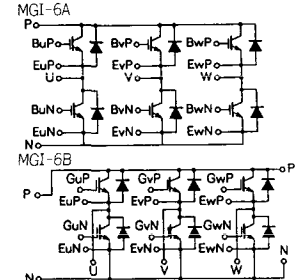
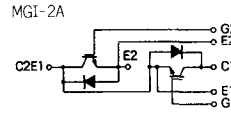
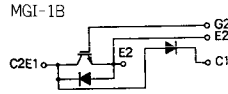
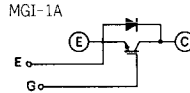


トランジスタ・モジュール (シリコンチャネル IGBT)

- フリーホイール・ダイオード付
- 絶縁形

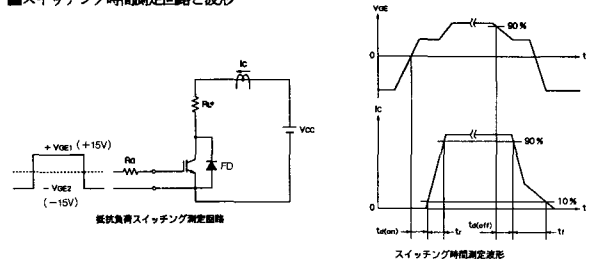
■等価回路



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

型名	最大定格 ( $T_J = 25^\circ\text{C}$ )										電気的特性 ( $T_J = 25^\circ\text{C}$ )												
	$V_{CES}$	$V_{GSS}$	$I_c$	$I_{CP}$	$I_F$	$I_{FP}$	$P_c$	$T_J$	$T_{stg}$	$V_{I_{EE}}$	$I_{GSS}$	$V_{GE}$	$I_{CES}$	$V_{CES}$	$V_{GE(OFF)}$	$V_{CE(SAT)}$	$I_c$	$V_{GE}$	$I_c$	$V_{GE}$	$I_c$		
	(V)	(V)	(注1) (A)	(注1) (A)	(注1) (A)	(注1) (A)	(注1) (W)	( $^\circ\text{C}$ )	( $^\circ\text{C}$ )	(注2) (V)	(nA) 最大	(V) 最大	(mA) 最大	(V) 最大	(V) 最小	(V) 最小	(V) 最大	(V) 最大	(mA) 最大	(V) 最大	(V) 最大	(A) 最大	
CM50DY-12E	600	$\pm 20$	50	100	50	100	250	150	-40~125	2500	$\pm 500$	$\pm 20$	1.0	600			3.5	6.5	10	5.0	3.5	15	50
CM75DY-12E	600	$\pm 20$	75	150	75	150	310	150	-40~125	2500	$\pm 500$	$\pm 20$	1.0	600			3.5	6.5	10	7.5	3.5	15	75
CM100DY-12E	600	$\pm 20$	100	200	100	200	400	150	-40~125	2500	$\pm 500$	$\pm 20$	1.0	600			3.5	6.5	10	10	3.5	15	100
CM150DY-12E	600	$\pm 20$	150	300	150	300	600	150	-40~125	2500	$\pm 500$	$\pm 20$	1.0	600			3.5	6.5	10	15	3.5	15	150
CM200DY-12E	600	$\pm 20$	200	400	200	400	780	150	-40~125	2500	$\pm 500$	$\pm 20$	1.0	600			3.5	6.5	10	20	3.5	15	200
CM300DY-12E	600	$\pm 20$	300	600	300	600	1100	150	-40~125	2500	$\pm 500$	$\pm 20$	1.0	600			3.5	6.5	10	30	3.5	15	300
CM400DY-12E	600	$\pm 20$	400	800	400	800	1500	150	-40~125	2500	$\pm 500$	$\pm 20$	1.0	600			3.5	6.5	10	40	3.5	15	400
CM50E3Y-12E	600	$\pm 20$	50	100	50	100	250	150	-40~125	2500	$\pm 500$	$\pm 20$	1.0	600			3.5	6.5	10	5.0	3.5	15	50
CM75E3Y-12E	600	$\pm 20$	75	150	75	150	310	150	-40~125	2500	$\pm 500$	$\pm 20$	1.0	600			3.5	6.5	10	7.5	3.5	15	75
CM100E3Y-12E	600	$\pm 20$	100	200	100	200	400	150	-40~125	2500	$\pm 500$	$\pm 20$	1.0	600			3.5	6.5	10	10	3.5	15	100
CM150E3Y-12E	600	$\pm 20$	150	300	150	300	600	150	-40~125	2500	$\pm 500$	$\pm 20$	1.0	600			3.5	6.5	10	15	3.5	15	150
CM200E3Y-12E	600	$\pm 20$	200	400	200	400	780	150	-40~125	2500	$\pm 500$	$\pm 20$	1.0	600			3.5	6.5	10	20	3.5	15	200
CM300E3Y-12E	600	$\pm 20$	300	600	300	600	1100	150	-40~125	2500	$\pm 500$	$\pm 20$	1.0	600			3.5	6.5	10	30	3.5	15	300
CM300HA-12E	600	$\pm 20$	300	600	300	600	1100	150	-40~125	2500	$\pm 500$	$\pm 20$	1.0	600			3.5	6.5	10	30	3.5	15	300
CM400HA-12E	600	$\pm 20$	400	800	400	800	1500	150	-40~125	2500	$\pm 500$	$\pm 20$	1.0	600			3.5	6.5	10	40	3.5	15	400
CM50TF-12E	600	$\pm 20$	50	100	50	100	250	150	-40~125	2500	$\pm 500$	$\pm 20$	1.0	600			3.5	6.5	10	5.0	3.5	15	50
CM75TF-12E	600	$\pm 20$	75	150	75	150	310	150	-40~125	2500	$\pm 500$	$\pm 20$	1.0	600			3.5	6.5	10	7.5	3.5	15	75
CM100TF-12E	600	$\pm 20$	100	200	100	200	400	150	-40~125	2500	$\pm 500$	$\pm 20$	1.0	600			3.5	6.5	10	10	3.5	15	100

■スイッチング時間測定回路と波形

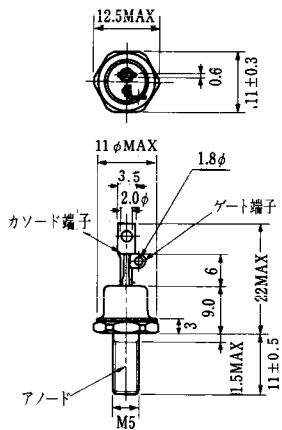


注3. スwitching時間は抵抗負荷時の値。

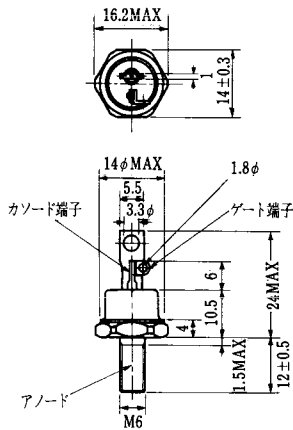
注4. FD: フリーホイール・ダイオード。

C... (pF)	f (MHz)	スイッチング時間 (ns)						エミッタ・コレクタ間ダイオード			熱抵抗			等価回路	外形図	記事	型名				
		V <sub>CE</sub> (V)	V <sub>GE</sub> (V)	t <sub>r</sub> 最大	t <sub>d</sub> (ON) 最大	t <sub>f</sub> 最大	t <sub>d</sub> (OFF) 最大	R <sub>g</sub> (Ω)	I <sub>c</sub> (A)	V <sub>cc</sub> (V)	V <sub>F</sub> (V)	I <sub>F</sub> (A)	t <sub>rr</sub> (ns)					I <sub>F</sub> (A)	di/dt (A/μs)	R <sub>th</sub> (θ-jc) (°C/W)	
																				トランジスタ部	ダイオード部
10000	10	0	300	150	350	400	13	50	300	2.5	50	200	50	-100	0.5	1.0	MG1-2A	M-4A2D	F D付, 直列接続	CM50DY-12E	
15000	10	0	300	150	350	400	8.3	75	300	2.5	75	200	75	-150	0.4	0.9	MG1-2A	M-4A2D	F D付, 直列接続	CM75DY-12E	
20000	10	0	300	150	350	400	6.3	100	300	2.5	100	200	100	-200	0.31	0.7	MG1-2A	M-4A2D	F D付, 直列接続	CM100DY-12E	
30000	10	0	700	400	350	600	4.2	150	300	2.5	150	200	150	-300	0.21	0.47	MG1-2A	M-4C2A	F D付, 直列接続	CM150DY-12E	
40000	10	0	700	400	350	700	3.1	200	300	2.5	200	200	200	-400	0.16	0.35	MG1-2A	M-4C2A	F D付, 直列接続	CM200DY-12E	
60000	10	0	700	400	350	800	2.1	300	300	2.5	300	200	300	-600	0.11	0.24	MG1-2A	M-9D2A	F D付, 直列接続	CM300DY-12E	
80000	10	0	700	400	350	800	1.6	400	300	2.5	400	200	400	-800	0.085	0.18	MG1-2A	M-10A2C	F D付, 直列接続	CM400DY-12E	
10000	10	0	300	150	350	400	13	50	300	2.5	50	200	50	-100	0.5	1.0	MG1-1B	M-4A2E	F D付	CM50E3Y-12E	
15000	10	0	300	150	350	400	8.3	75	300	2.5	75	200	75	-150	0.4	0.9	MG1-1B	M-4A2E	F D付	CM75E3Y-12E	
20000	10	0	300	150	350	400	6.3	100	300	2.5	100	200	100	-200	0.31	0.7	MG1-1B	M-4A2E	F D付	CM100E3Y-12E	
30000	10	0	700	400	350	600	4.2	150	300	2.5	150	200	150	-300	0.21	0.47	MG1-1B	M-4C2B	F D付	CM150E3Y-12E	
40000	10	0	700	400	350	700	3.1	200	300	2.5	200	200	200	-400	0.16	0.35	MG1-1B	M-4C2B	F D付	CM200E3Y-12E	
60000	10	0	700	400	350	800	2.1	300	300	2.5	300	200	300	-600	0.11	0.24	MG1-1B	M-9D2B	F D付	CM300E3Y-12E	
60000	10	0	700	400	350	800	2.1	300	300	2.5	300	200	300	-600	0.11	0.24	MG1-1A	M-9B1C	F D付	CM300HA-12E	
80000	10	0	700	400	350	800	1.6	400	300	2.5	400	200	400	-800	0.085	0.18	MG1-1A	M-9B1C	F D付	CM400HA-12E	
10000	10	0	300	150	350	400	13	50	300	2.5	50	200	50	-100	0.5	1.0	MG1-6A	M-2B6C	F D付, 3相ブリッジ接続	CM50TF-12E	
15000	10	0	300	150	350	400	8.3	75	300	2.5	75	200	75	-150	0.4	0.9	MG1-6B	M-12B6A	F D付, 3相ブリッジ接続	CM75TF-12E	
20000	10	0	300	150	350	400	6.3	100	300	2.5	100	200	100	-200	0.31	0.7	MG1-6B	M-12B6A	F D付, 3相ブリッジ接続	CM100TF-12E	

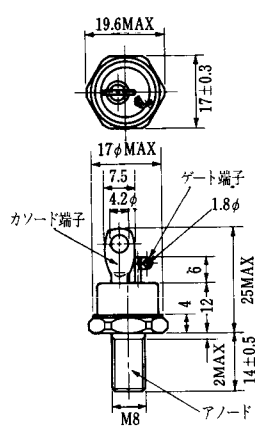
FD-1



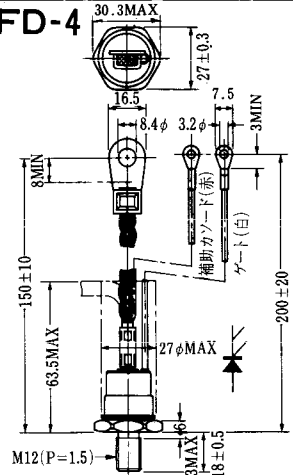
FD-2



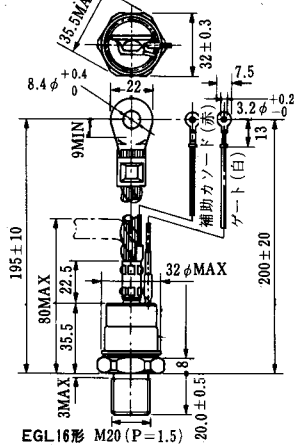
FD-3



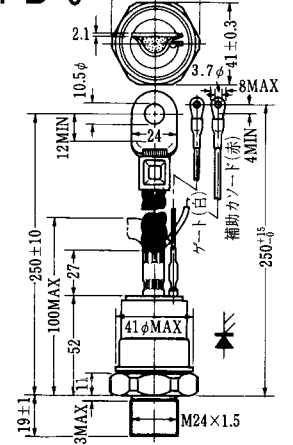
FD-4



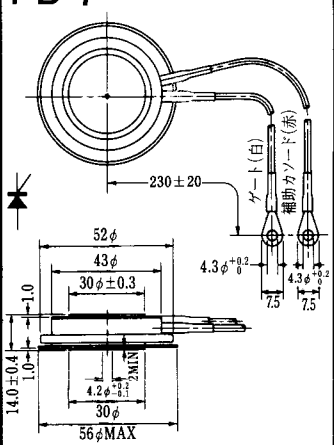
FD-5



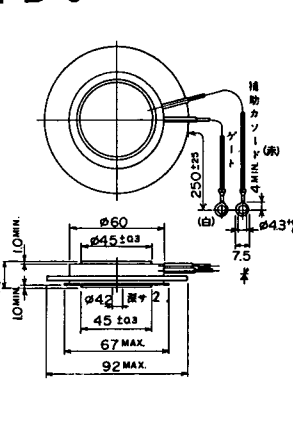
FD-6



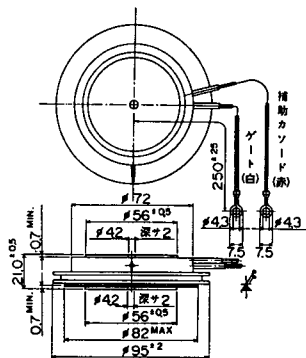
FD-7



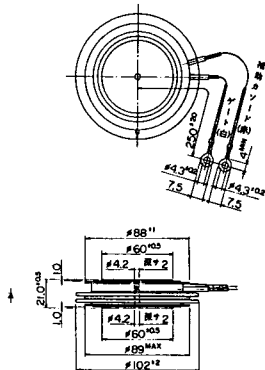
FD-8



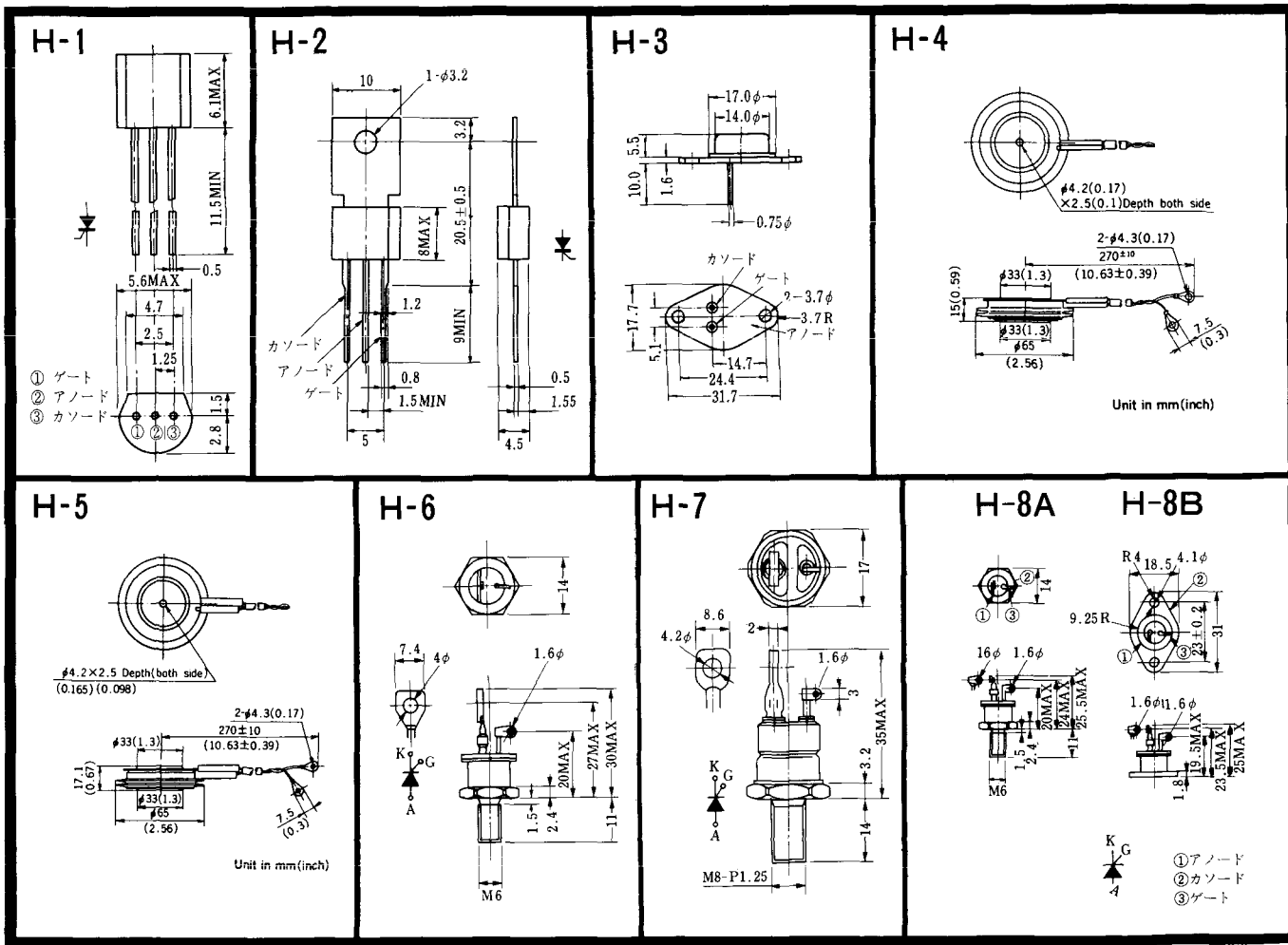
FD-9

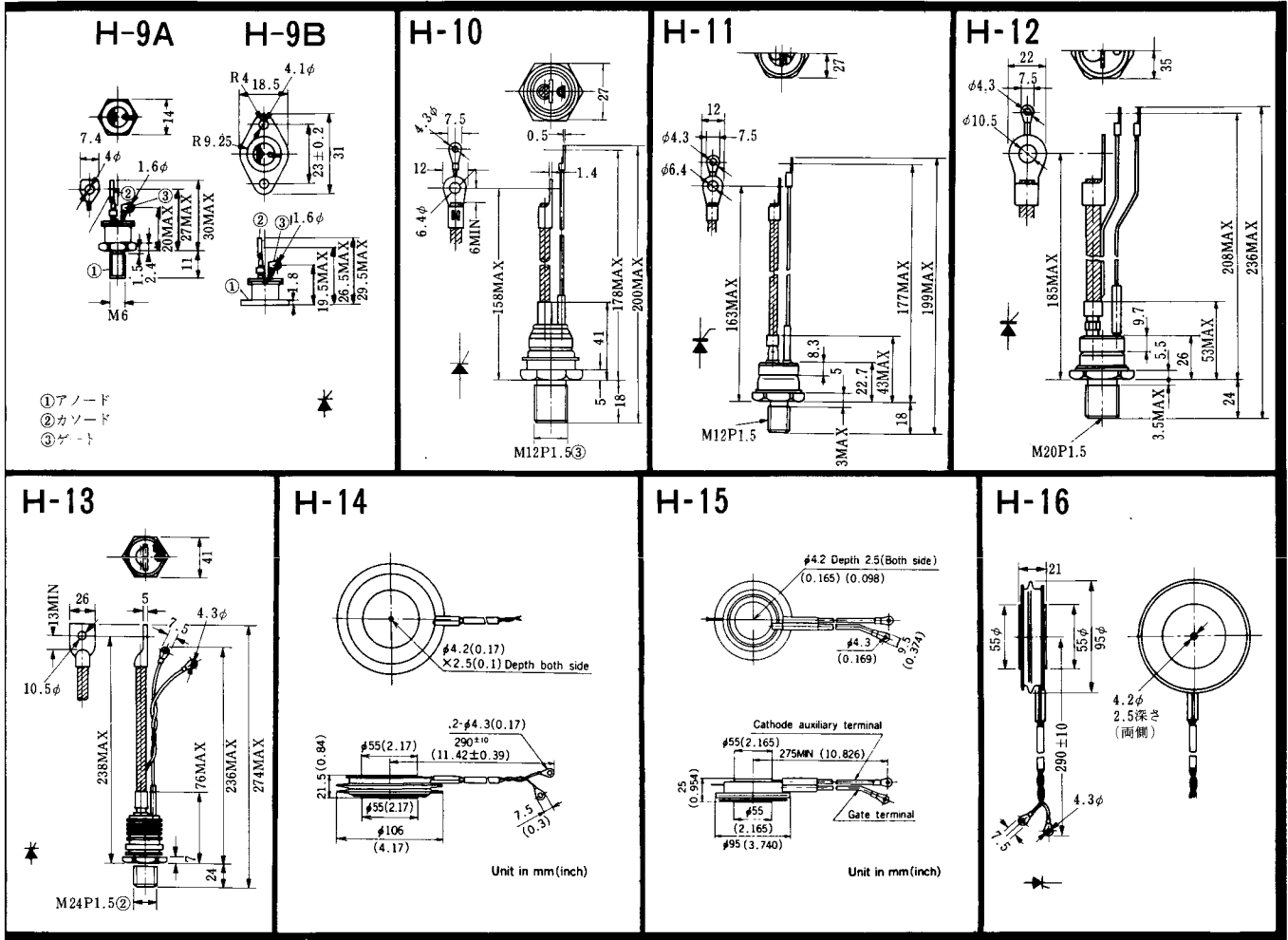


FD-10

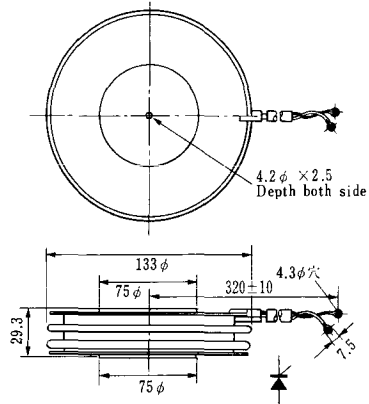


FD-12

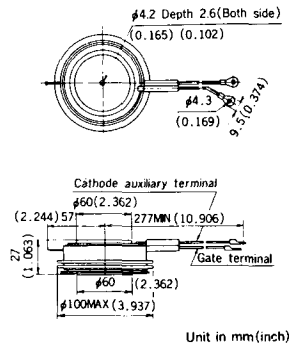




### H-17

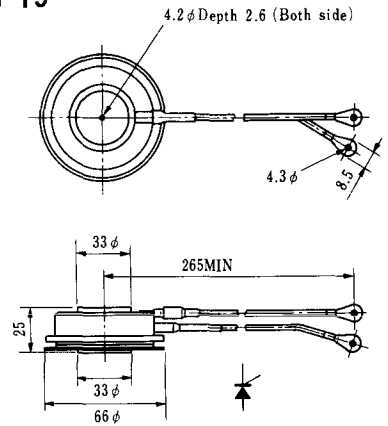


### H-18

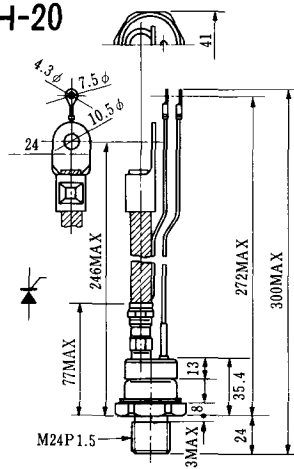


Unit in mm (inch)

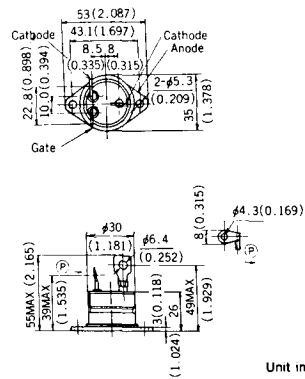
### H-19



### H-20

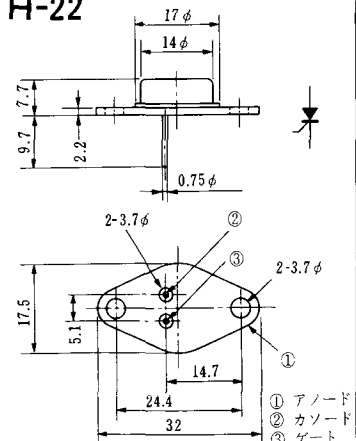


### H-21

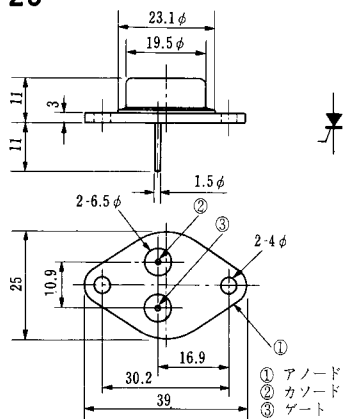


Unit in mm (inch)

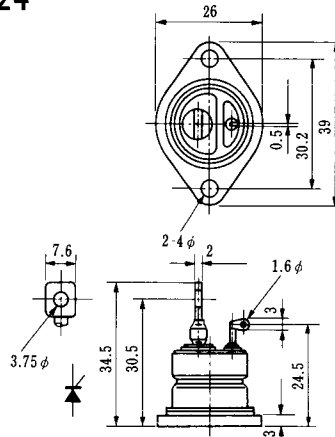
### H-22



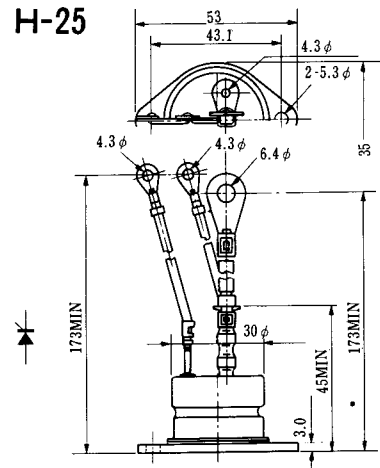
### H-23



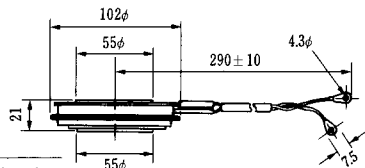
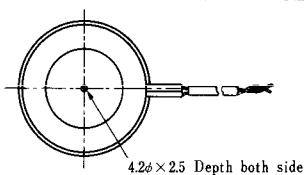
### H-24



### H-25



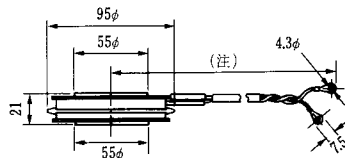
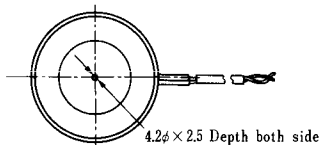
### H-26



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

CA12	
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### H-27

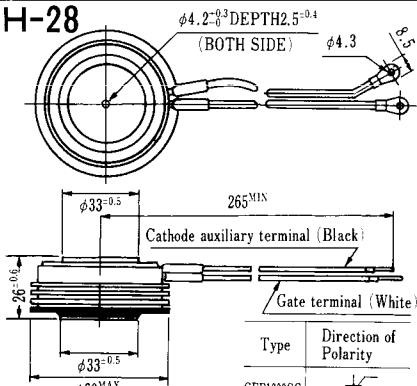


Type	Direction of polarity
------	-----------------------

CF11V	
-------	--

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

### H-28



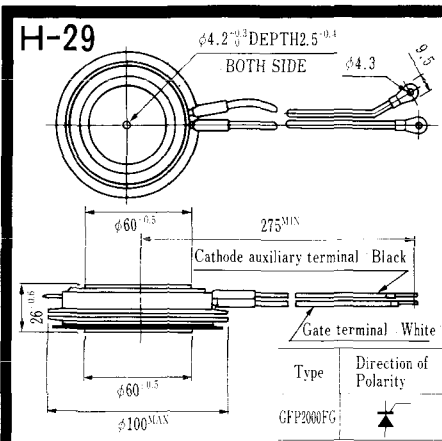
Type	Direction of Polarity
------	-----------------------

GFP100GG	
----------	--

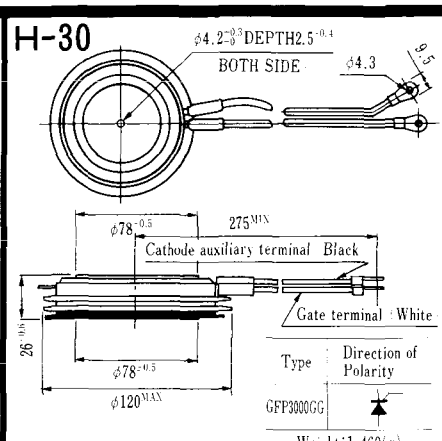
Weight: 360(g)

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





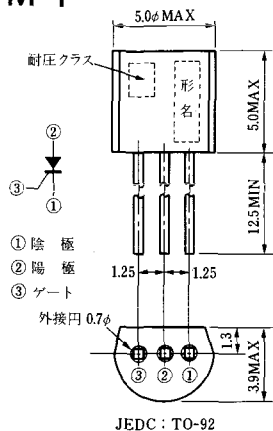
Note : The thickness is a dimension in press at the rated mounting force. Weight: 870(g)



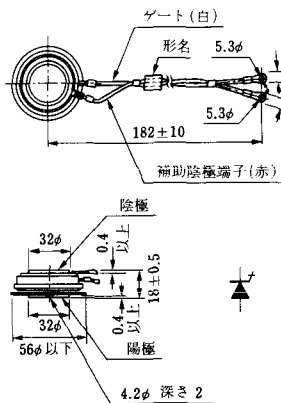
Note : The thickness is a dimension in press at the rated mounting force. Weight: 1,460(g)



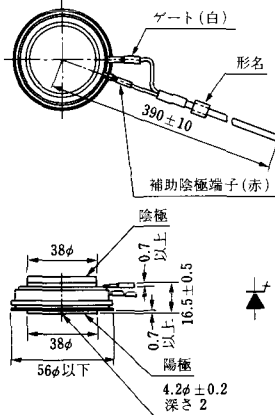
### M-1



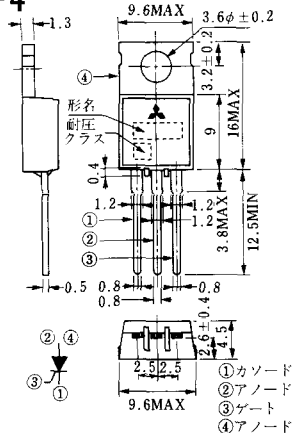
### M-2



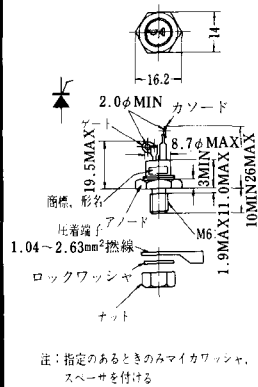
### M-3



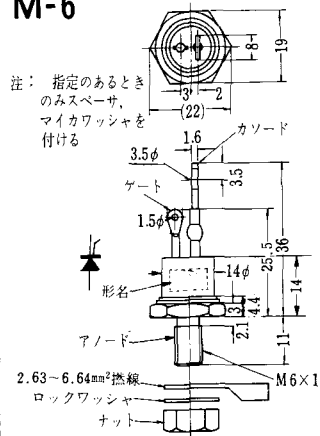
### M-4



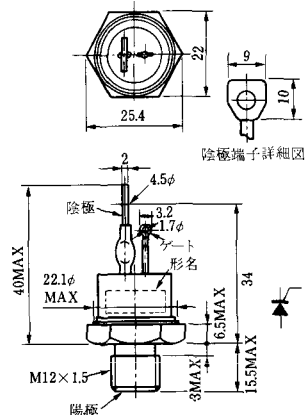
### M-5



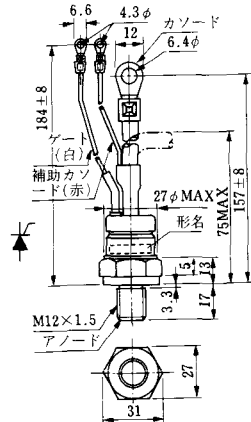
### M-6



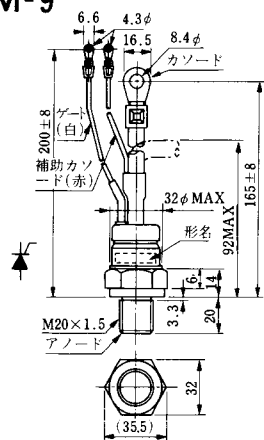
### M-7



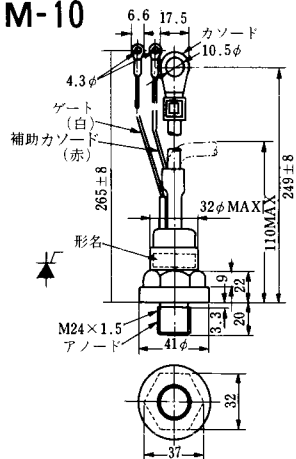
### M-8



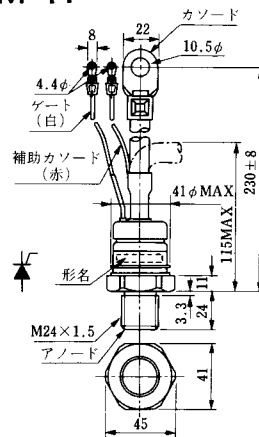
M-9



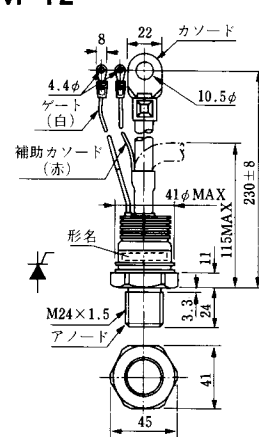
M-10



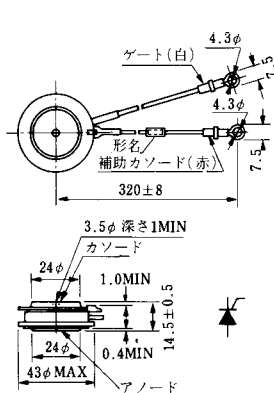
M-11



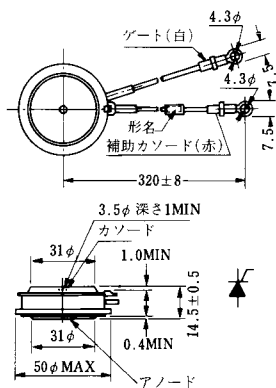
M-12



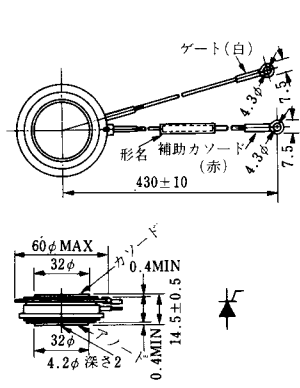
M-13



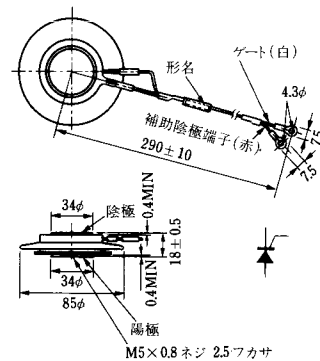
M-14

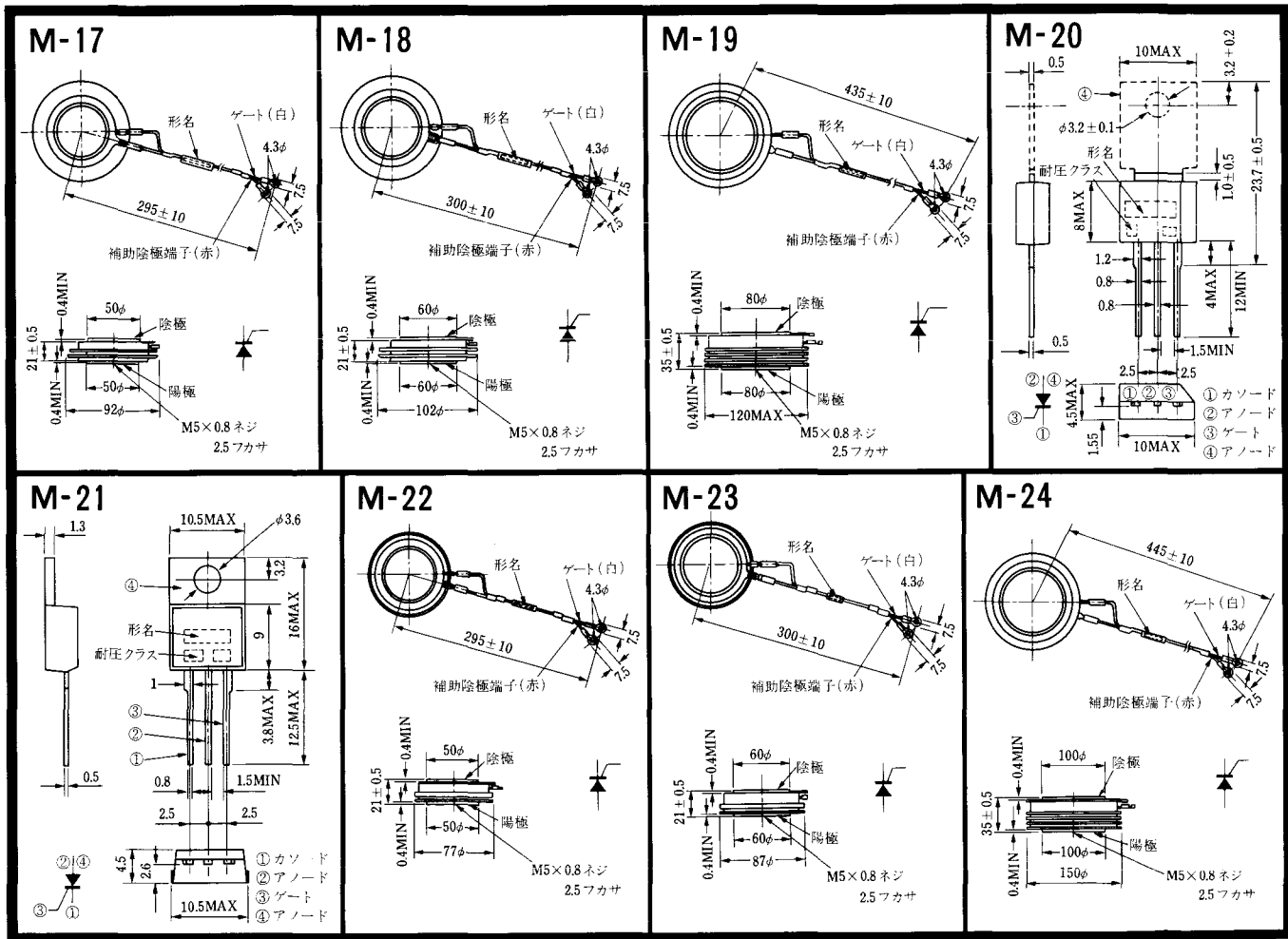


M-15

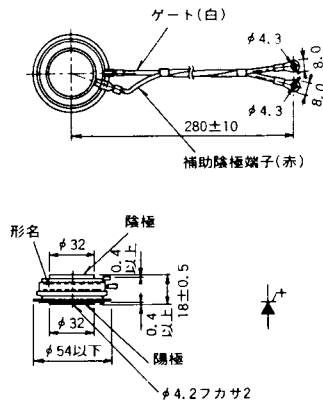


M-16

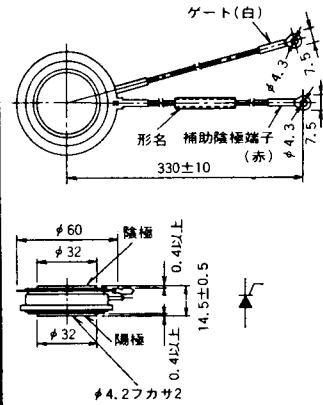




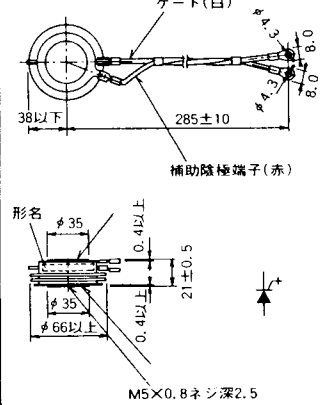
M-25



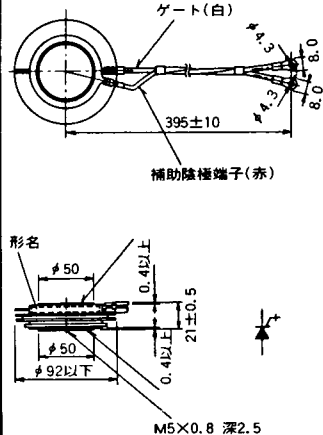
M-26



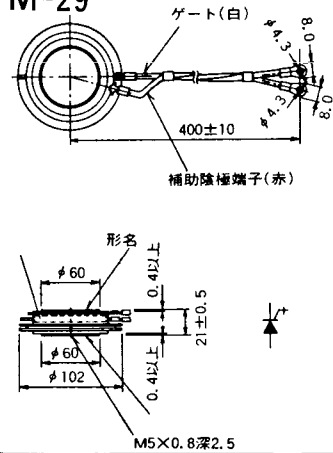
M-27



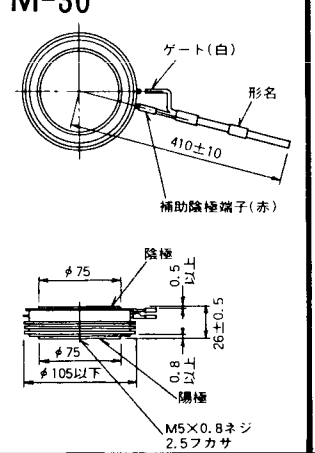
M-28



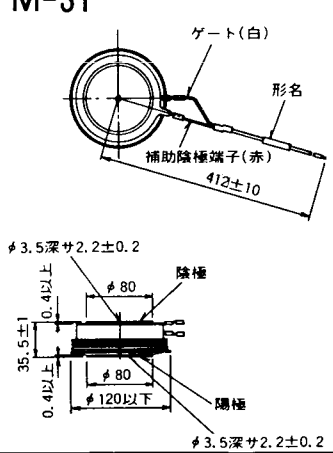
M-29



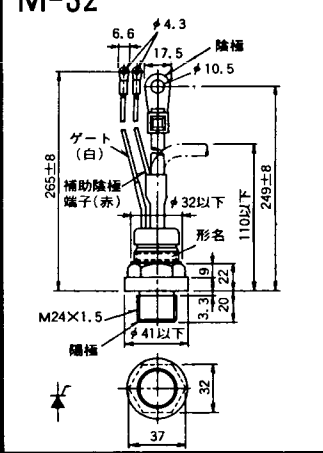
M-30



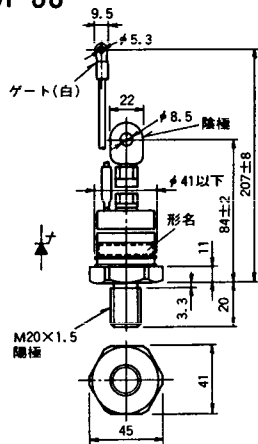
M-31



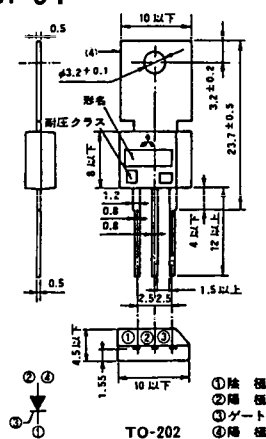
M-32



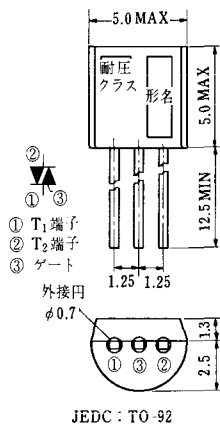
### M-33



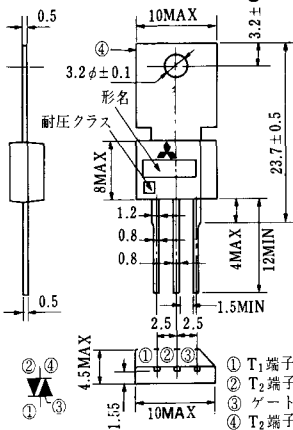
### M-34



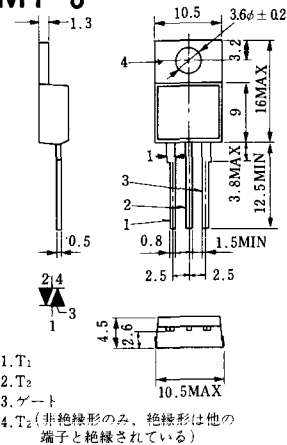
### MT-1



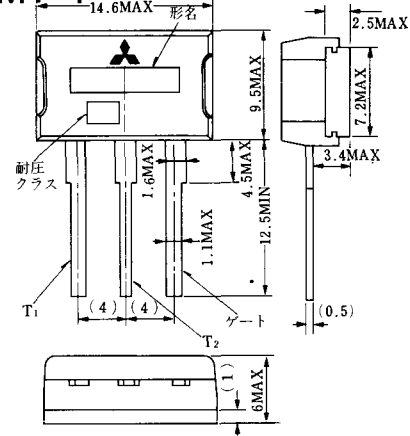
### MT-2



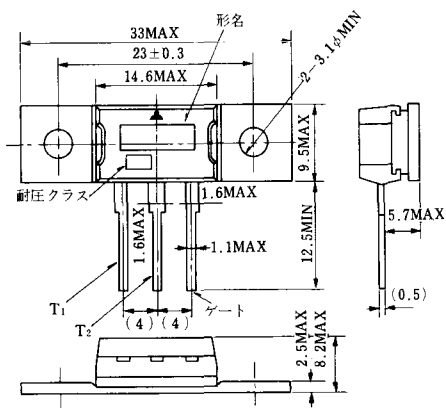
### MT-3



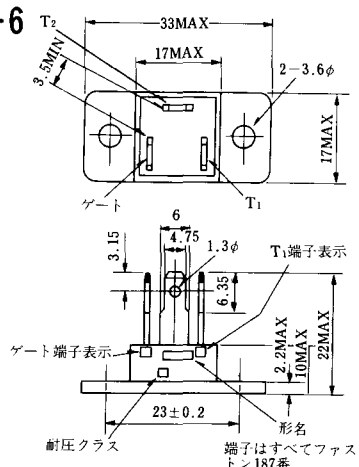
### MT-4



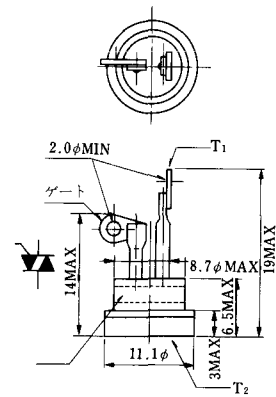
### MT-5



### MT-6

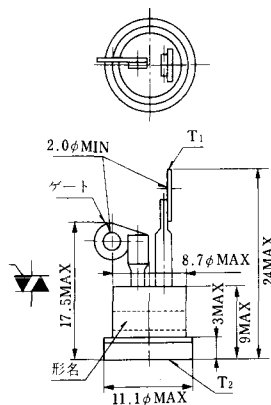


### MT-7

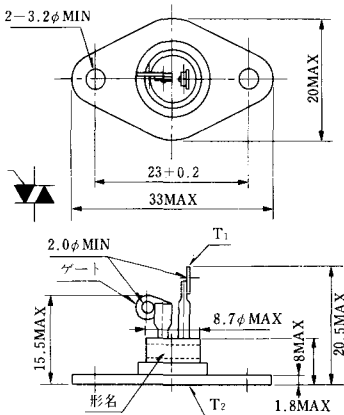




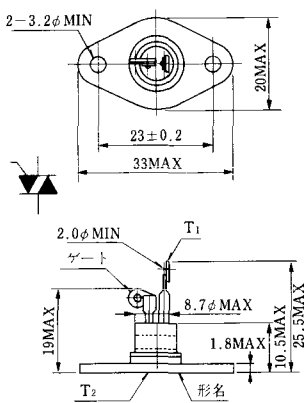
MT-8



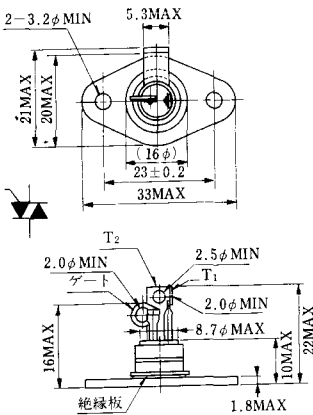
MT-9



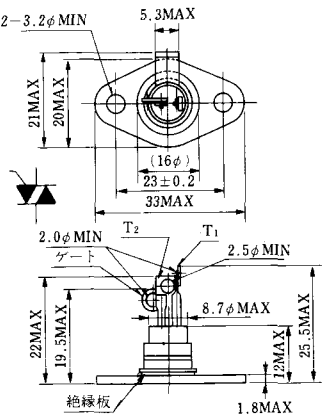
MT-10



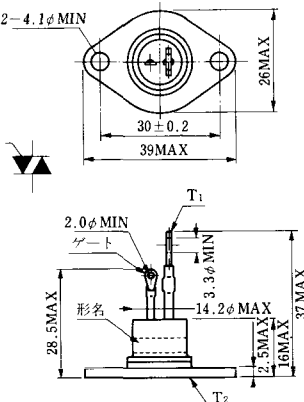
MT-11



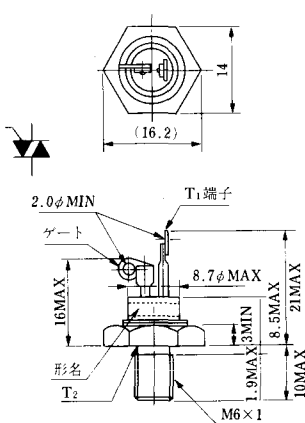
MT-12



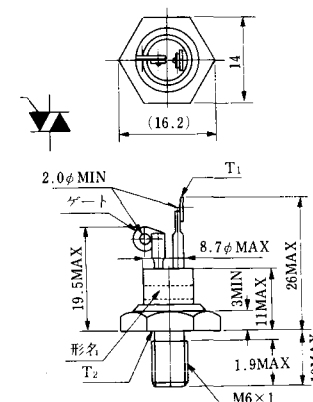
MT-13



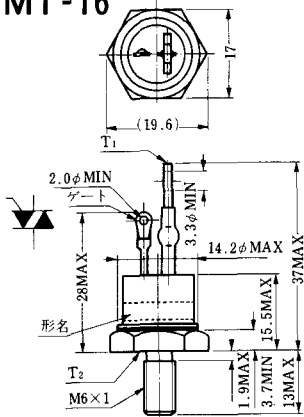
MT-14



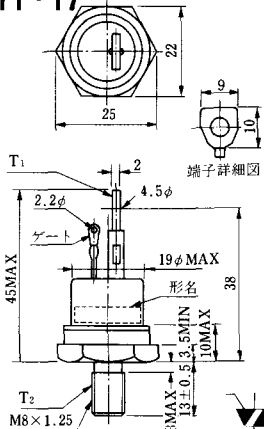
MT-15



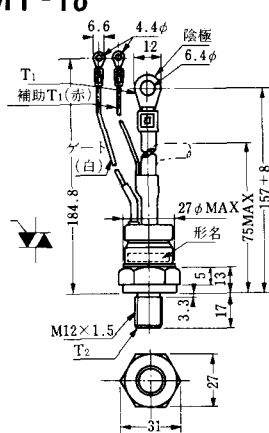
MT-16



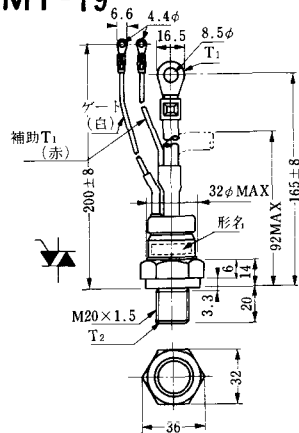
MT-17



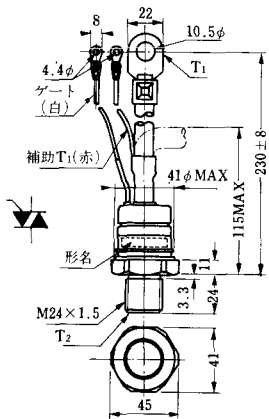
MT-18



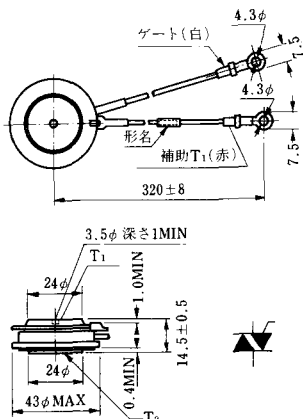
MT-19



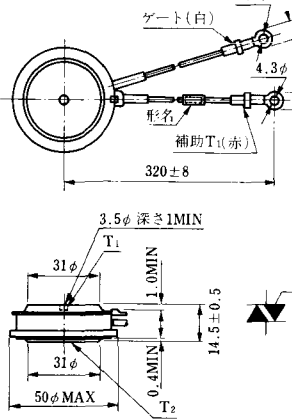
MT-20



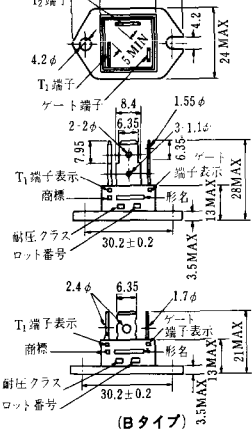
MT-21



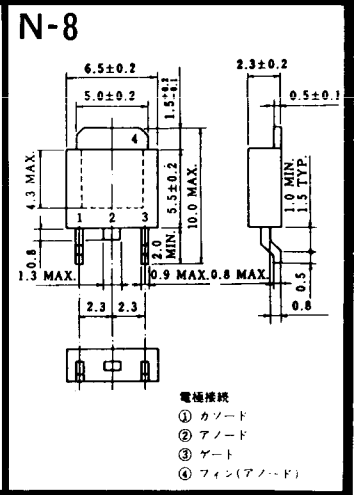
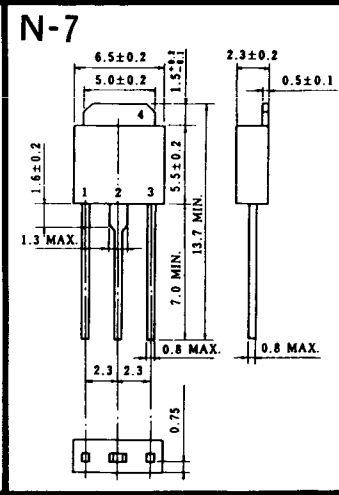
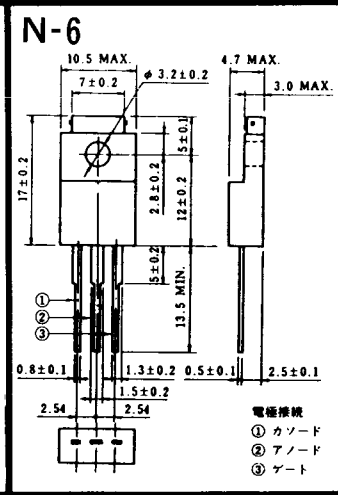
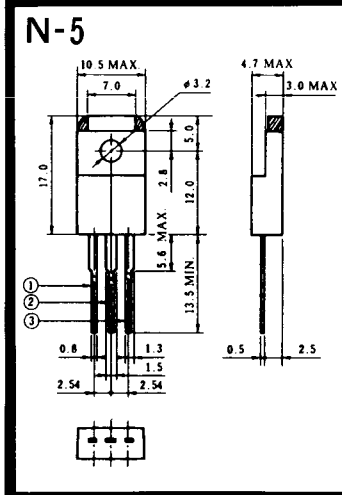
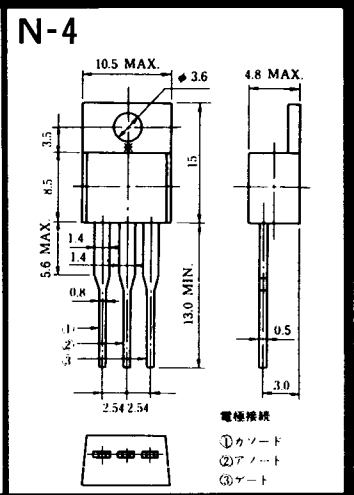
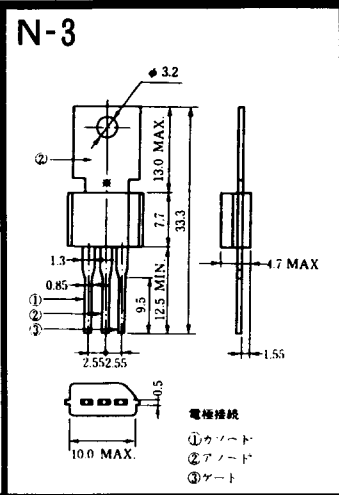
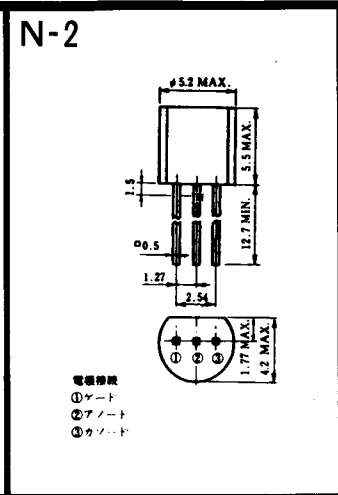
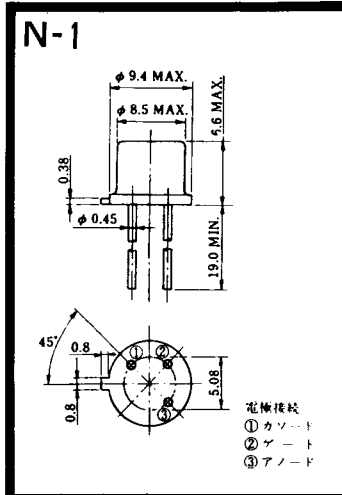
MT-22



MT-23



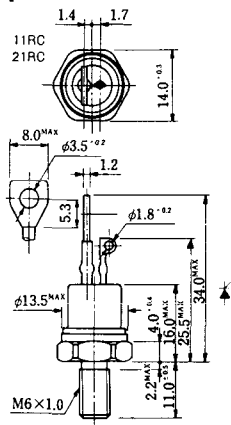






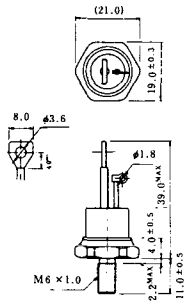


### NI-1



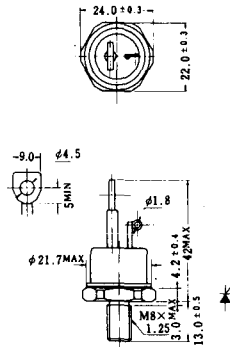
### NI-2

29RD



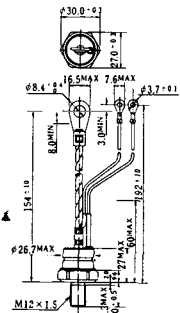
### NI-3

39RC  
59RC  
39RF  
59RF



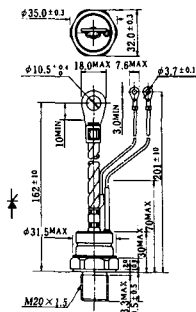
### NI-4

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



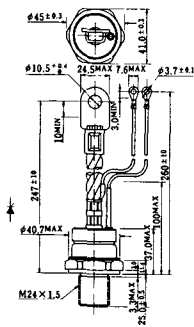
### NI-5

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



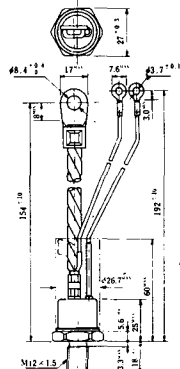
### NI-6

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



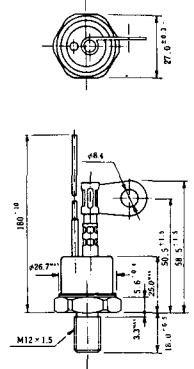
### NI-7

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



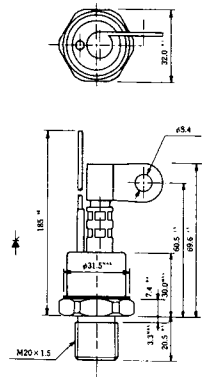
### NI-8

89RW  
129RW



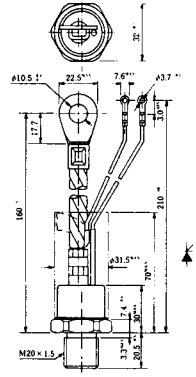
### NI-9

259RW  
309RW



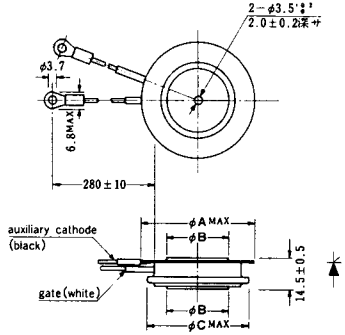
### NI-10

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



### NI-11

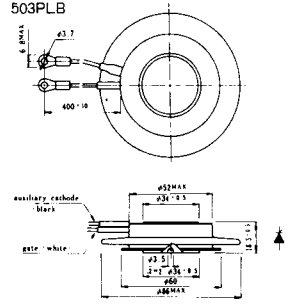
103PA  
253PA  
503PA  
553PA  
803PA  
103PLE  
103PLG  
103PLH  
203PLG  
253PLE  
253PLH  
353PLG  
403PLE  
403PLH



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

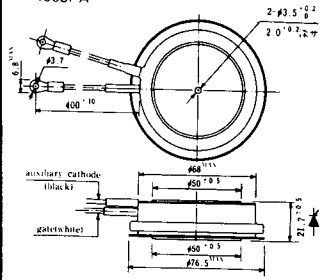
### NI-12

403PAB  
503PAB  
503PLB



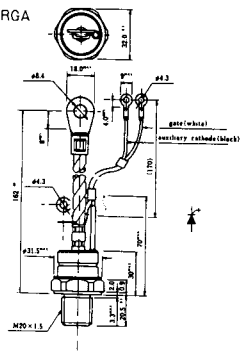
### NI-13

1003PA  
1003PAB  
1003PLF  
1003PLH  
1503PA



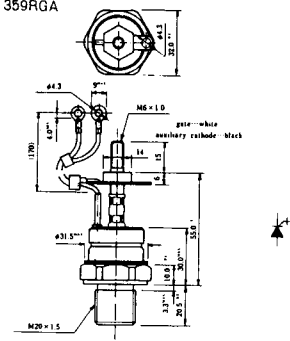
### NI-14

358RGA

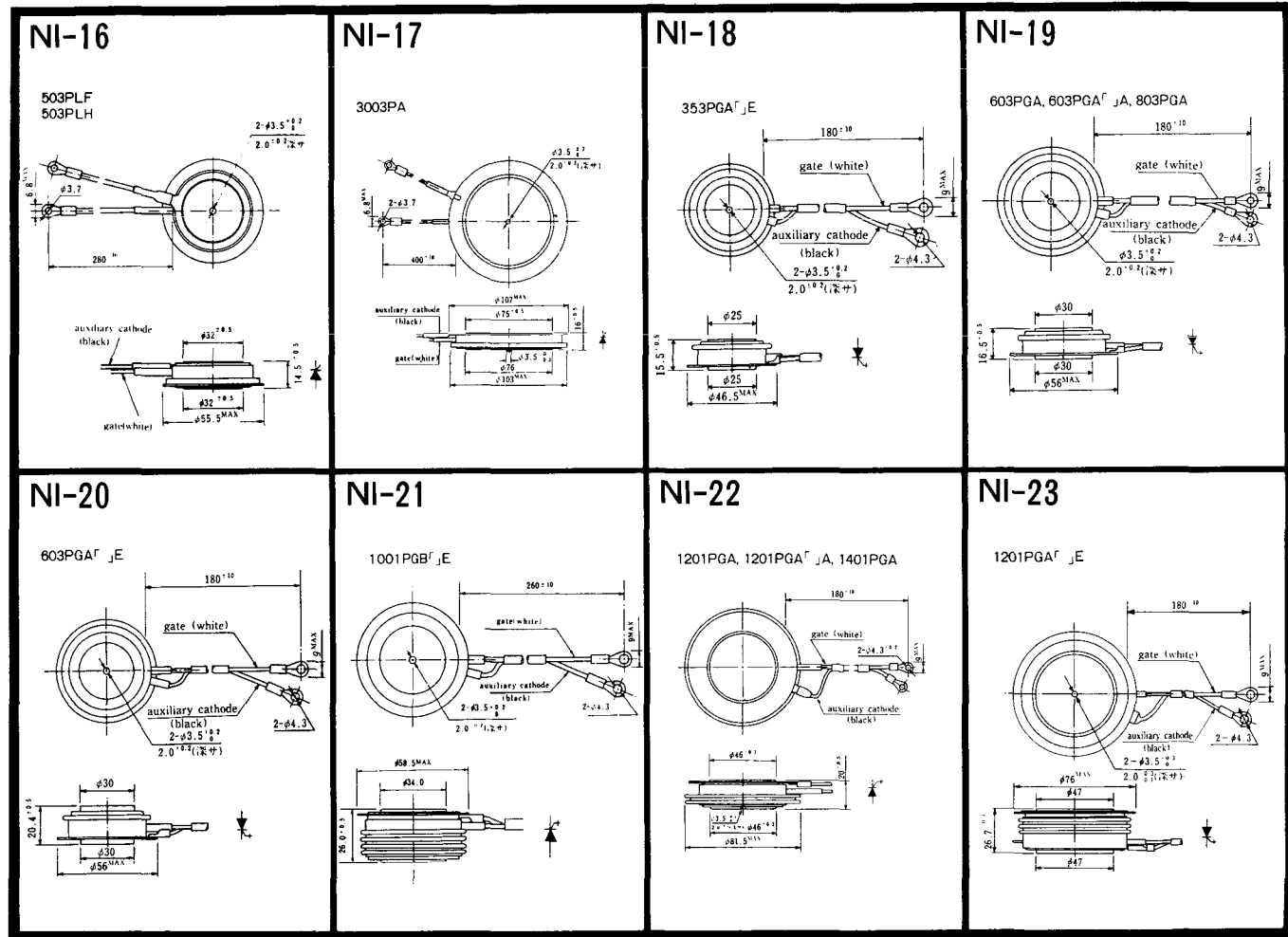


### NI-15

359RGA

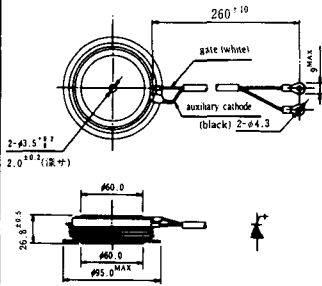






NI-24

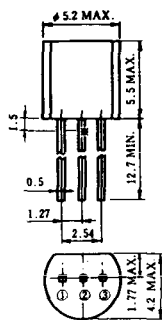
2001PGB<sup>r</sup> JE



NI-25

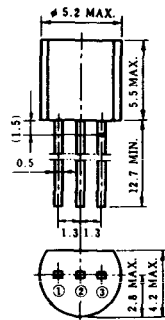
NI-26

### NT-1



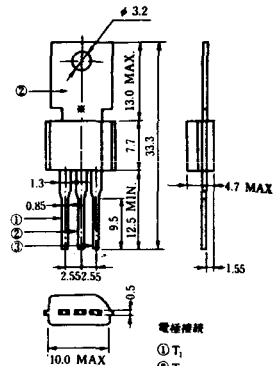
電極接続  
① T<sub>1</sub>  
② ゲート  
③ T<sub>2</sub>

### NT-2



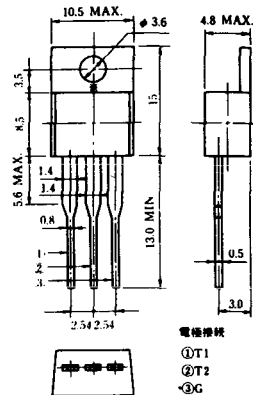
電極接続  
① T<sub>1</sub>  
② ゲート  
③ T<sub>2</sub>

### NT-3



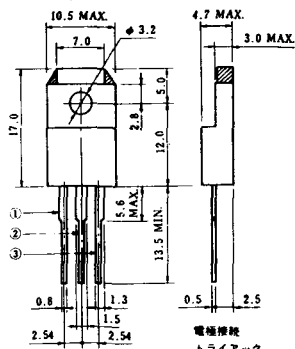
電極接続  
① T<sub>1</sub>  
② T<sub>2</sub>  
③ ゲート

### NT-4



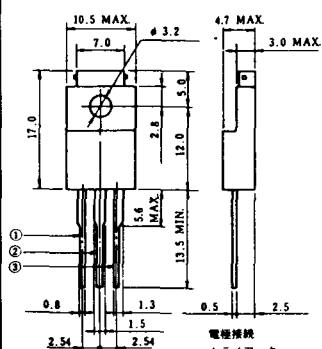
電極接続  
① T<sub>1</sub>  
② T<sub>2</sub>  
③ G

### NT-5



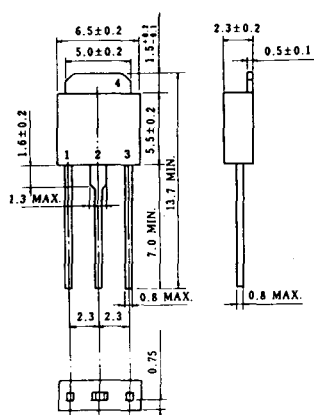
電極接続  
トライアック  
① T<sub>1</sub>  
② T<sub>2</sub>  
③ ゲート  
φ 2g

### NT-6

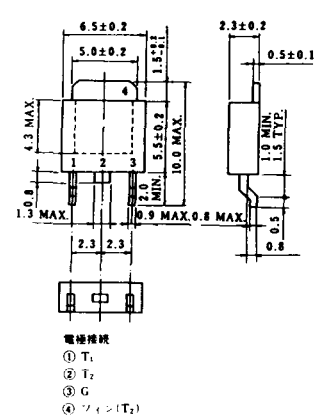


電極接続  
トライアック  
① T<sub>1</sub>  
② T<sub>2</sub>  
③ ゲート  
φ 2k

### NT-7

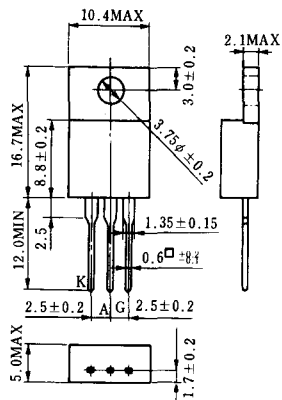


### NT-8

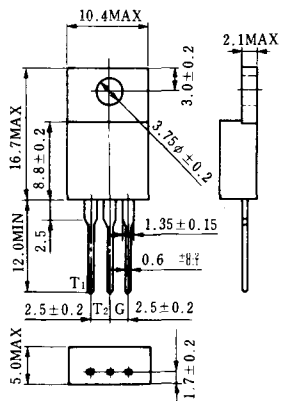


電極接続  
① T<sub>1</sub>  
② T<sub>2</sub>  
③ G  
④ シェン(T<sub>2</sub>)

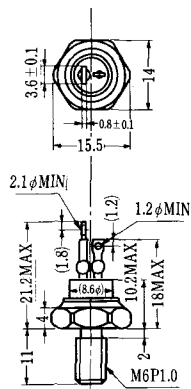
### S-1



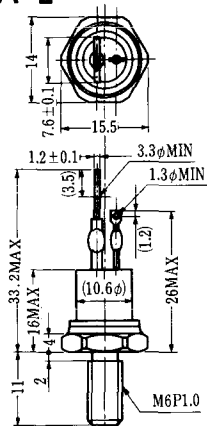
### ST-1



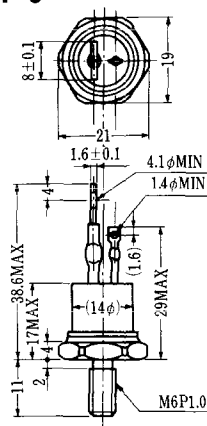
SA-1



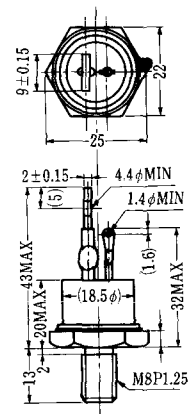
SA-2



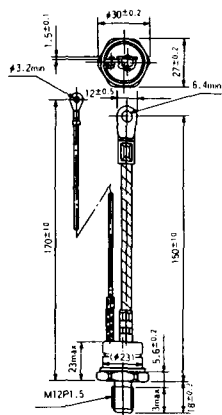
SA-3



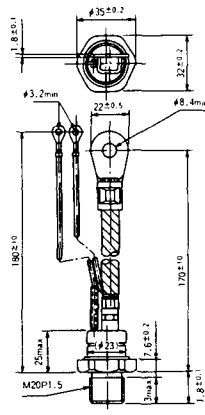
SA-4



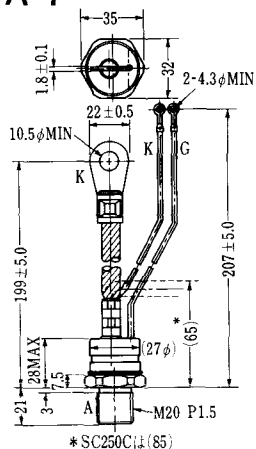
SA-5



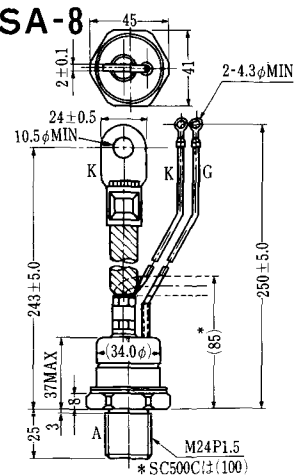
SA-6



SA-7



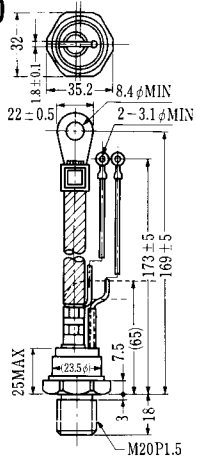
SA-8



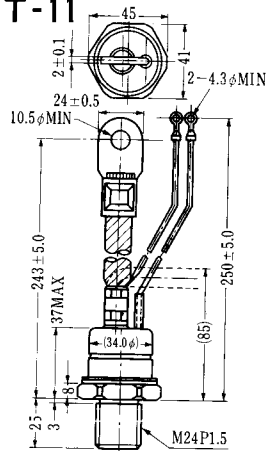




SAT-10

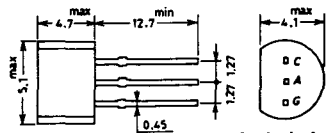


SAT-11



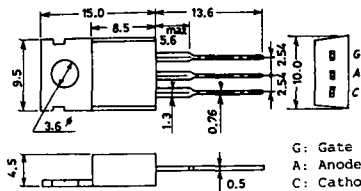


### SY-1 (1096A)



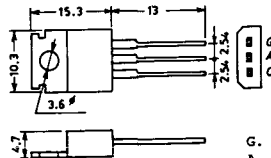
C: Cathode  
A: Anode  
G: Gate

### SY-2 (1151)



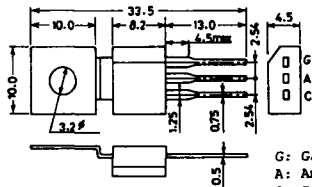
G: Gate  
A: Anode  
C: Cathode

### SY-3 (1104)



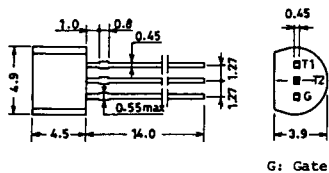
G: Gate  
A: Anode  
C: Cathode

### SY-4 (1150)



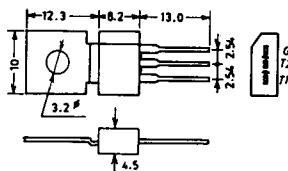
G: Gate  
A: Anode  
C: Cathode

1097A

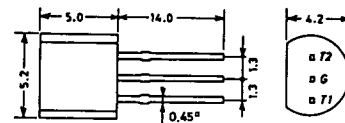


G: Gate

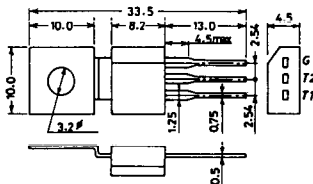
1102



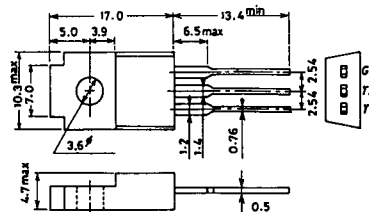
1141



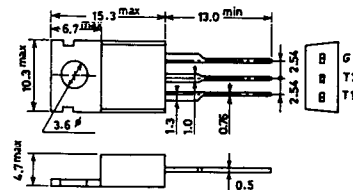
1142



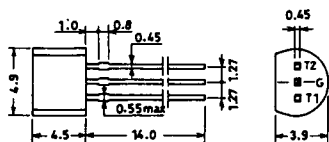
1144



1155

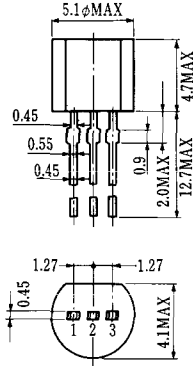


1192A



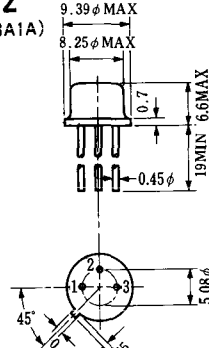
G: Gate

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



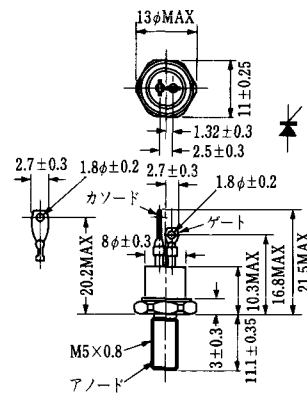
- 1 ゲート
- 2 アノード
- 3 カソード

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



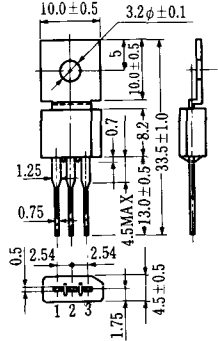
1. カソード
2. ゲート
3. アノード(ケース)

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



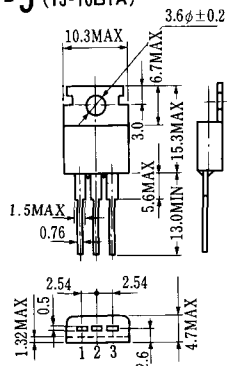
カソード  
ゲート  
アノード

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



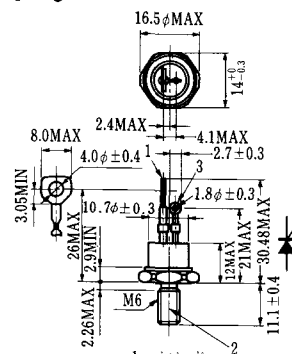
- 1 カソード
- 2 アノード
- 3 ゲート

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



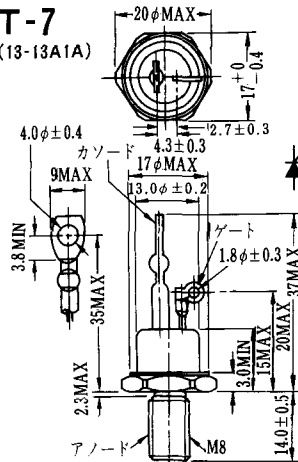
- 1 カソード
- 2 アノード
- 3 ゲート

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



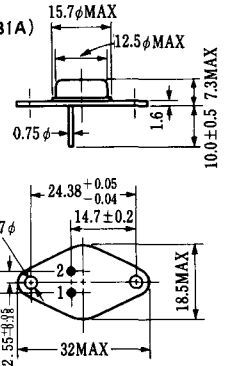
- 1 カソード
- 2 アノード
- 3 ゲート

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



カソード  
ゲート  
アノード

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



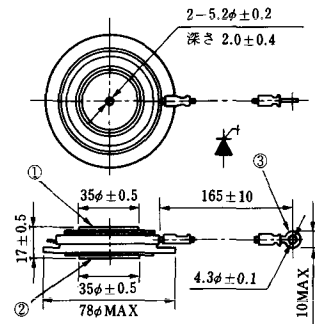
1. ゲート
2. カソード
3. アノード(ケース)





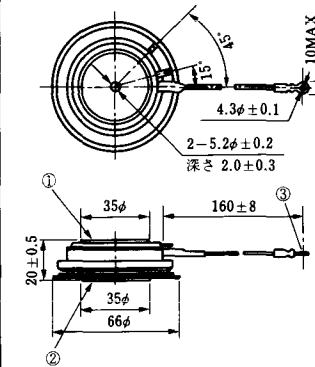


**T-33 (13-78B1A)**



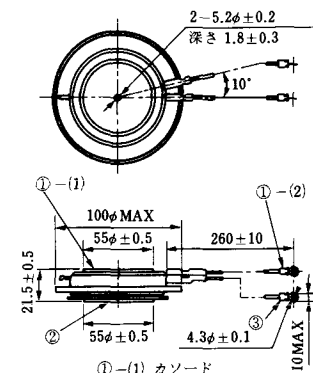
- ① カソード
- ② アノード
- ③ ゲート

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



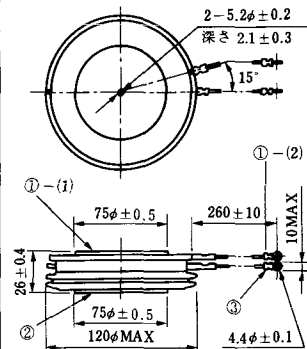
- ① カソード
- ② アノード
- ③ ゲート

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



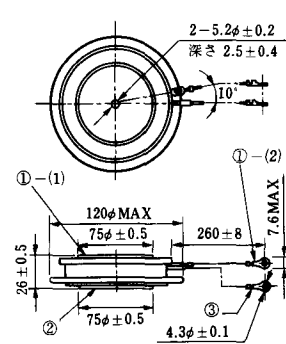
- ①-(1) カソード
- ①-(2) カソード(黒)
- ② アノード
- ③ ゲート(白)

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



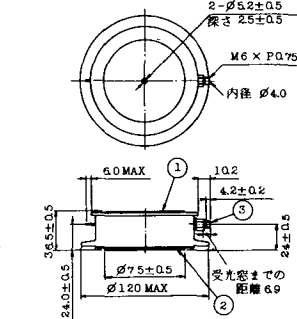
- ①-(1) カソード
- ①-(2) カソード(黒)
- ② アノード
- ③ ゲート(白)

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



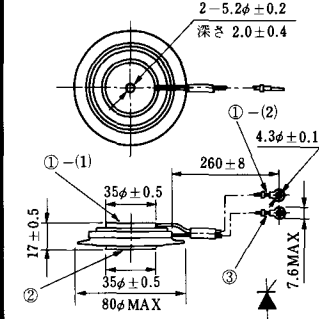
- ①-(1) カソード
- ①-(2) カソード(黒)
- ② アノード
- ③ ゲート(白)

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



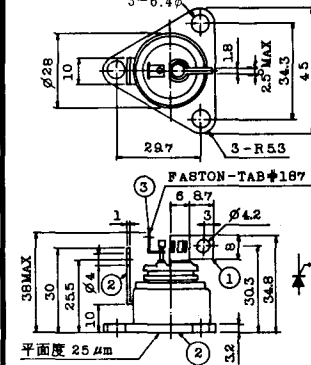
- ① カソード
- ② アノード
- ③ ゲート

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



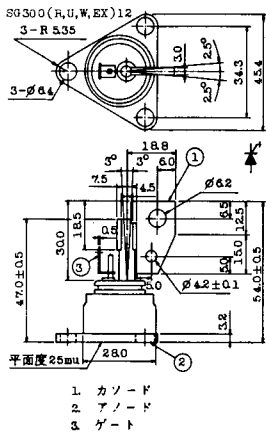
- ①-(1) カソード
- ①-(2) カソード(黒)
- ② アノード
- ③ ゲート(白)

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

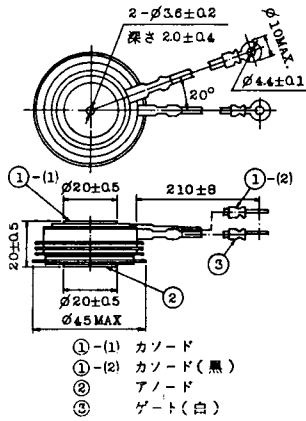


- 1. カソード
- 2. アノード
- 3. ゲート

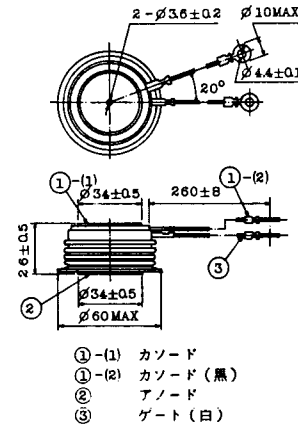
### T-41 (13-28A2A)



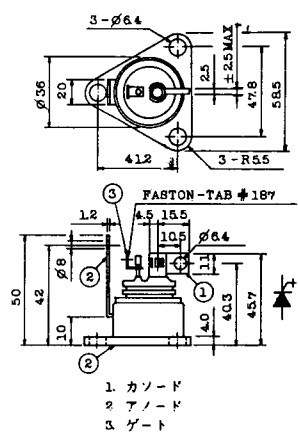
### T-42 (13-45F1A)



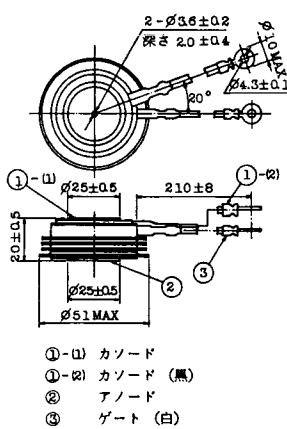
### T-43 (13-60E2A)



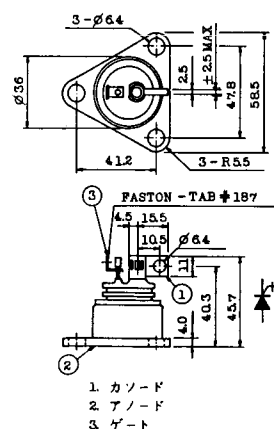
### T-44 (13-36A1A)



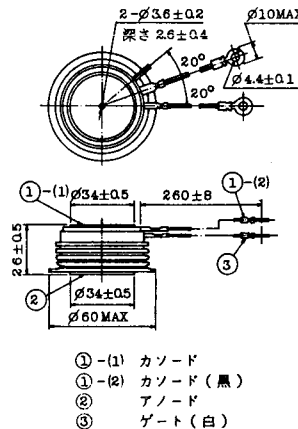
### T-45 (13-51B1A)



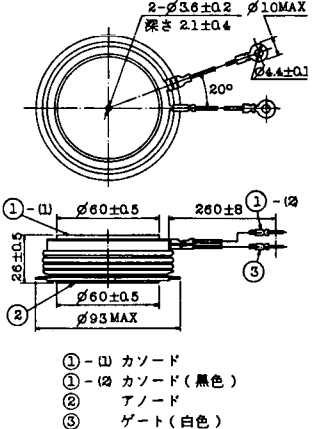
### T-46 (13-36B1A)



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

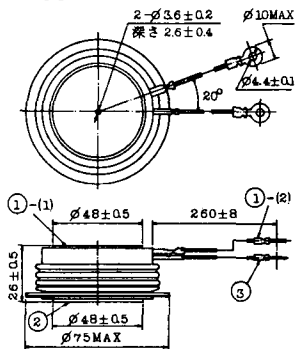


### T-48 (13-93C1A)



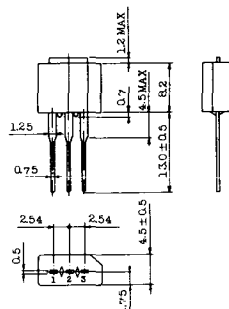


T-49 (13-75A1A)



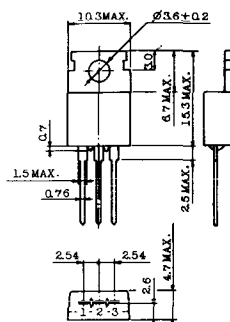
- 1-(1) カソード
- 1-(2) カソード (黒)
- 2 アノード
- 3 ゲート (白)

T-50 (13-10A3A)



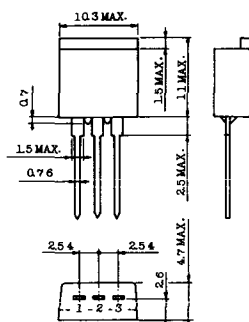
- 1 カソード
- 2 アノード
- 3 ゲート

T-51 (13-10D1A)



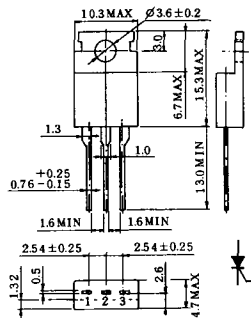
- 1 カソード
- 2 アノード
- 3 ゲート

T-52 (13-10D2A)



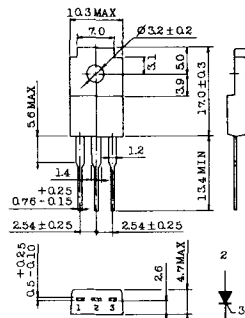
- 1 カソード
- 2 アノード
- 3 ゲート

T-53 (13-10E1B)



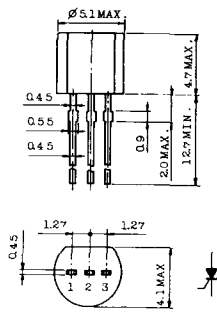
- 1 カソード
- 2 アノード
- 3 ゲート

T-54 (13-10F1B)



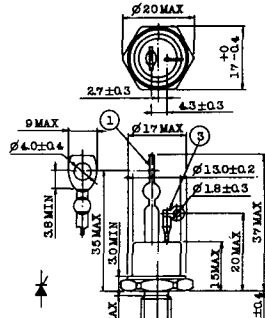
- 1 カソード
- 2 アノード
- 3 ゲート

T-55 (13-5A1D)



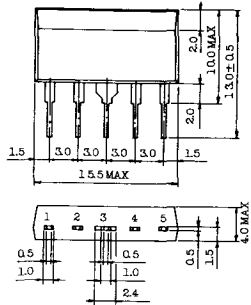
- 1 カソード
- 2 アノード
- 3 アノード

T-56 (13-13C1A)



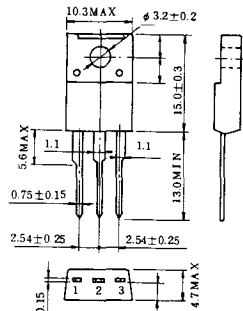
- 1 カソード
- 2 アノード
- 3 ゲート

T-57 (12-16C1A)



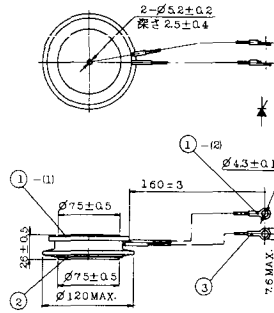
1. アノード (主)
2. ゲート (主)
3. カソード (共通)
4. ゲート (補助)
5. アノード (補助)

T-58 (13-10H1B)



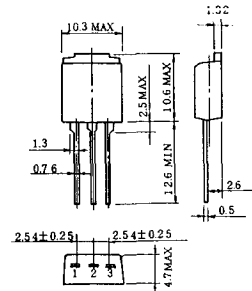
1. カソード
2. アノード
3. ゲート

T-59 (13-120A1A)



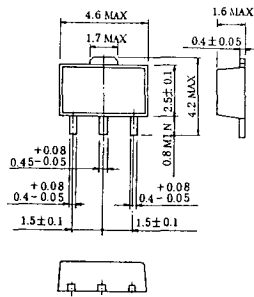
- 1-(1) カソード
- 1-(2) カソード (黒)
2. アノード
3. ゲート (白)

T-60



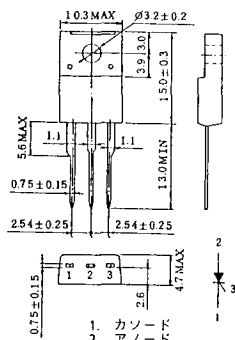
1. カソード
2. アノード
3. ゲート

T-61 (13-5B1A)



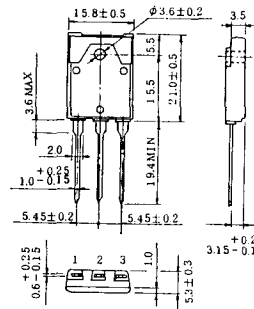
1. ゲート
2. アノード
3. カソード

T-62 (13-10H1A)



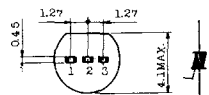
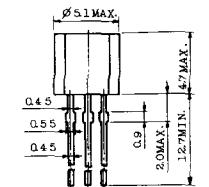
1. カソード
2. アノード
3. ゲート

T-63 (13-16A1B)



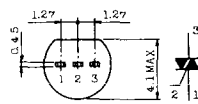
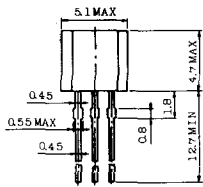
1. カソード
2. アノード
3. ゲート

TT-1



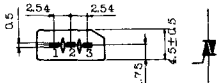
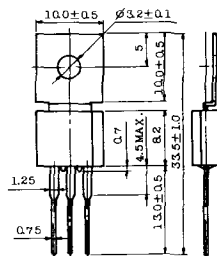
- 1 ゲート
- 2 T<sub>2</sub>
- 3 T<sub>1</sub>

TT-2



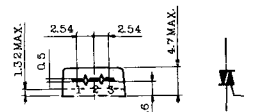
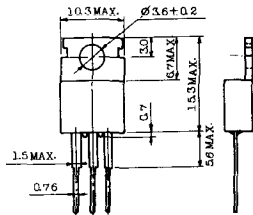
- 1 T<sub>1</sub>
- 2 ゲート
- 3 T<sub>2</sub>

TT-3



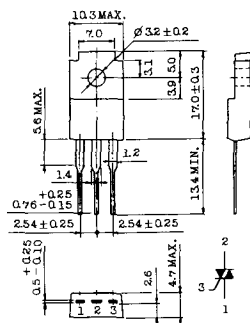
- 1 T<sub>1</sub>
- 2 T<sub>2</sub>
- 3 ゲート

TT-4



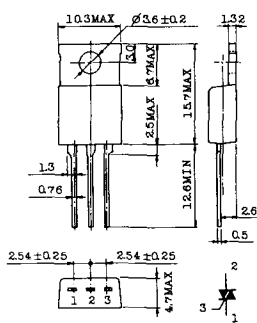
- 1 T<sub>1</sub>
- 2 T<sub>2</sub>
- 3 ゲート

TT-5



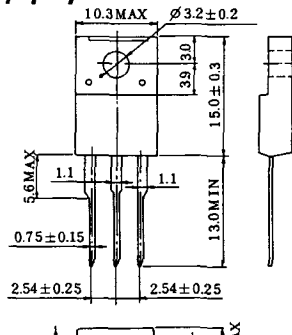
- 1 T<sub>1</sub>
- 2 T<sub>2</sub>
- 3 ゲート

TT-6



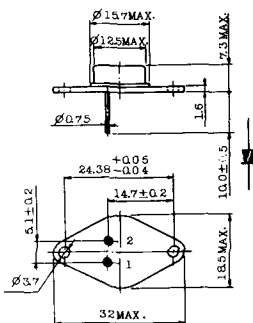
- 1 T<sub>1</sub>
- 2 T<sub>2</sub> (放熱板)
- 3 ゲート

TT-7



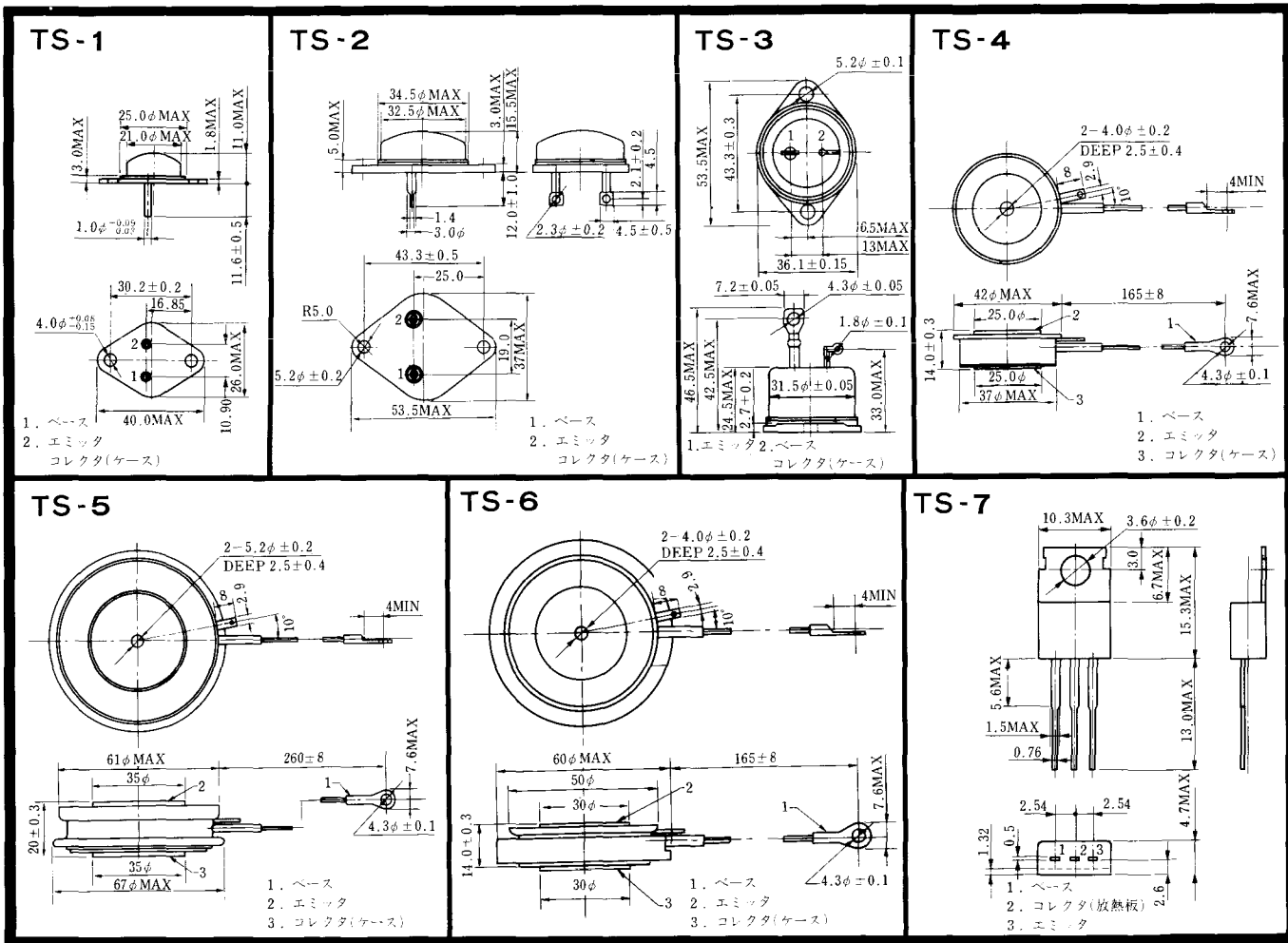
- 1 T<sub>1</sub>
- 2 T<sub>2</sub>
- 3 ゲート

TT-8

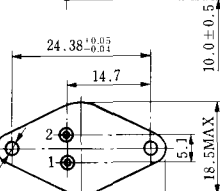
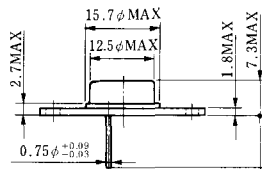


- 1 ゲート
- 2 T<sub>1</sub>
- T<sub>2</sub> (ケース)



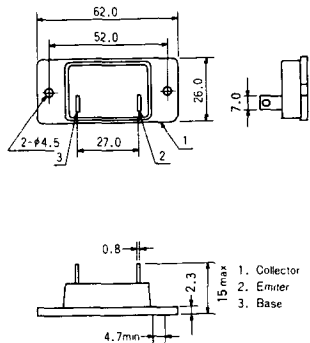


# TS-8

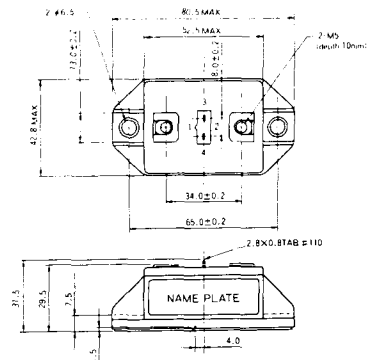


- 1. ベース
- 2. エミッタ  
コレクタ  
(ケース)

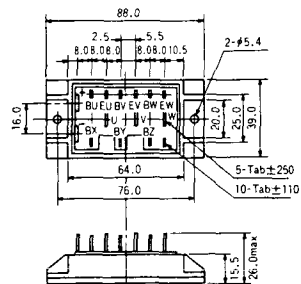
### S-62A1A



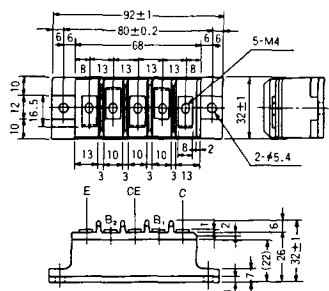
### S-80A1A



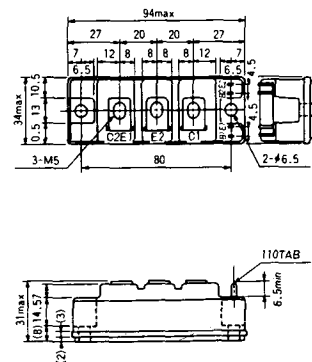
### S-88D1A



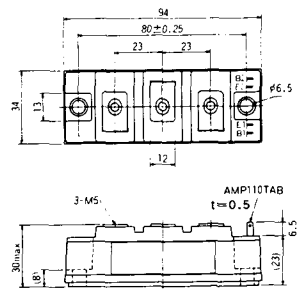
### S-92B1A



### S-94B1A



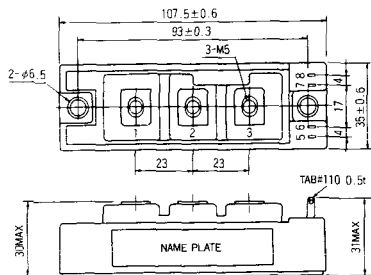
### S-94B1B



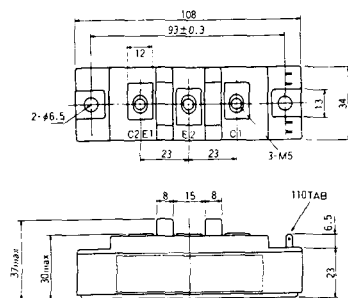




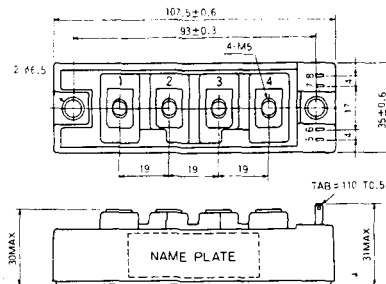
S-108B1A



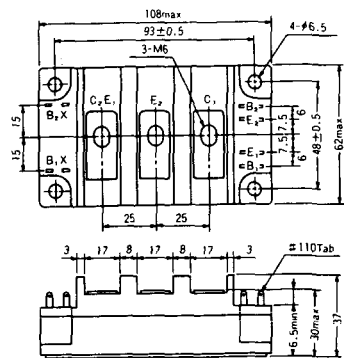
S-108B1B



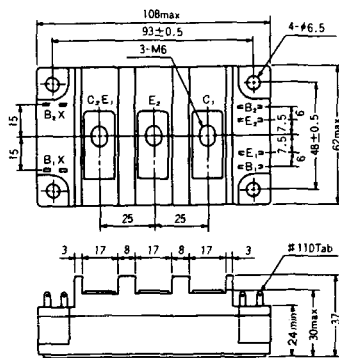
S-108B1C



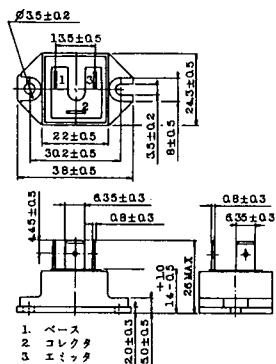
S-108B2A



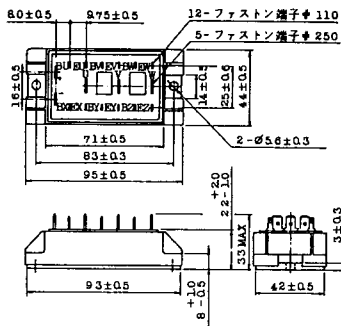
S-108B2B



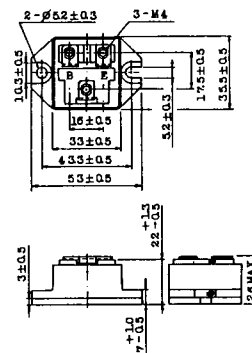
### 2-22B1A



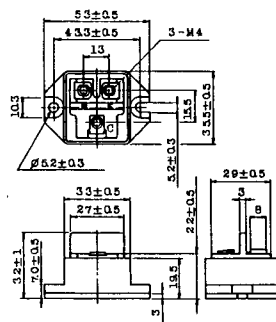
### 2-27A4A



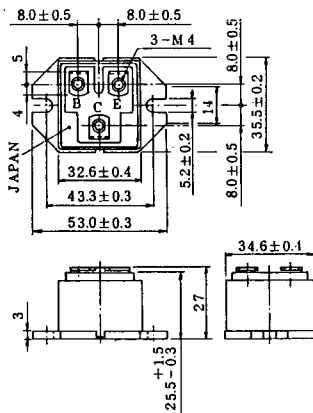
### 2-33C1A



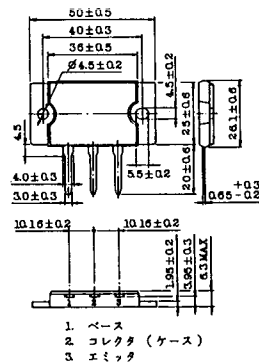
### 2-33D1A



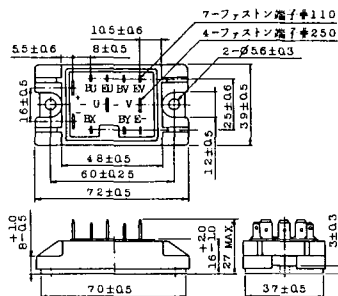
### 2-33F1A



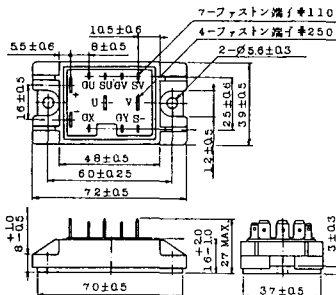
### 2-37A1A



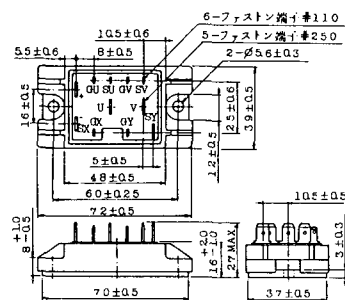
2-48A3A



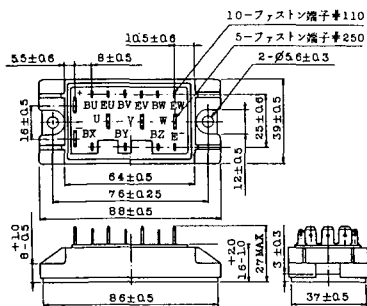
2-48A3B



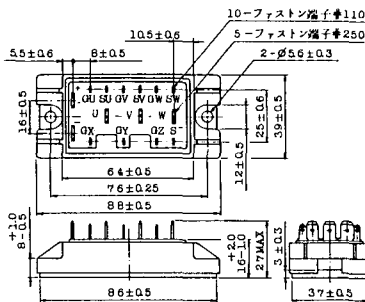
2-48A4A



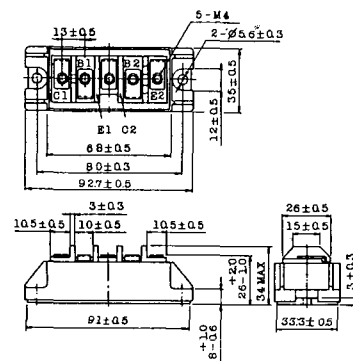
2-64A2A



2-64A2B



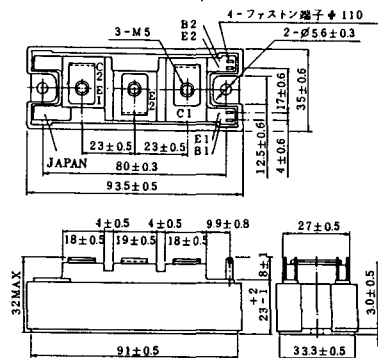
2-68A2A



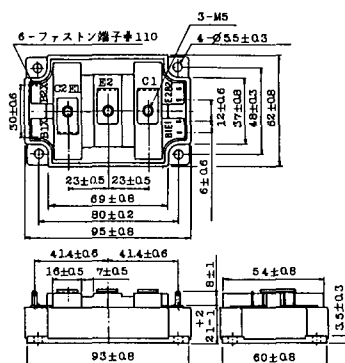




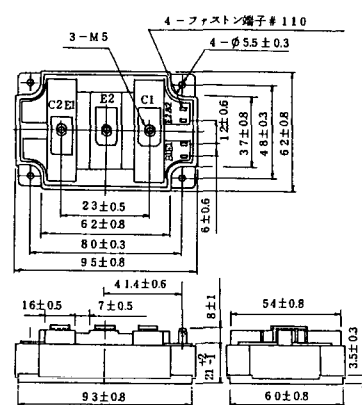
### 2-94D1A



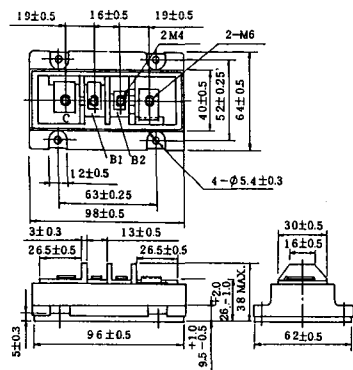
### 2-96A3A



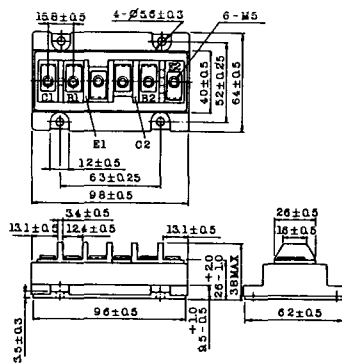
### 2-96A4A



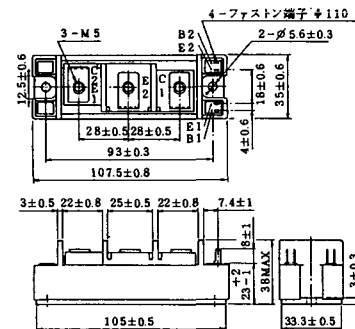
### 2-98B1A



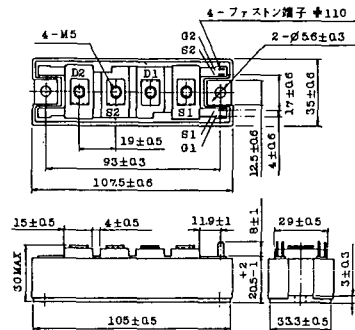
### 2-98C2A



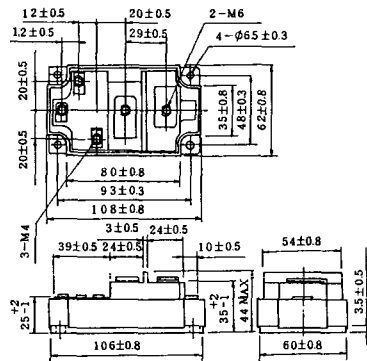
### 2-108A2A



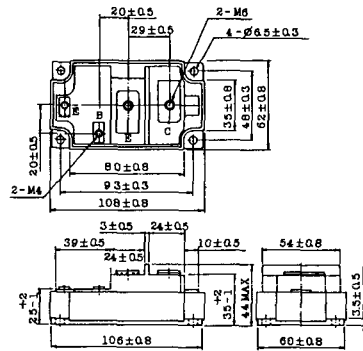
### 2-108B1A



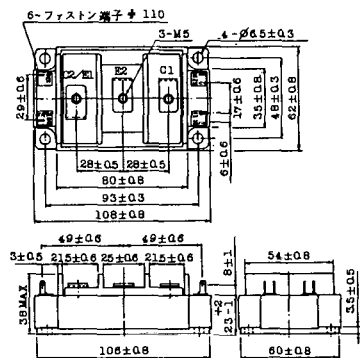
### 2-109A3A



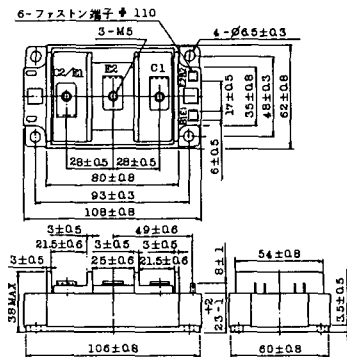
### 2-109A4A



### 2-109B3A

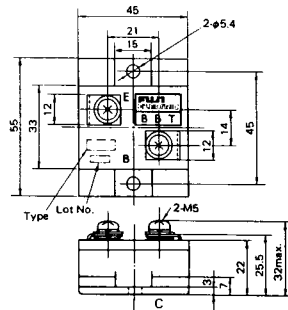


### 2-109B4A



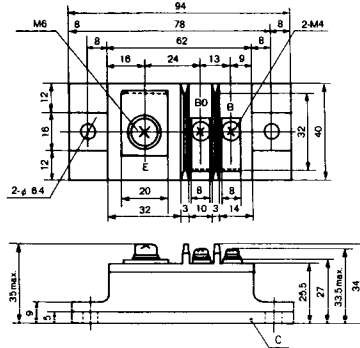
### BBT-II

BBTII  
1D200A-020



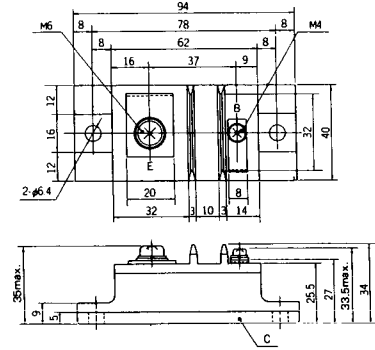
### BBT-III

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



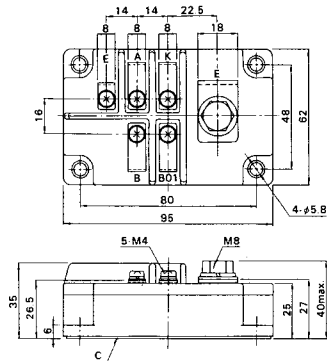
### BBT-III

BBTIII  
ETN01-055  
ET1257



### BBT-IV

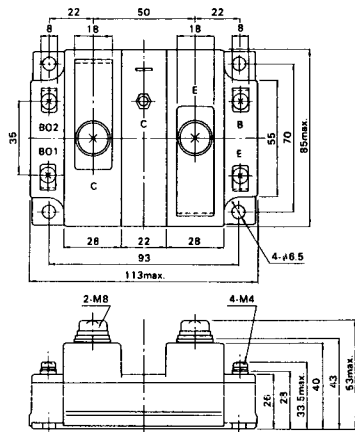
BBTIV  
1D500A-030



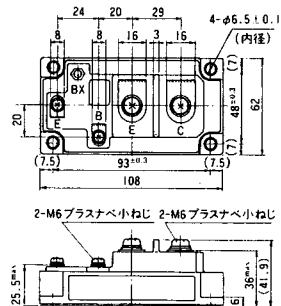




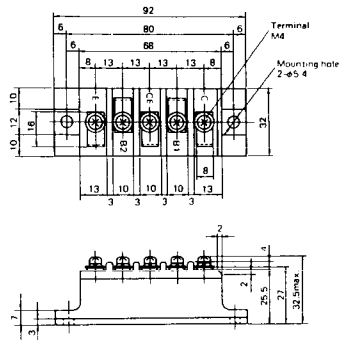
### M-107



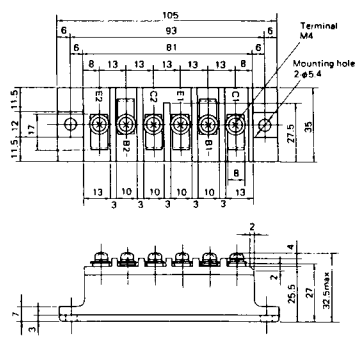
### M-116



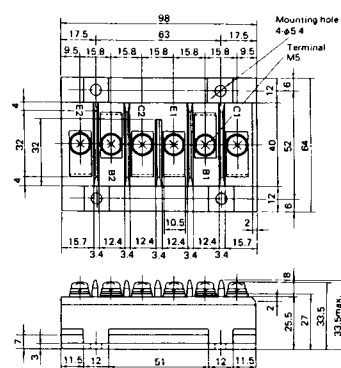
M-201



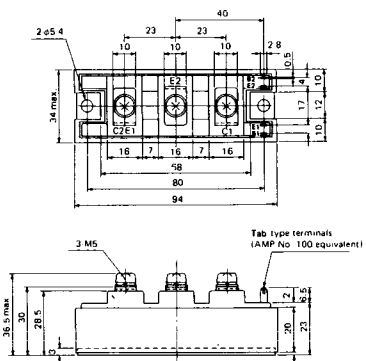
M-202



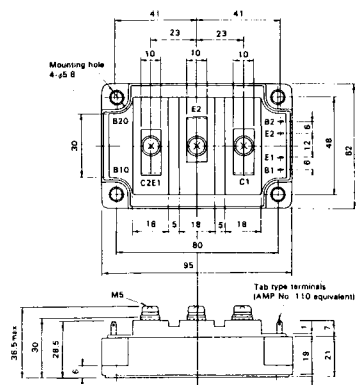
M-203



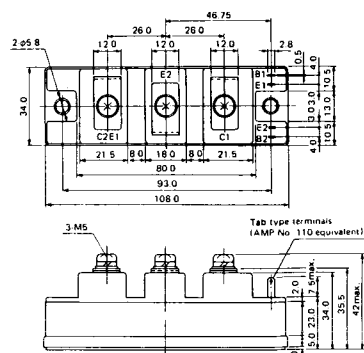
M-204



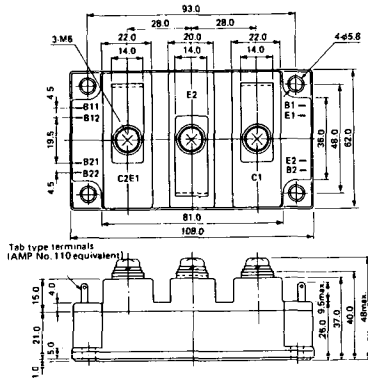
M-205



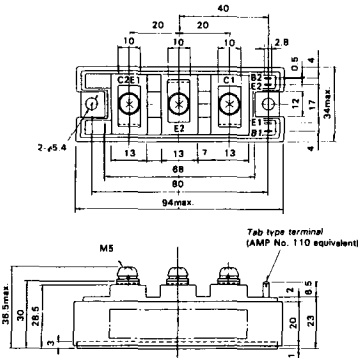
M-206



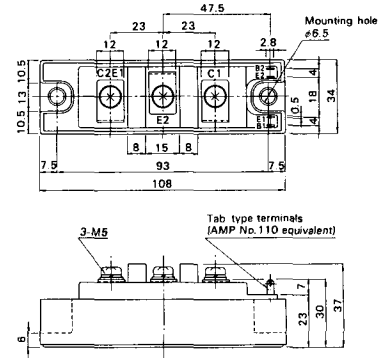
M-207



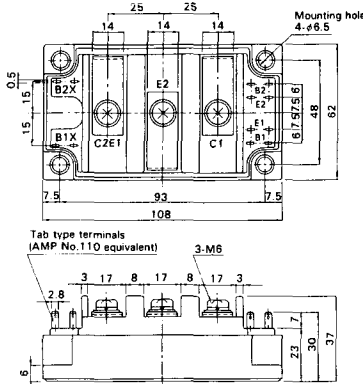
M-208



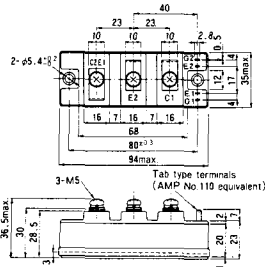
M-209



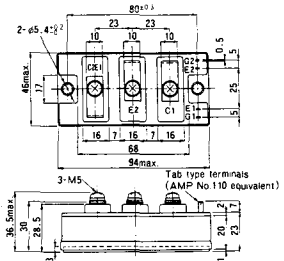
M-210



M-211

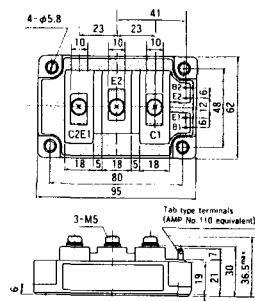


M-212

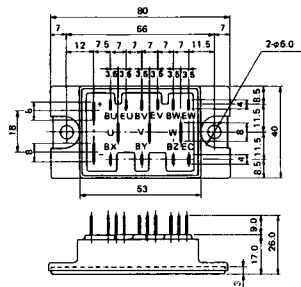




M-219



M-601



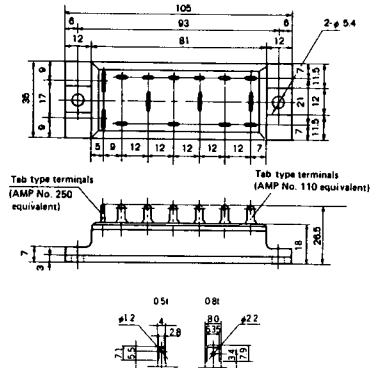
Tab type terminals  
(AMP No. 110 equivalent)



Tab type terminals  
(AMP No. 250 equivalent)



M-602



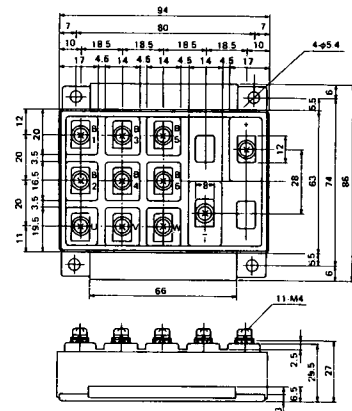
Tab type terminals  
(AMP No. 250 equivalent)



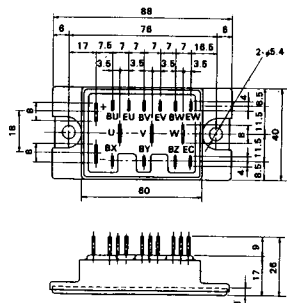
Tab type terminals  
(AMP No. 110 equivalent)



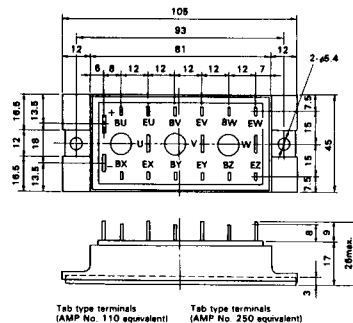
M-603



M-604



M-605



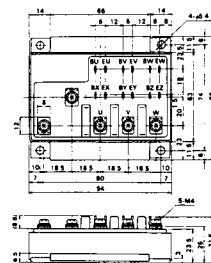
Tab type terminals  
(AMP No. 110 equivalent)



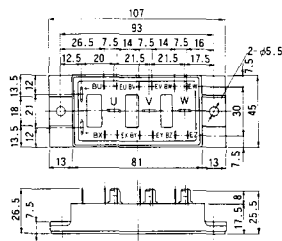
Tab type terminals  
(AMP No. 250 equivalent)



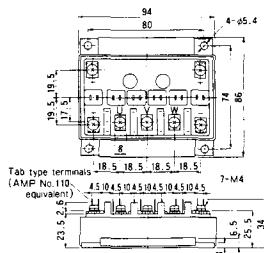
M-606



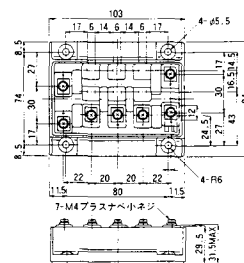
M-607



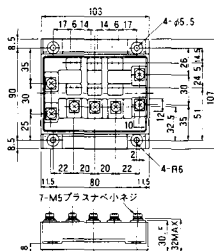
M-608



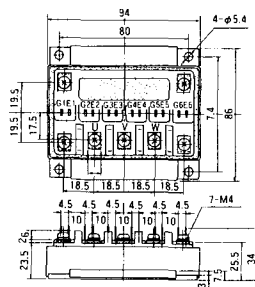
M-609



M-610

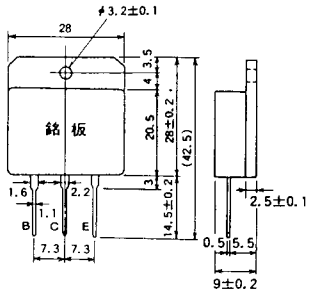


M-616

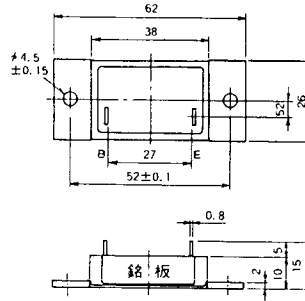




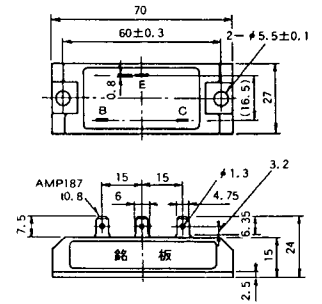
M-1A1A



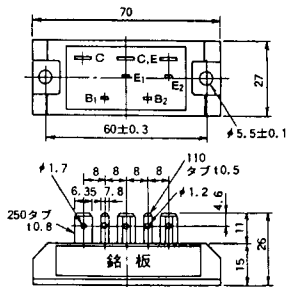
M-2A1A



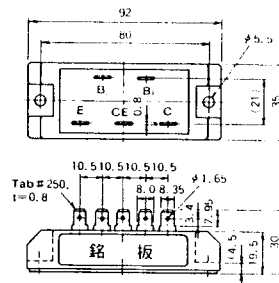
M-2B1A



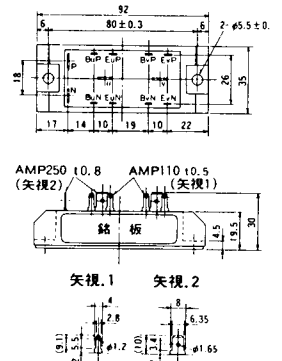
M-2B2A



M-2C2A

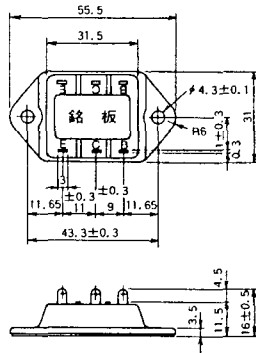


M-2D4A

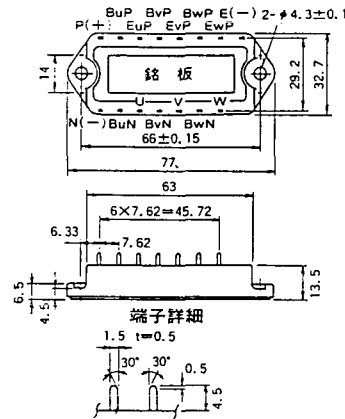




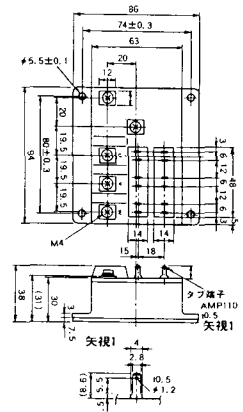
M-3C1A



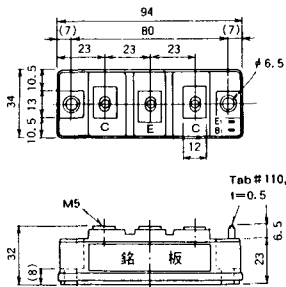
M-3D6A



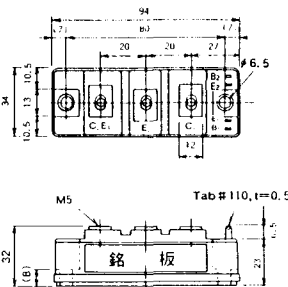
M-3E6A



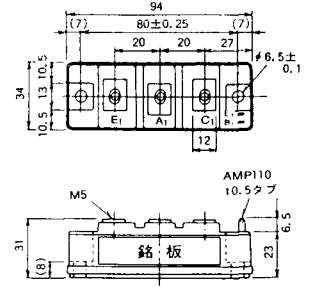
M-4A1A



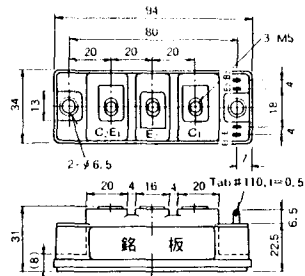
M-4A2A



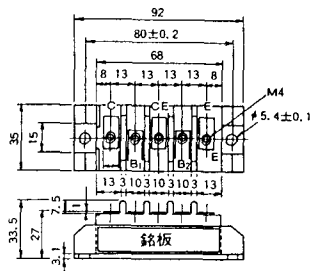
M-4A1B



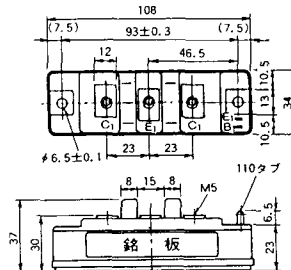
M-4A2B



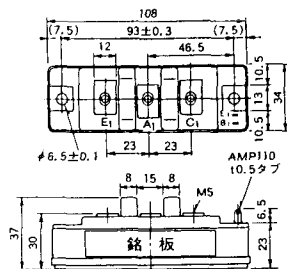
M-4B2A



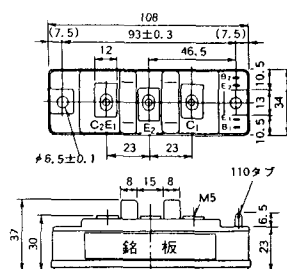
M-5A1A



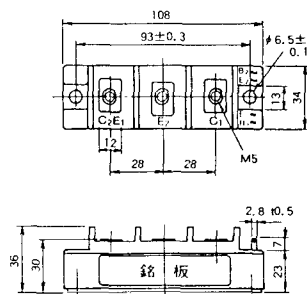
M-5A1B



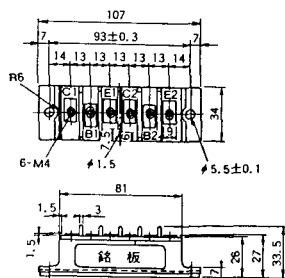
M-5A2A



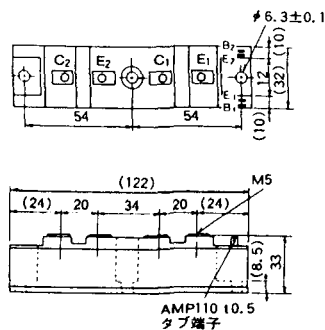
M-5B2A



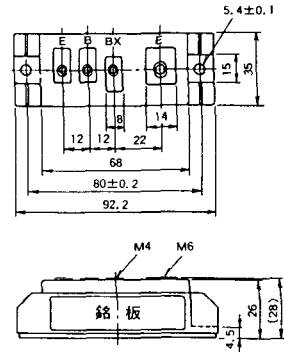
M-5C2A



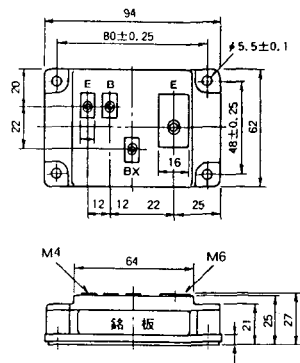
M-5D2A



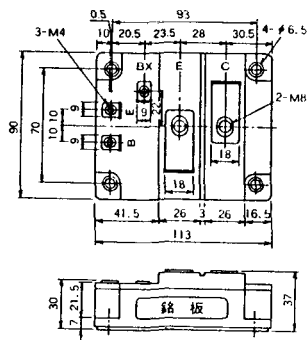
M-6A1A



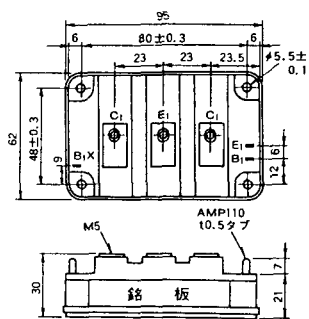
M-7A1A



M-7B1A

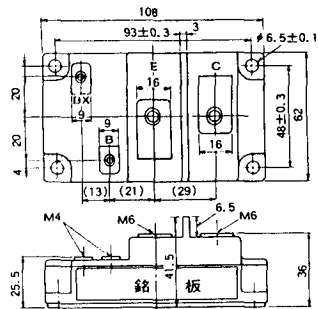


M-8A1A

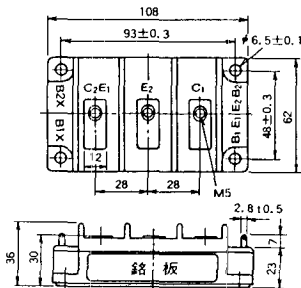




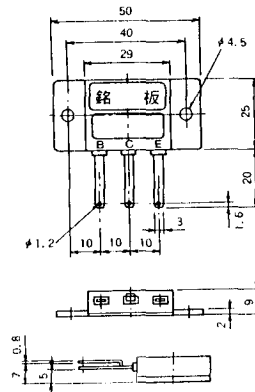
M-9B1A



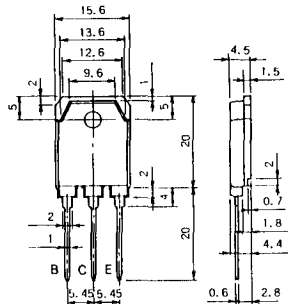
M-9C2A



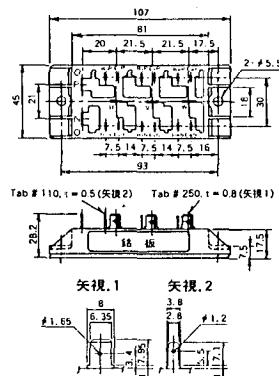
M-1A1B



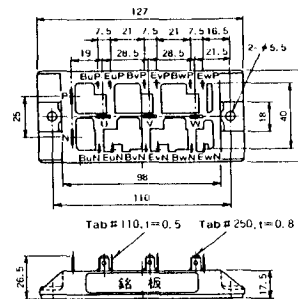
M-1A1C



M-2E6B



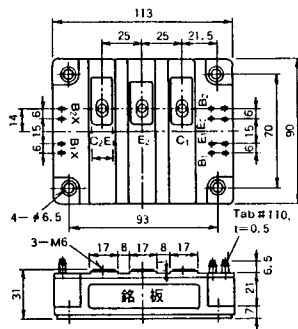
M-2E6C



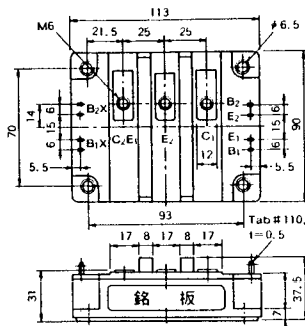




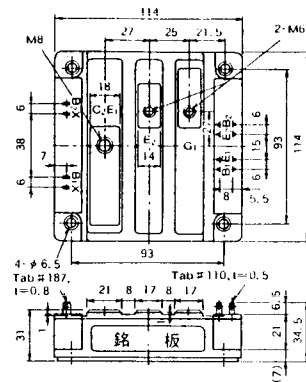
M-10A2A



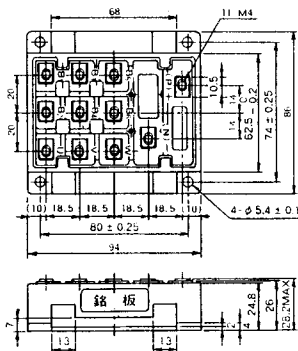
M-10A2B



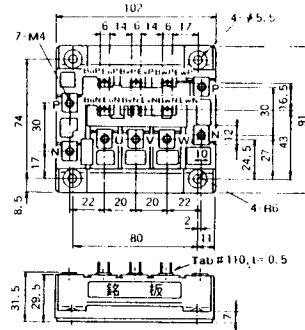
M-11A2A



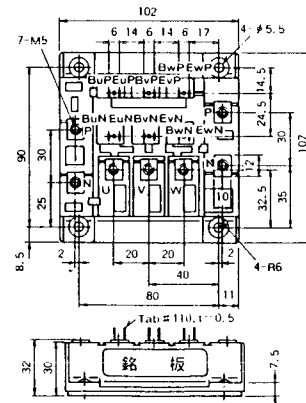
M-12A6A



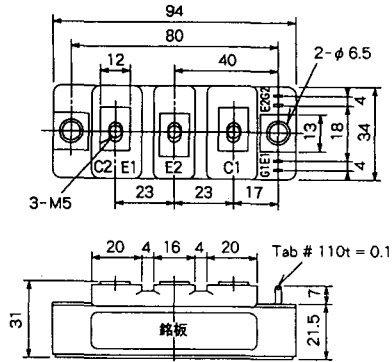
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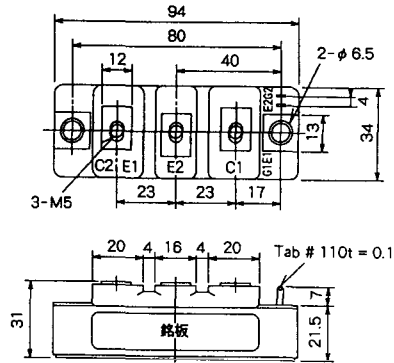
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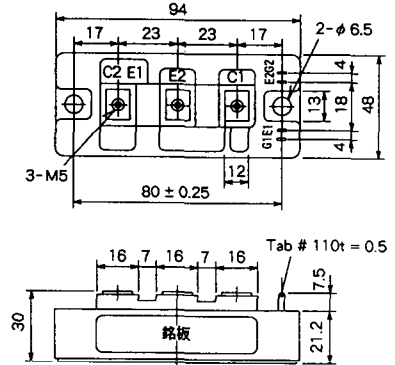
M-4A2D



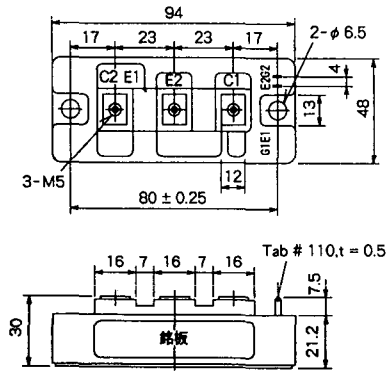
M-4A2E



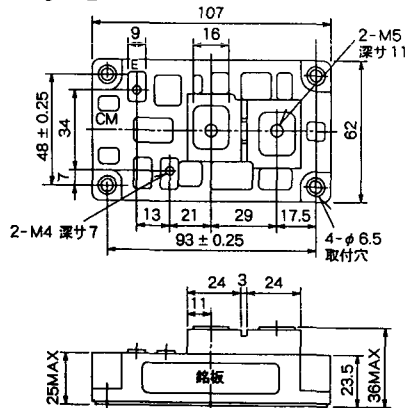
M-4C2A



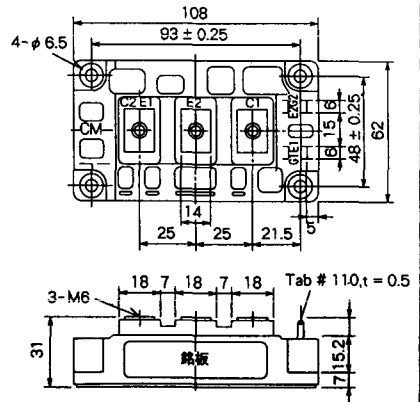
M-4C2B



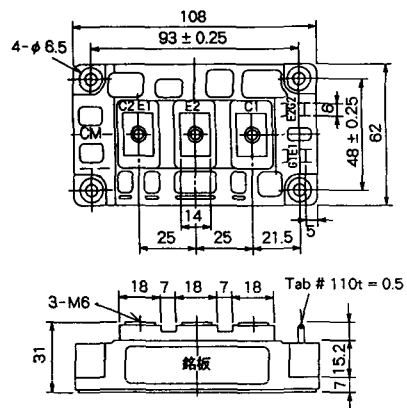
M-9B1C



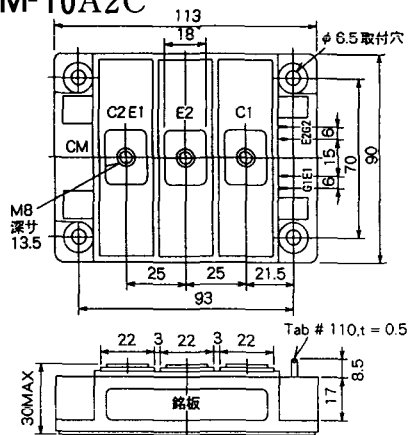
M-9D2A



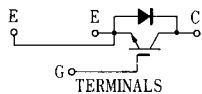
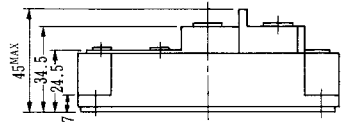
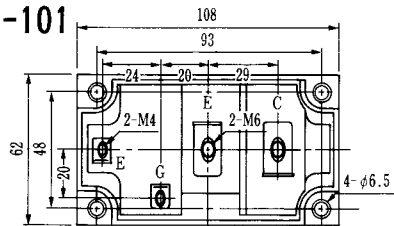
M-9D2B



M-10A2C

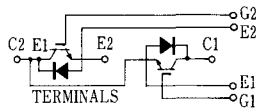
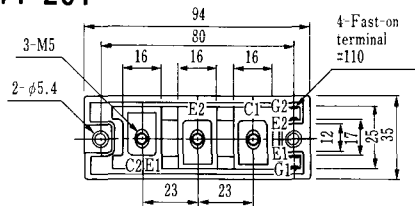


H-101



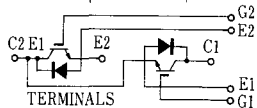
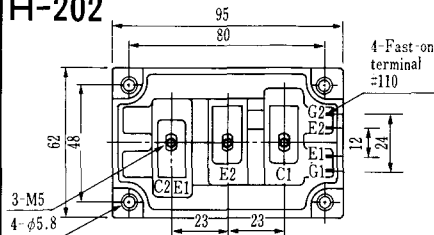
Weight :480g

### H-201



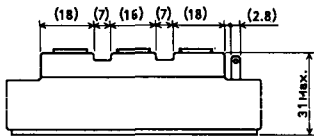
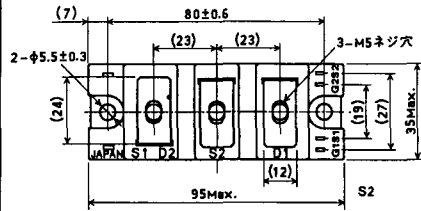
Weight: 200g

### H-202



Weight: 360g

### LF-J



### LF-K

