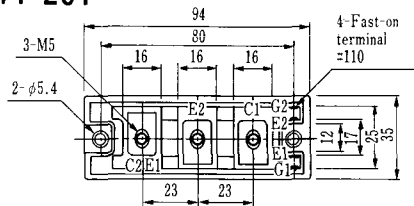


H-101



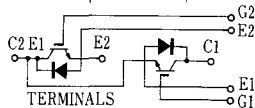
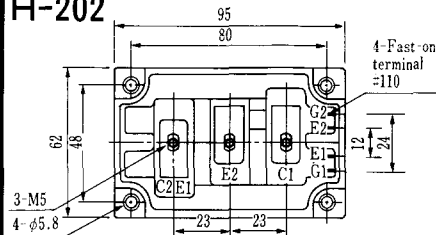
Weight :480g

### H-201



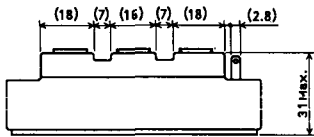
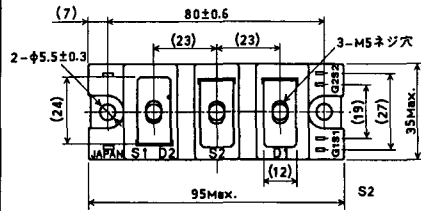
Weight: 200g

### H-202



Weight: 360g

### LF-J



### LF-K

