

- ダーリントン・トランジスタを2個内蔵

■ 等価回路

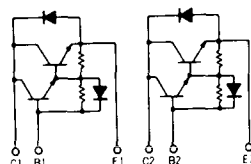
- フリーホイール・ダイオード付

- 絶縁形

- 直流電流増幅率は100以上 (定格電流にて)

- UL認定品: No. E76102 (M)

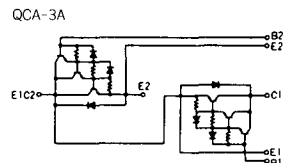
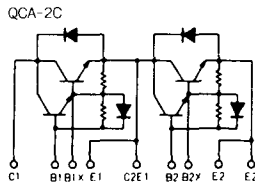
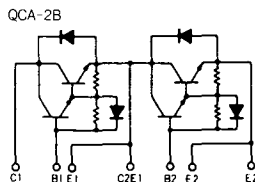
QBB-2A



注1. $T_c = 25^\circ\text{C}$.

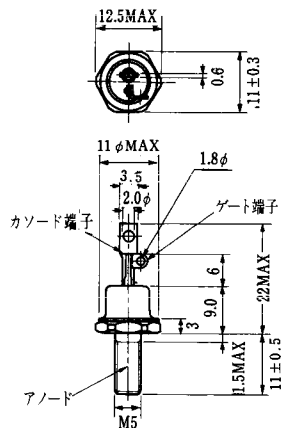
注2. AC, 1分間.

型 名	最 大 定 格 ($T_c = 25^\circ\text{C}$)										電 気 的 特 性									
	V_{CE0}	V_{CEX} (SUS)	V_{EB0}	I_C	I_{CP}	I_B	I_F	I_{FM}	P_C	T_j	T_{jstg}	$V_{I_{BO}}$	I_{CBO}	V_{CB}	I_{EBO}	V_{EB}	V_{CE0} (SUS)	h_{FE}	V_{CE}	I_C
	(V)	(V)	(V)	(A)	(A)	(A)	(A)	(A)	(W)	($^\circ\text{C}$)	($^\circ\text{C}$)	(V)	最大 (mA)	(V)	最大 (mA)	(V)	最小 (A)	最小	(V)	(A)
QBB100A40	400	400	10	100	200	6.0	100		620	150	-40~125	2500	1.0	400	400	10	300	1.0	75/100	2/5 100
QBB100A60	600	600	10	100	200	6.0	100		620	150	-40~125	2500	1.0	600	400	10	450	1.0	75/100	2/5 100
QBB150A40	400	400	10	150	300	9.0	150		690	150	-40~125	2500	1.0	400	500	10	300	1.0	75/100	2/5 150
QBB150A60	600	600	10	150	300	9.0	150		690	150	-40~125	2500	1.0	600	500	10	450	1.0	75/100	2/5 150
QCA30B40	400	400	10	30	60	2.0	30		250	150	-40~125	2500	1.0	400	300	10	300	1.0	75/100	2/5 30
QCA30B60	600	600	10	30	60	2.0	30		250	150	-40~125	2500	1.0	600	300	10	450	1.0	75/100	2/5 30
QCA50B40	400	400	10	50	100	3.0	50		300	150	-40~125	2500	1.0	400	300	10	300	1.0	75/100	2/5 50
QCA50B60	600	600	10	50	100	3.0	50		300	150	-40~125	2500	1.0	600	300	10	450	1.0	75/100	2/5 50
QCA50AA100	1000	1000	7	50		3.0	50		400	150	-40~125	2500	1.0	1000	200	7			75/100	2.8/5 50
QCA50AA120	1200	1200	10	50		3.0	50		400	150	-40~125	2500	1.0	1200	300	10			75	5 50
QCA75A40	400	400	10	75	150	4.5	75		350	150	-40~125	2500	1.0	400	300	10	300	1.0	75/100	2/5 75
QCA75A60	600	600	10	75	150	4.5	75		350	150	-40~125	2500	1.0	600	300	10	450	1.0	75/100	2/5 75
QCA75AA100	1000	1000	7	75		4.0	75		500	150	-40~125	2500	1.0	1000	200	7			75/100	2.8/5 75
QCA75AA120	1200	1200	10	75		4.0	75		500	150	-40~125	2500	1.0	1200	300	10			75	5 75
QCA75BA60	600	600	10	75	150	4.5	75		350	150	-40~125	2500	1.0	600	300	10	450	1.0	750	2.5 75
QCA100A40	400	400	10	100	200	6.0	100		620	150	-40~125	2500	1.0	400	400	10	300	1.0	75/100	2/5 100
QCA100A60	600	600	10	100	200	6.0	100		620	150	-40~125	2500	1.0	600	400	10	450	1.0	75/100	2/5 100
QCA100AA100	1000	1000	7	100		5.0	100		800	150	-40~125	2500	2.0	1000	400	7			75/100	2.8/5 100
QCA100AA120	1200	1200	10	100		5.0	100		800	150	-40~125	2500	2.0	1200	600	10			75	5 100
QCA100BA60	600	600	10	100	200	6.0	100		620	150	-40~125	2500	2.0	600	400	10	450	1.0	750	2.5 100

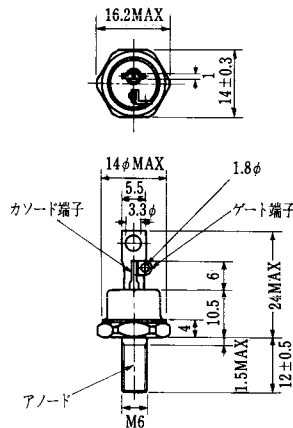


(T _a = 25°C)												エミッタ・コレクタ間ダイオード						熱抵抗		等 価 回 路	外形図	記 事	型 名
飽和電圧 (V)		I _C	I _B	スイッチング時間 (μs)			I _{B1}	I _{B2}	V _{CC}	I _C	V _F (V)	I _F	t _{rr} * 標準値				R _{th(j-c)} (°C/W)						
V _{CE}	V _{BE}			t _{on}	t _{off}	t _r							t _{rr}	I _F	I _F	V _{BE}	di/dt	トランジスタ部 最大	ダイオード部 最大				
最大	最大	(A)	(A)	最大	最大	最大	(A)	(A)	(V)	(A)	最大	(A)	(V)	(A/μs)	最大	最大							
2.0	2.5	100	1.4	2.0	12	3.0	2.0	-2.0	300	100	1.4	100				0.2	0.6	QBB-2A	S-98B1B	UL認定品		QBB100A40	
2.0	2.5	100	1.4	2.0	12	3.0	2.0	-2.0	300	100	1.4	100				0.2	0.6	QBB-2A	S-98B1B	UL認定品		QBB100A60	
2.0	2.5	150	2.0	2.0	12	3.0	2.0	-2.0	300	150	1.4	150				0.18	0.6	QBB-2A	S-98B1B	UL認定品		QBB150A40	
2.0	2.5	150	2.0	2.0	12	3.0	2.0	-2.0	300	150	1.4	150				0.18	0.6	QBB-2A	S-98B1B	UL認定品		QBB150A60	
2.0	2.5	30	0.4	1.0	12	2.0	0.6	-0.6	300	30	1.4	30				0.5	1.6	QCA-2B	S-94B1A	UL認定品		QCA30B40	
2.0	2.5	30	0.4	1.0	12	2.0	0.6	-0.6	300	30	1.4	30				0.5	1.6	QCA-2B	S-94B1A	UL認定品		QCA30B60	
2.0	2.5	50	0.67	1.0	12	2.0	1.0	-1.0	300	50	1.4	50				0.4	1.3	QCA-2B	S-94B1A	UL認定品		QCA50B40	
2.0	2.5	50	0.67	1.0	12	2.0	1.0	-1.0	300	50	1.4	50				0.4	1.3	QCA-2B	S-94B1A	UL認定品		QCA50B60	
2.5	3.5	50	1.0	2.5	15	3.0	1.0	-1.0	600	50	1.8	50				0.31	1.2	QCA-3A	S-94B1B	UL認定品		QCA50AA100	
3.0	3.5	50	1.0	2.5	15	3.0	1.0	-1.0	600	50	1.8	50				0.31	1.2	QCA-3A	S-94B1B			QCA50AA120	
2.0	2.5	75	1.0	2.0	12	3.0	1.0	-1.0	300	75	1.4	75				0.35	1.3	QCA-2B	S-94B1A	UL認定品		QCA75A40	
2.0	2.5	75	1.0	2.0	12	3.0	1.0	-1.0	300	75	1.4	75				0.35	1.3	QCA-2B	S-94B1A	UL認定品		QCA75A60	
2.5	3.5	75	1.5	2.5	15	3.0	1.5	-1.5	600	75	1.8	75				0.25	1.2	QCA-3A	S-108B1B	UL認定品		QCA75AA100	
3.0	3.5	75	1.5	2.5	15	3.0	1.5	-1.5	600	75	1.8	75				0.25	1.2	QCA-3A	S-108B1B			QCA75AA120	
2.5	3.0	75	0.1	2.0	8.0	2.0	0.15	-1.5	300	75	1.9	75	0.2 *	75	-5	75	0.35	1.3	QCA-3A	S-94B1A	高H _{FE} 品		QCA75BA60
2.0	2.5	100	1.4	2.0	12	3.0	2.0	-2.0	300	100	1.4	100				0.2	0.6	QCA-2C	S-95B1A	UL認定品		QCA100A40	
2.0	2.5	100	1.4	2.0	12	3.0	2.0	-2.0	300	100	1.4	100				0.2	0.6	QCA-2C	S-95B1A	UL認定品		QCA100A60	
2.5	3.5	100	2.0	3.0	15	3.0	2.0	-2.0	600	100	1.8	100				0.155	0.65	QCA-3B	S-108B2A	UL認定品		QCA100AA100	
3.0	3.5	100	2.0	3.0	15	3.0	2.0	-2.0	600	100	1.8	100				0.155	0.65	QCA-3B	S-108B2A			QCA100AA120	
2.5	3.0	100	0.13	2.0	8.0	2.0	0.2	-2.0	300	100	1.8	100	0.2 *	100	-5	100	0.2	0.6	QCA-3B	S-95B1A	高H _{FE} 品		QCA100BA60

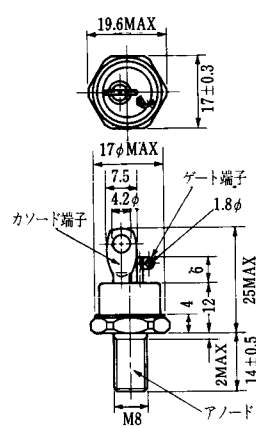
FD-1



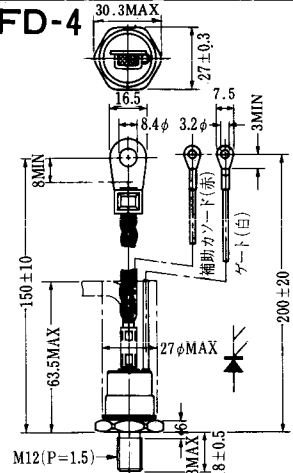
FD-2



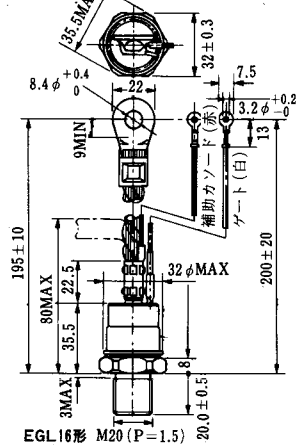
FD-3



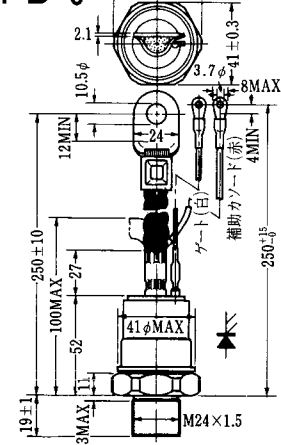
FD-4



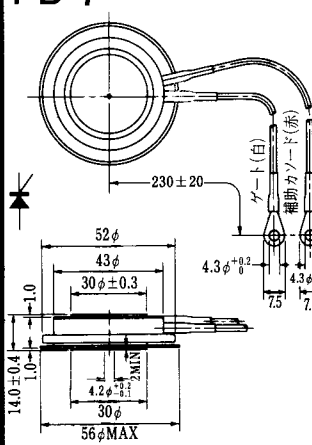
FD-5



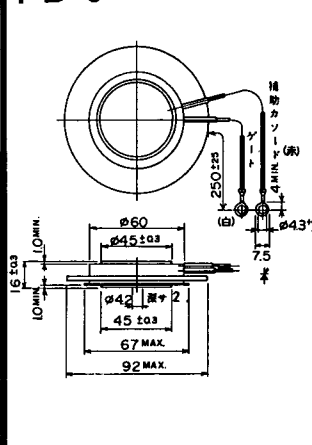
FD-6



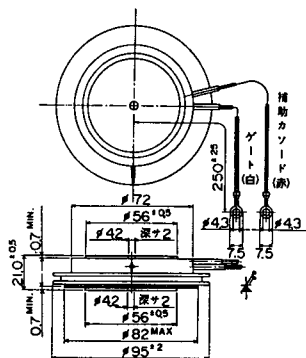
FD-7



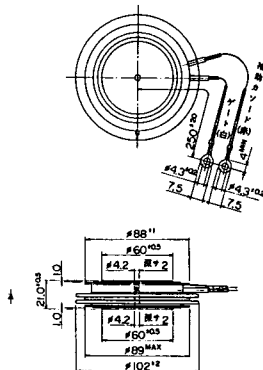
FD-8



FD-9

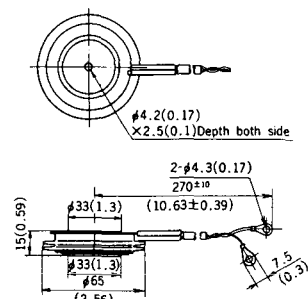
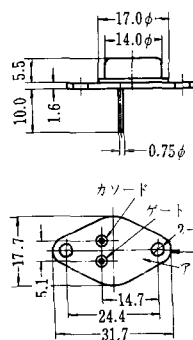
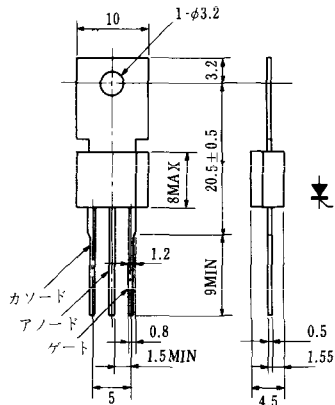


FD-10

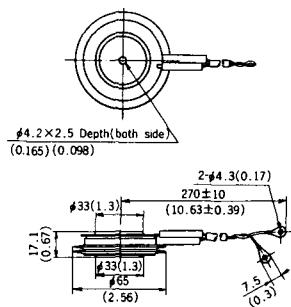


FD-11

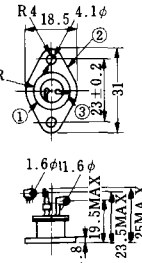
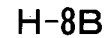
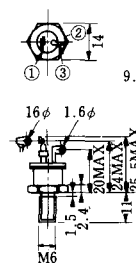
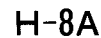
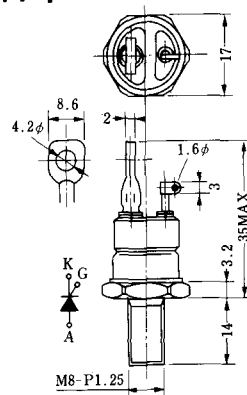
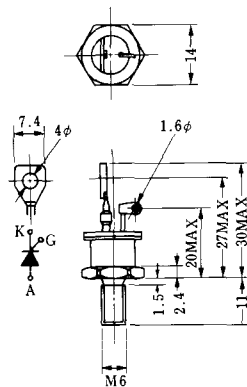
FD-12



Unit in mm (inch)

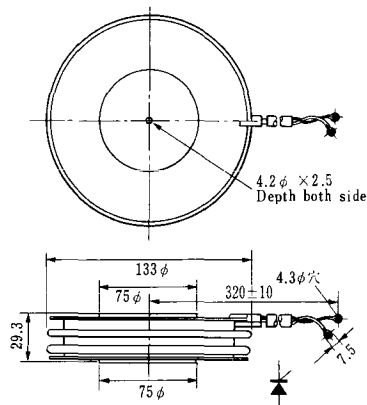


Unit in mm(inch)

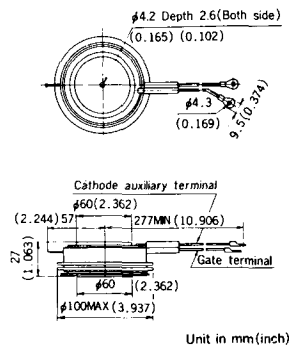


- ①アノード
②カソード
③ゲート

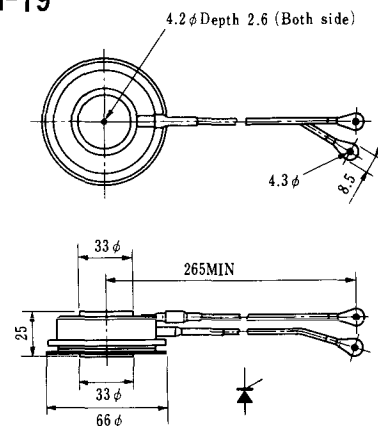
H-17



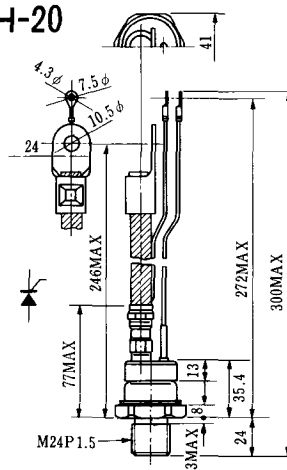
H-18



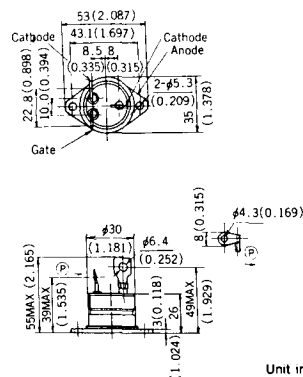
H-19



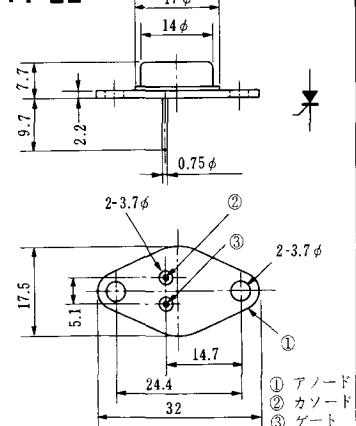
H-20



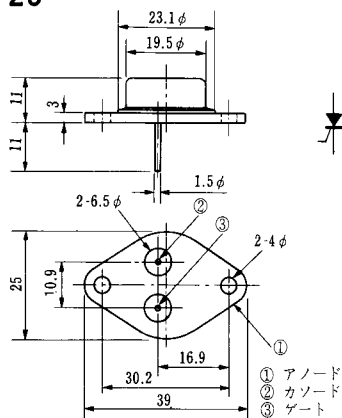
H-21



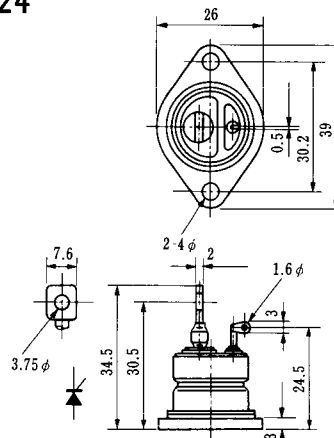
H-22



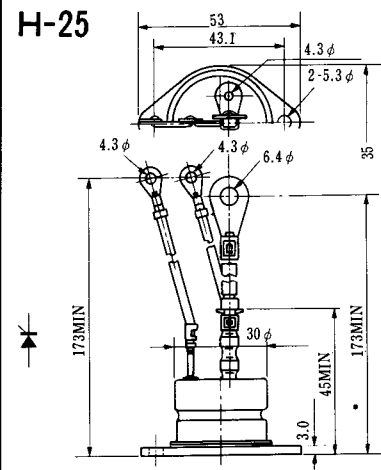
H-23



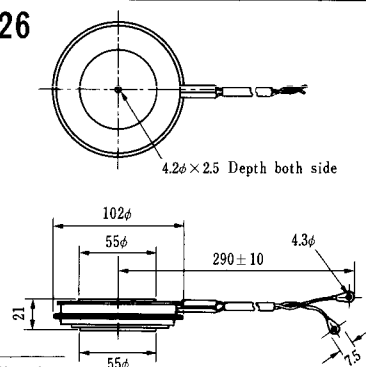
H-24



H-25

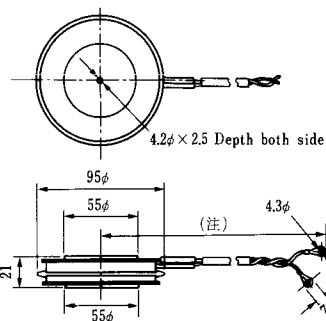


H-26



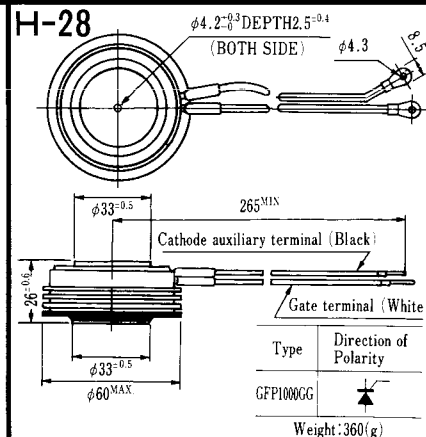
Type	Direction of polarity
CA12	

H-27



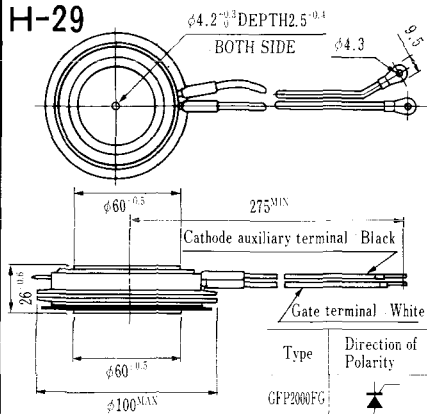
Type	Direction of polarity
CF11V	

H-28



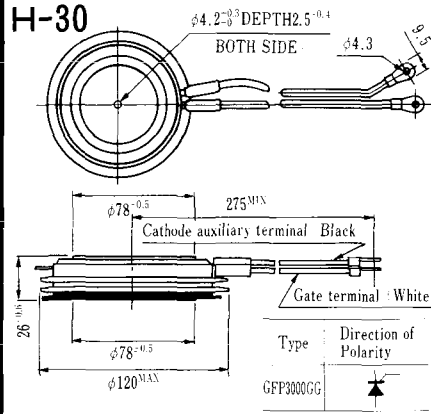
Note: The thickness is a dimension in press at the rated mounting force.

H-29



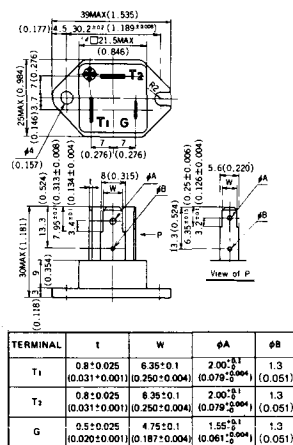
Note : The thickness is a dimension in press at the rated mounting force.

H-30



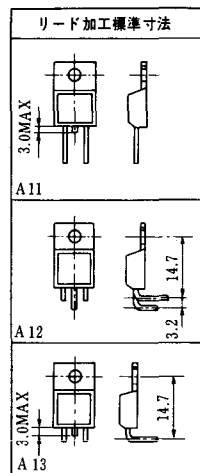
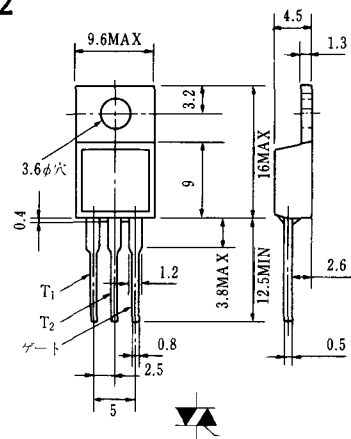
Note : The thickness is a dimension in press at the rated mounting force.

HT-1

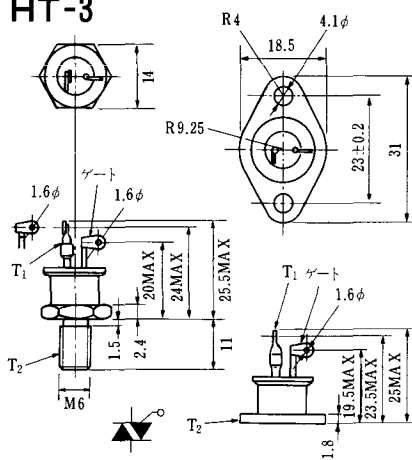


Unit in mm (inch)

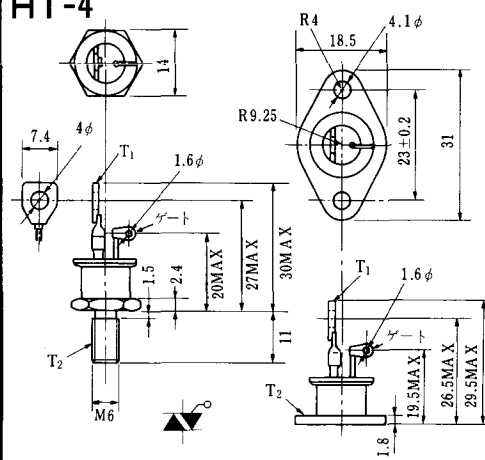
HT-2



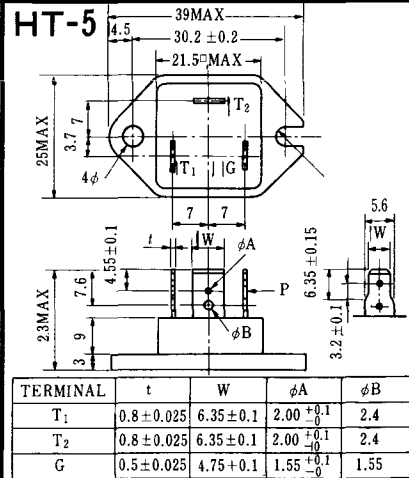
HT-3



HT-4

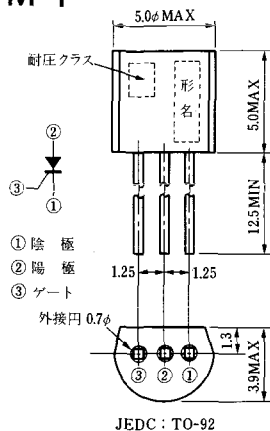


HT-5

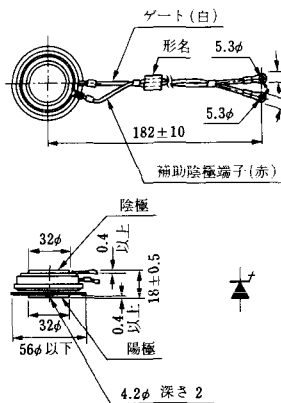


《寸法図単位：mm》

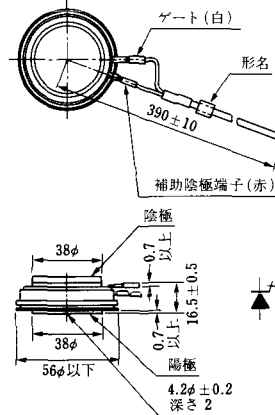
M-1



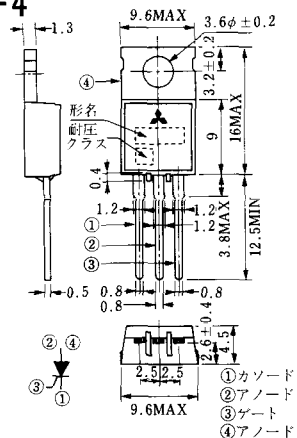
M-2



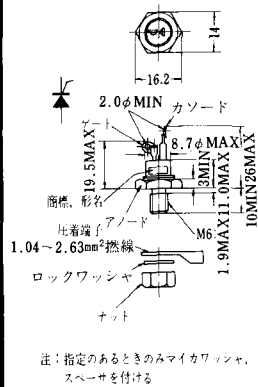
M-3



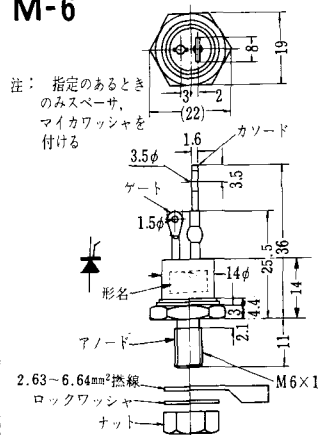
M-4



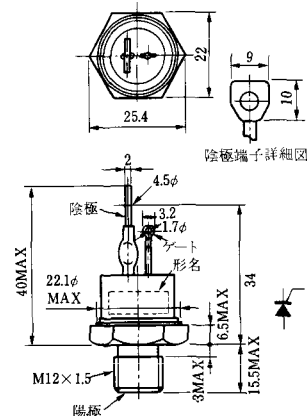
M-5



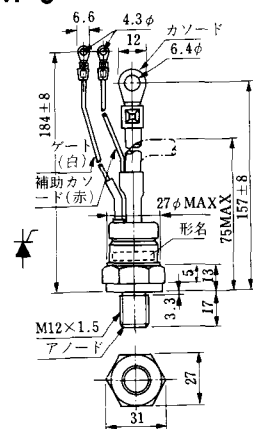
M-6



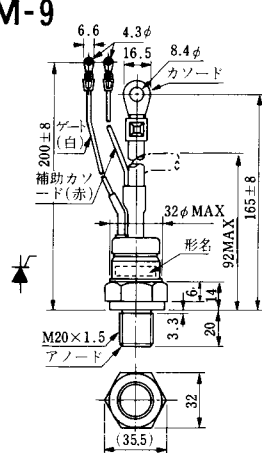
M-7



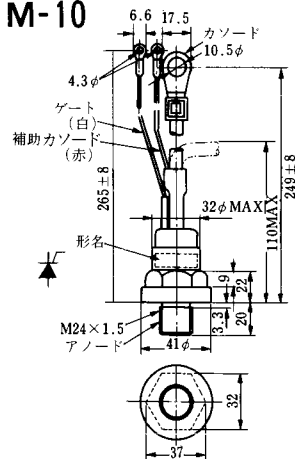
M-8



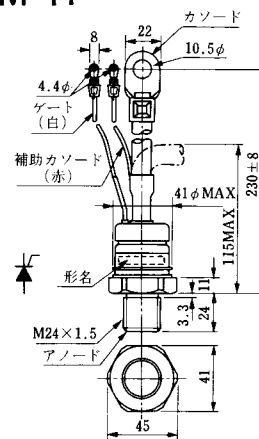
M-9



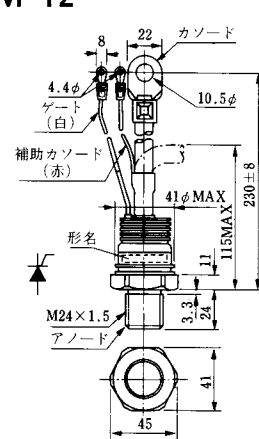
M-10



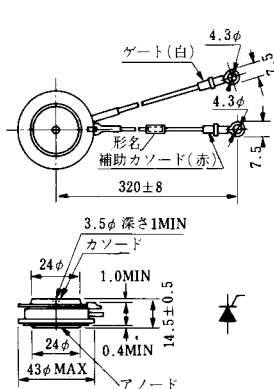
M-11



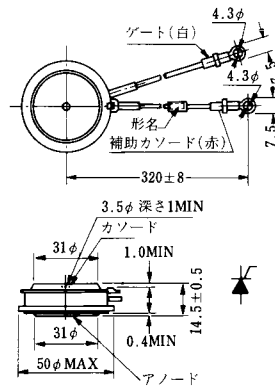
M-12



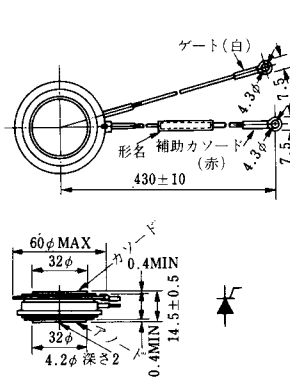
M-13



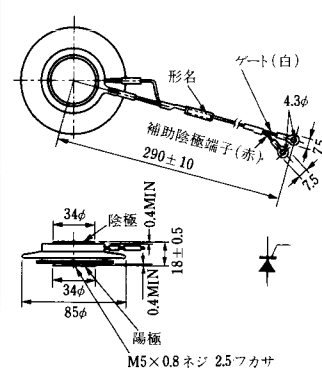
M-14



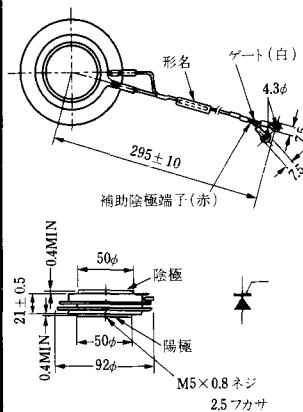
M-15



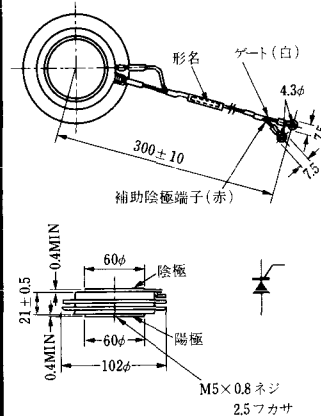
M-16



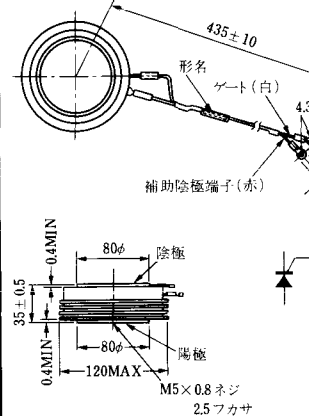
M-17



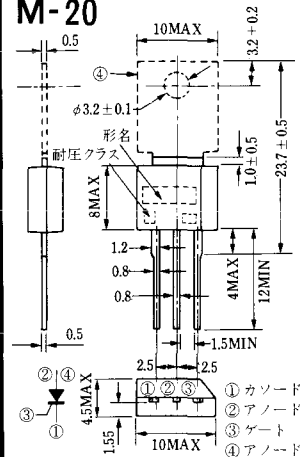
M-18



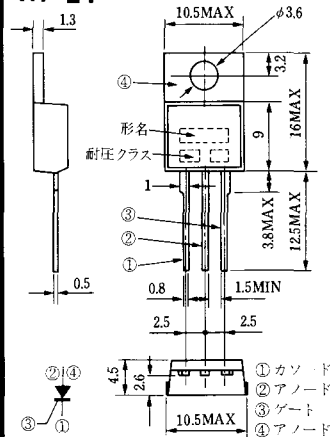
M-19



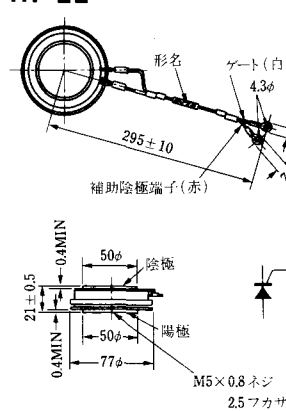
M-20



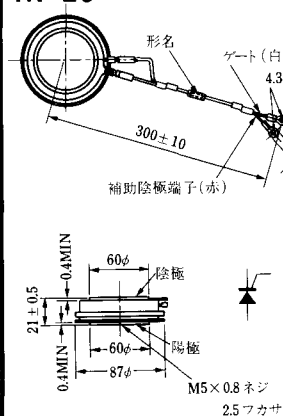
M-21



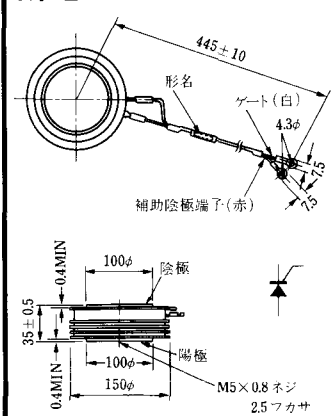
M-22



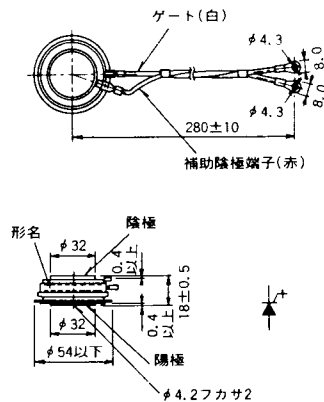
M-23



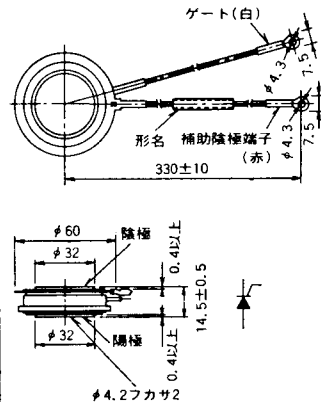
M-24



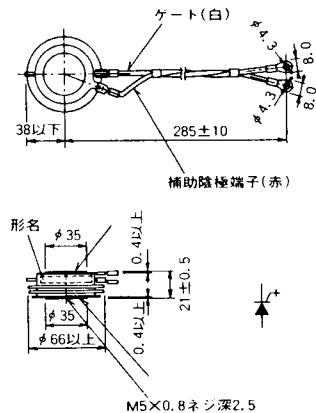
M-25



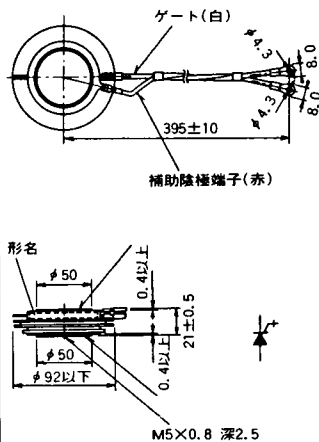
M-26



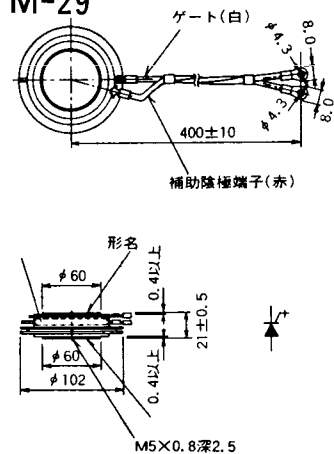
M-27



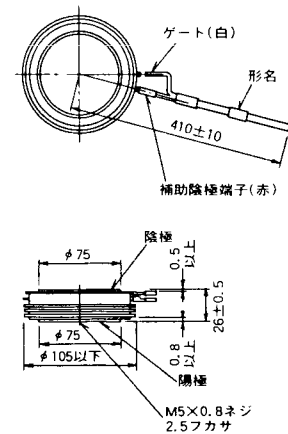
M-28



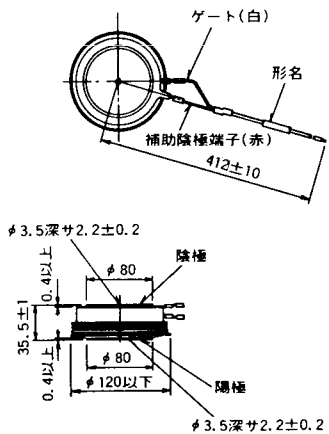
M-29



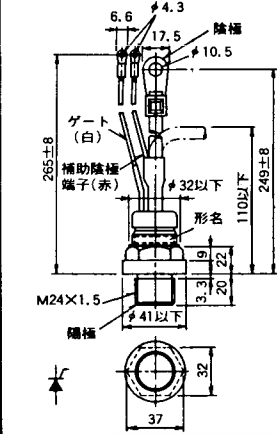
M-30



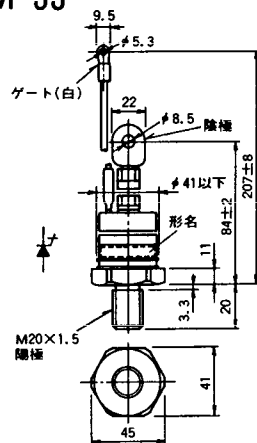
M-31



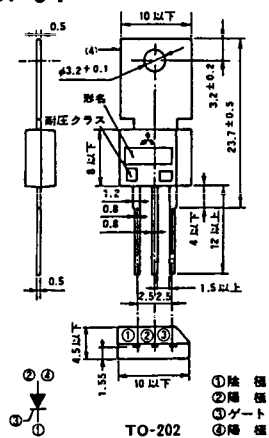
M-32



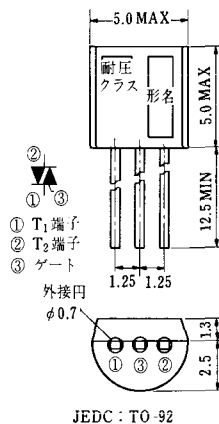
M-33



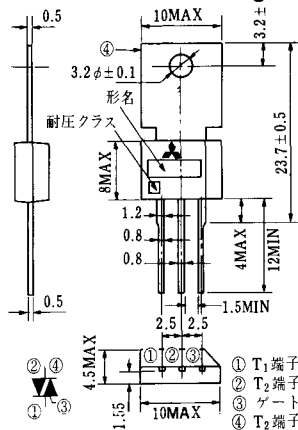
M-34



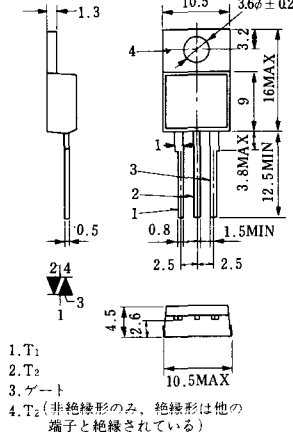
MT-1



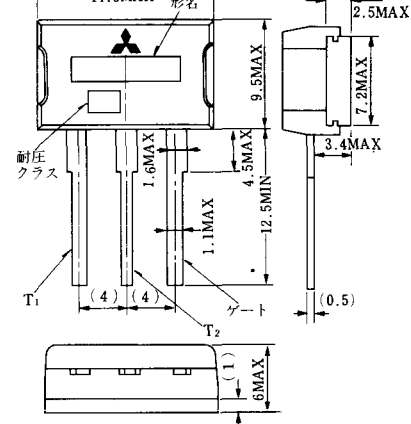
MT-2



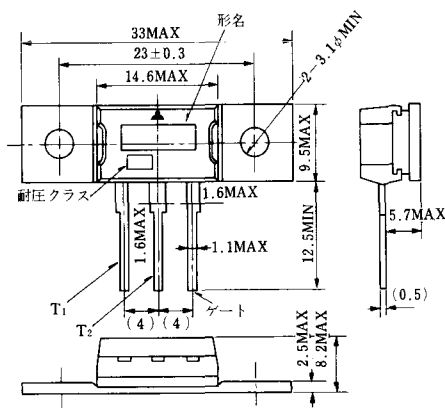
MT-3



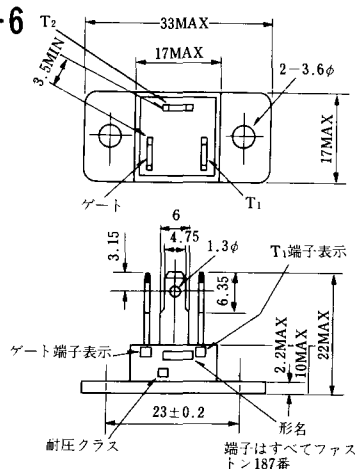
MT-4



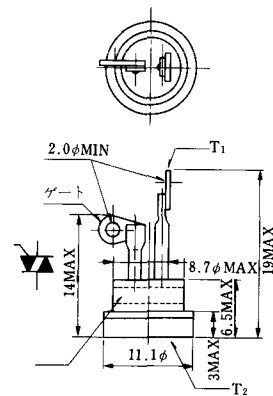
MT-5



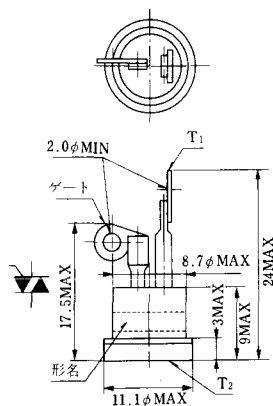
MT-6



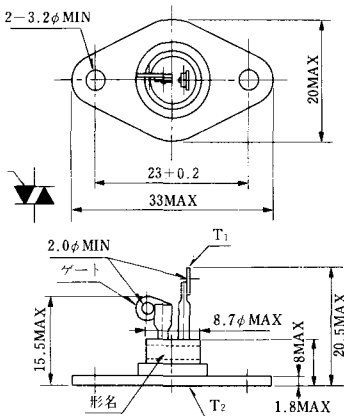
MT-7



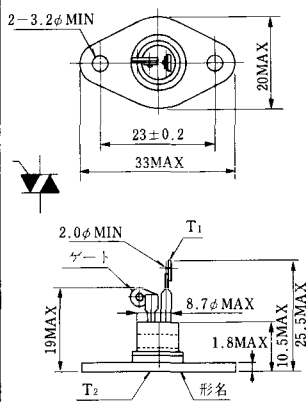
MT-8



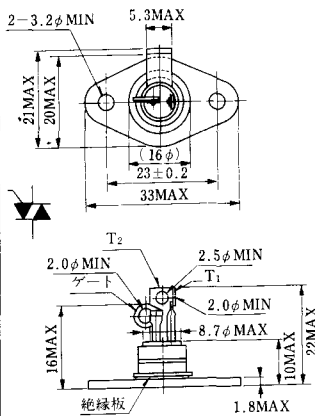
MT-9



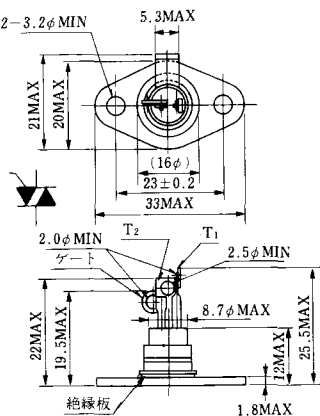
MT-10



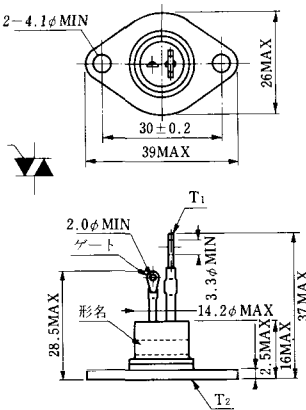
MT-11



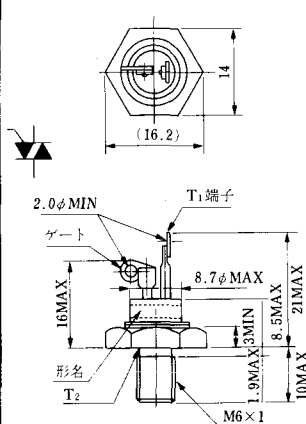
MT-12



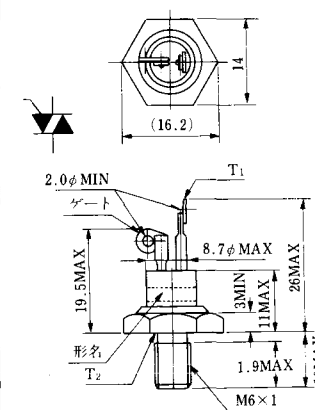
MT-13



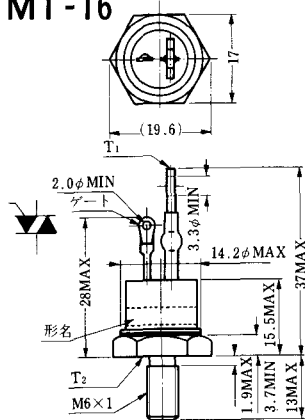
MT-14



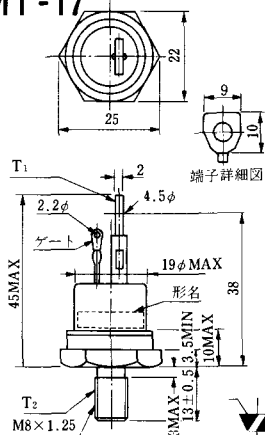
MT-15



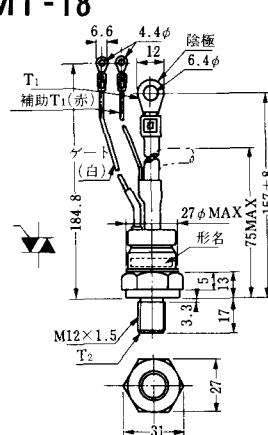
MT-16



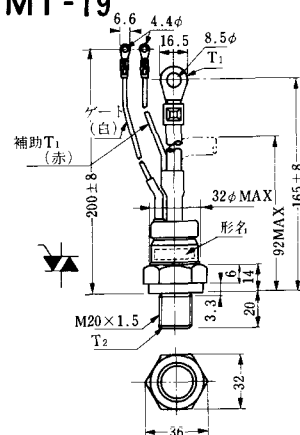
MT-17



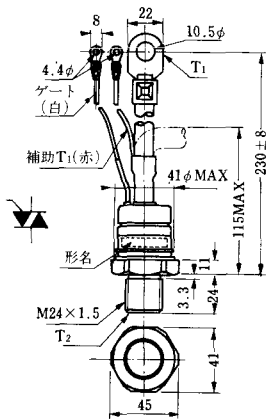
MT-18



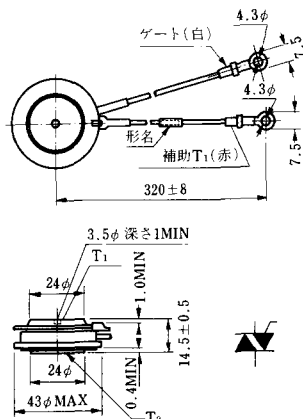
MT-19



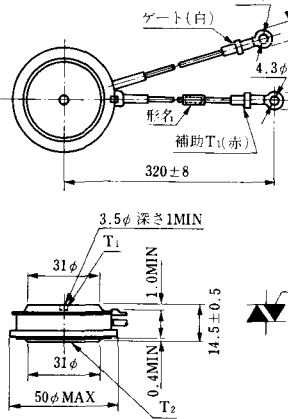
MT-20



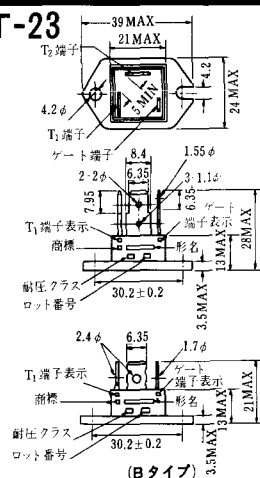
MT-21



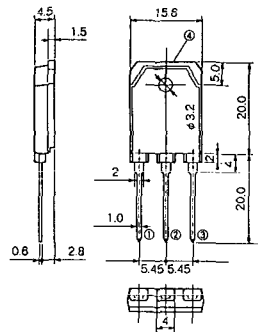
MT-22



MT-23



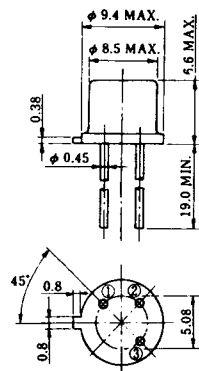
MT-24



TO - 3P

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

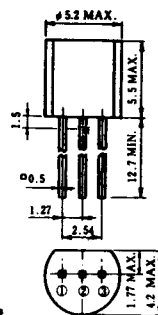
N-1



電極接続

- ① カソード
- ② ゲート
- ③ アノード

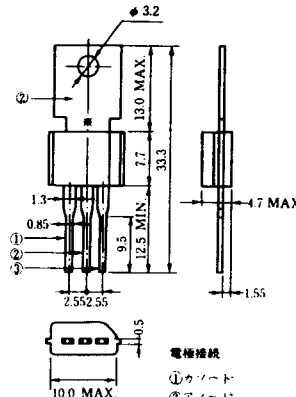
N-2



電極接続

- ① ヤード
- ② アノード
- ③ カソード

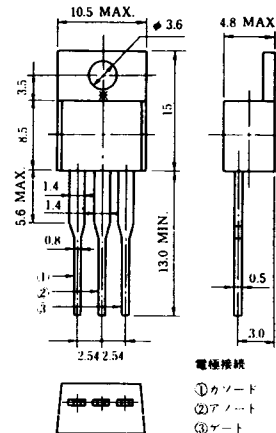
N-3



電極接続

- ① カソード
- ② アノード
- ③ ゲート

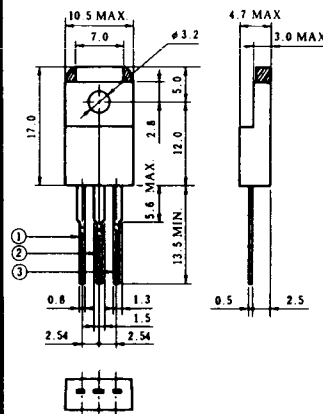
N-4



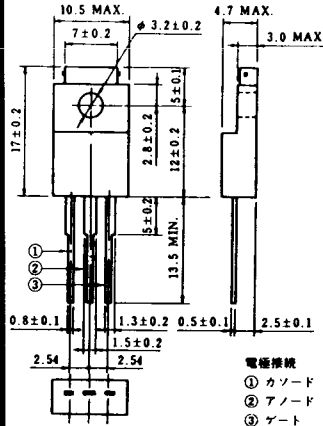
電極接続

- ① カソード
- ② アノード
- ③ ゲート

N-5



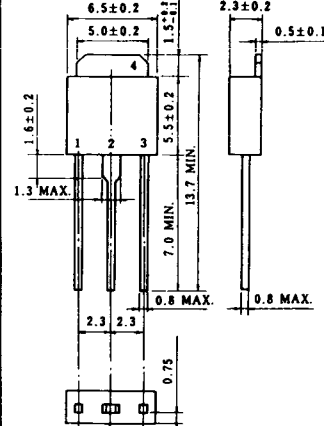
N-6



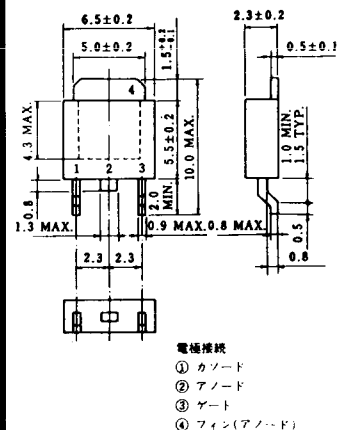
電極接続

- ① カソード
- ② アノード
- ③ ゲート

N-7



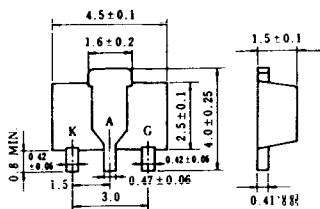
N-8



電極接続

- ① カソード
- ② アノード
- ③ ゲート
- ④ フィン(アノード)

N-9



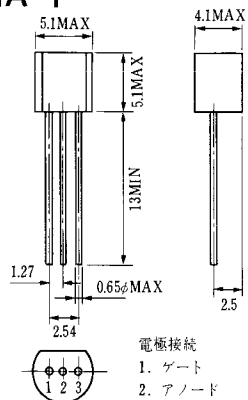
電極接続

K : カソード

A : アノード

G : ゲート

NA-1

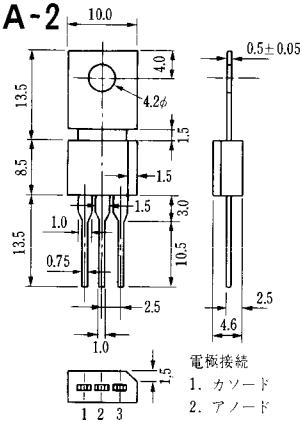


電極接続

1. ゲート
2. アノード
3. カソード

JEDEC: TO-92

NA-2



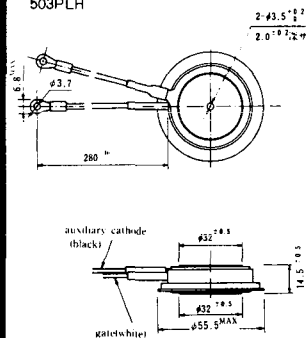
電極接続

1. カソード
2. アノード
3. ゲート

JEDEC: TO-202AA

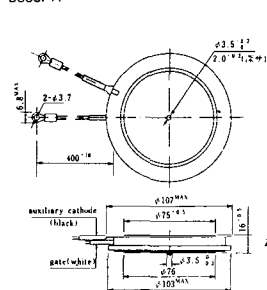
NI-16

503PLF
503PLH



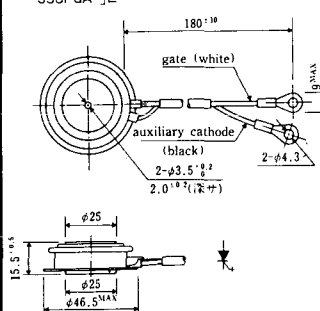
NI-17

3003PA



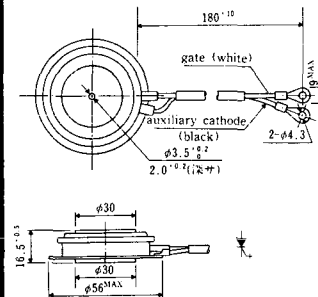
NI-18

353PGA「E



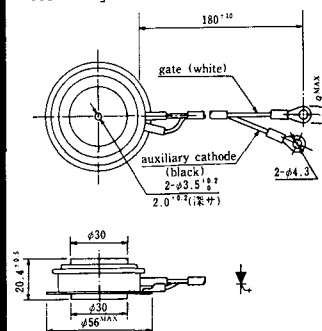
NI-19

603PGA, 603PGA「A, 803PGA



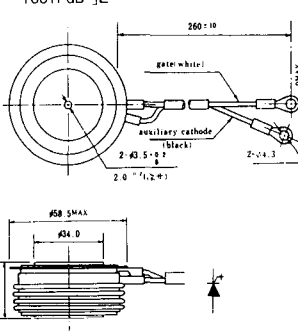
NI-20

603PGA「E



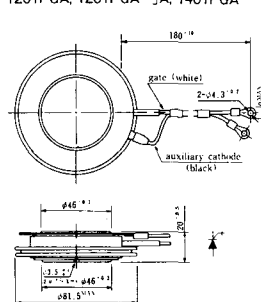
NI-21

1001PGB「E



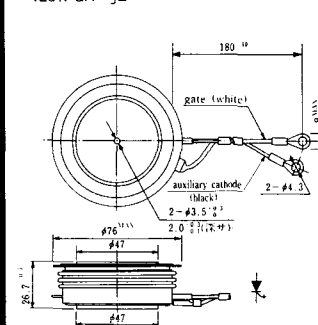
NI-22

1201PGA, 1201PGA「A, 1401PGA



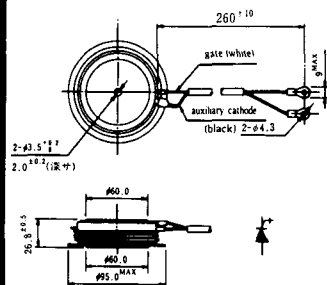
NI-23

1201PGA「E



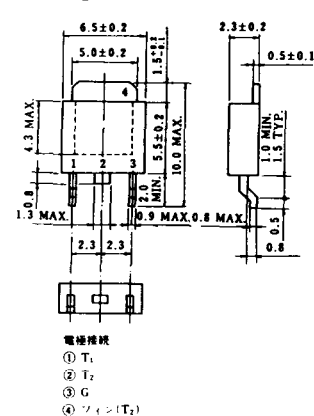
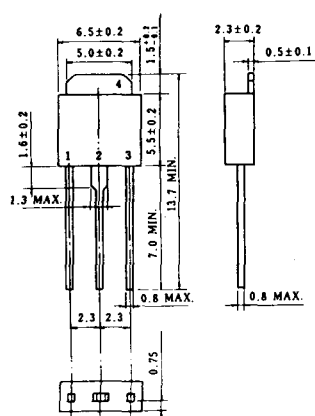
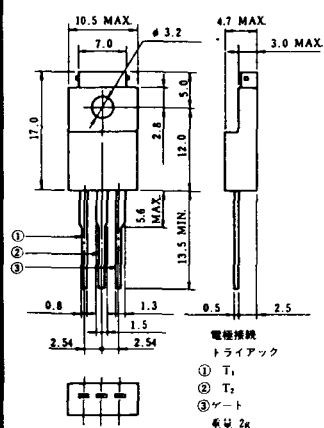
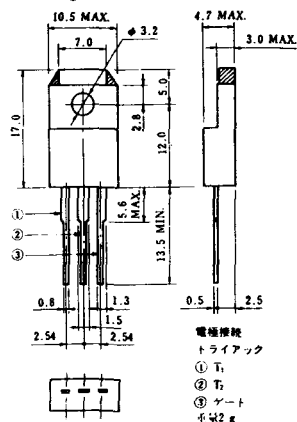
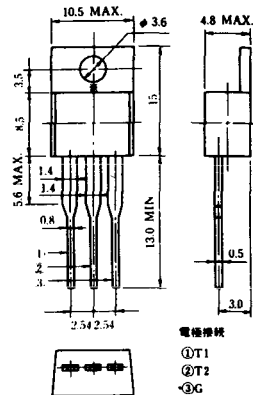
NI-24

2001PGB^r JE

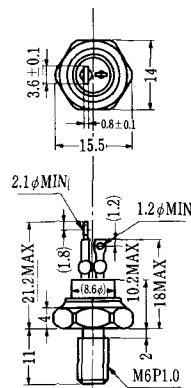


NI-25

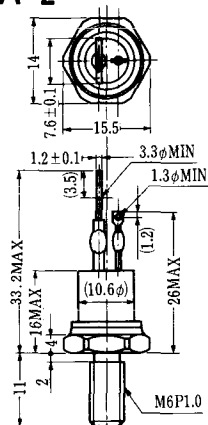
NI-26



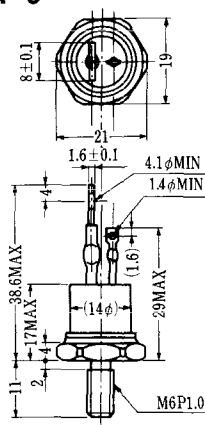
SA-1



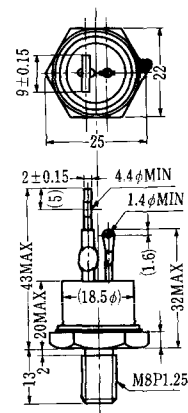
SA-2



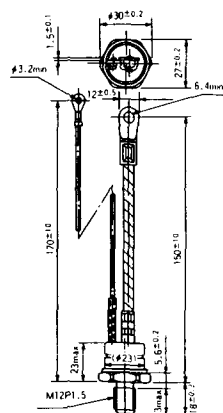
SA-3



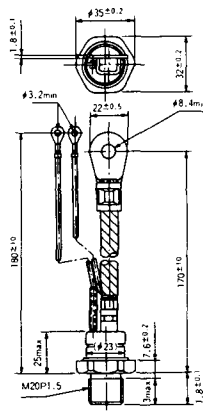
SA-4



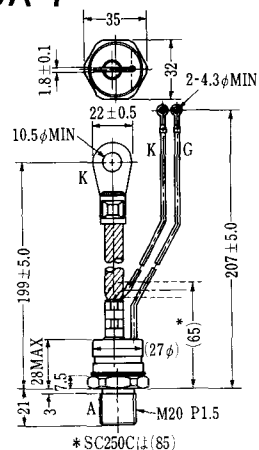
SA-5



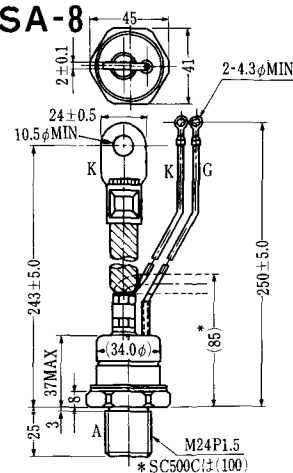
SA-6



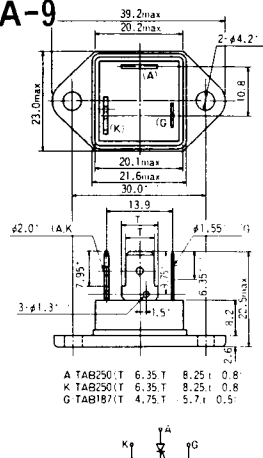
SA-7



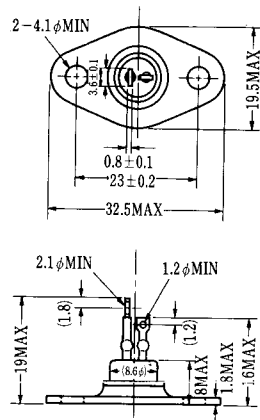
SA-8



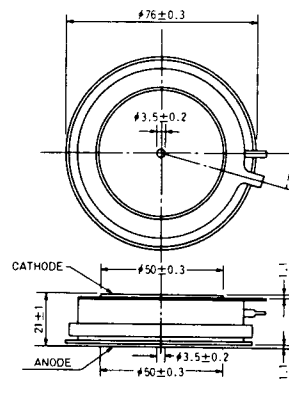
SA-9



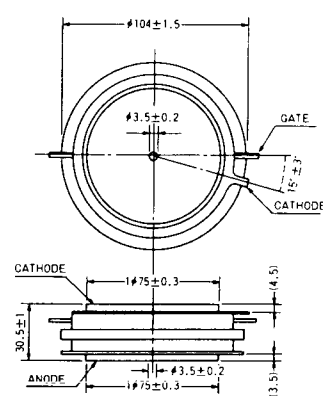
SA-10



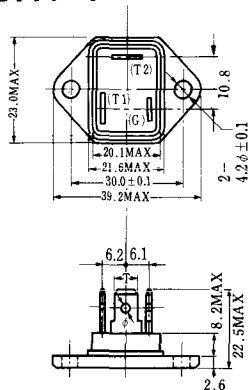
SA-11



SA-12

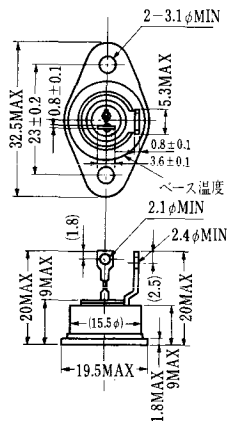


SAT-1

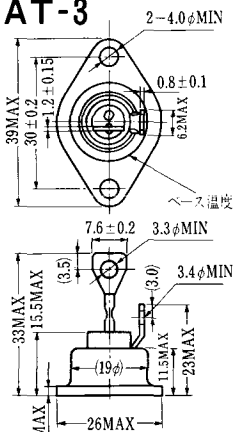


T1端子:ファストン250($T=6.35$, $t=0.8$, $\phi=1.65$)
T2端子:ファストン250($T=6.35$, $t=0.8$, $\phi=1.65$)
G端子:ファストン187($T=4.75$, $t=0.5$, $\phi=1.3$)

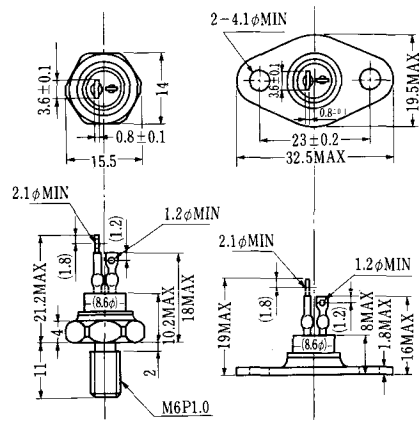
SAT-2



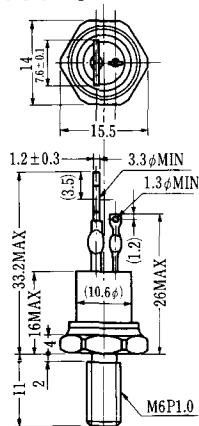
SAT-3



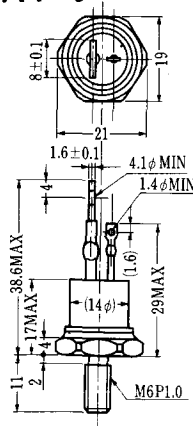
SAT-4



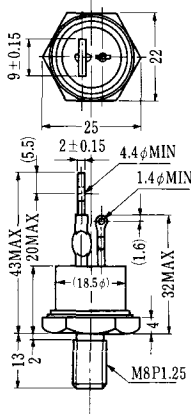
SAT-5



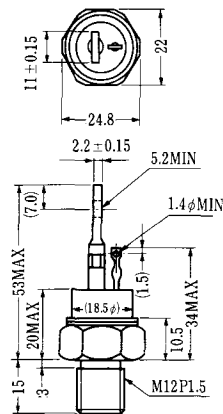
SAT-6



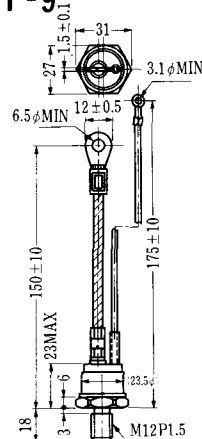
SAT-7



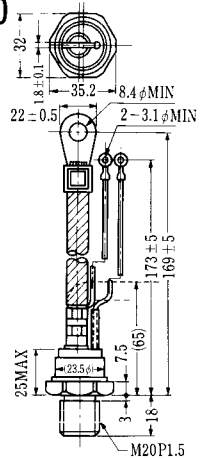
SAT-8



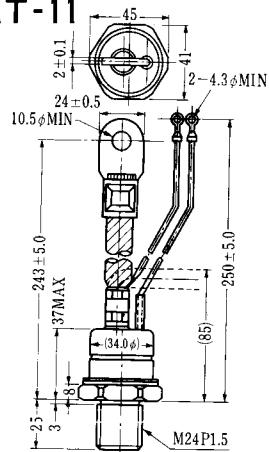
SAT-9.



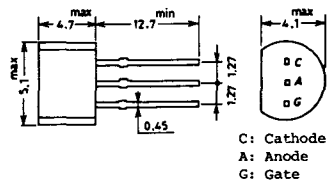
SAT-10



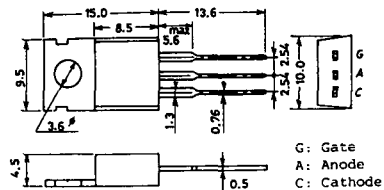
SAT-11



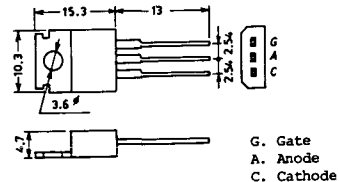
SY-1(1096A)



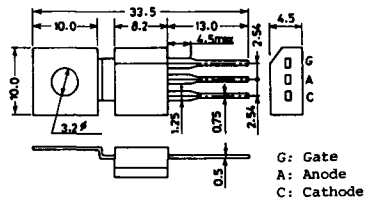
SY-2(1151)



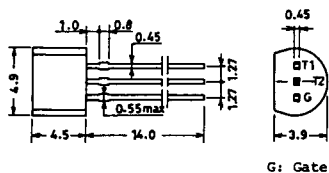
SY-3(1104)



SY-4(1150)

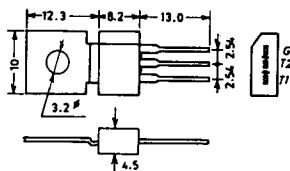


1097A

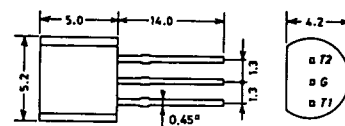


G: Gate

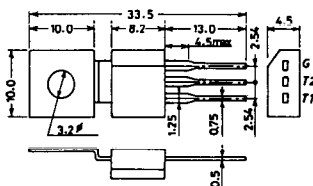
1102



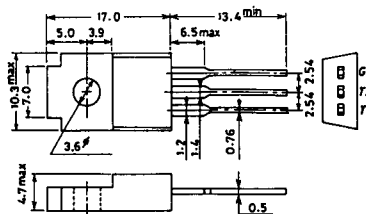
1141



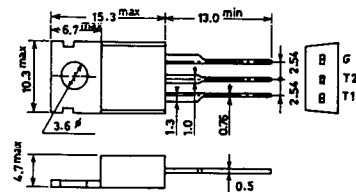
1142



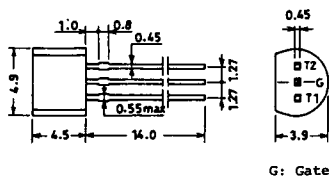
1144



1155

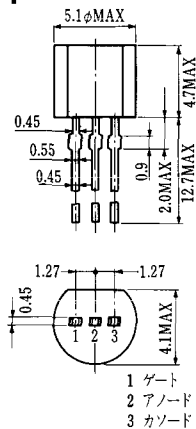


1192A

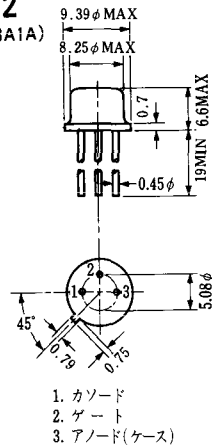


G: Gate

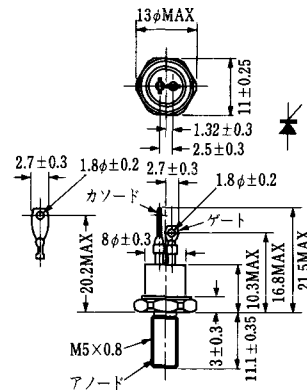
T-1 (13-5A1A)



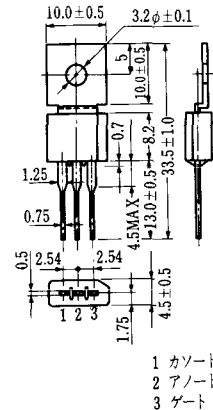
T-2 (13-8A1A)



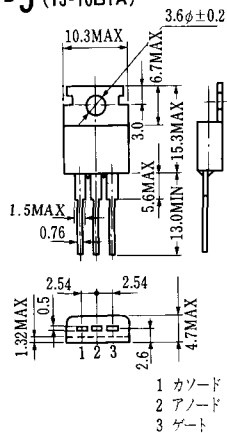
T-3 (13-8C1A)



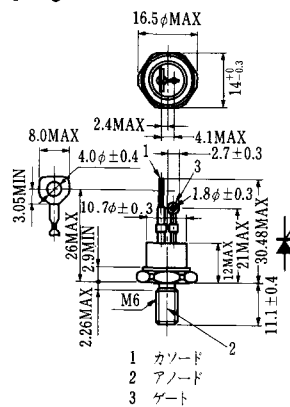
T-4 (13-10A1A)



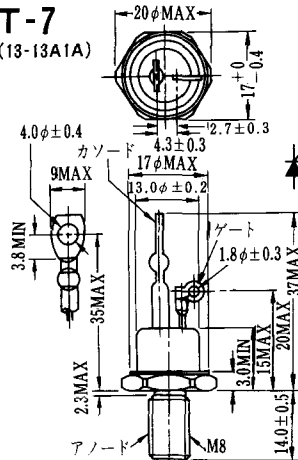
T-5 (13-10B1A)



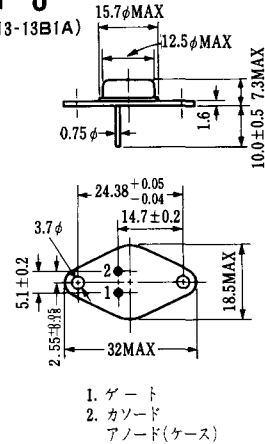
T-6 (13-11D1A)



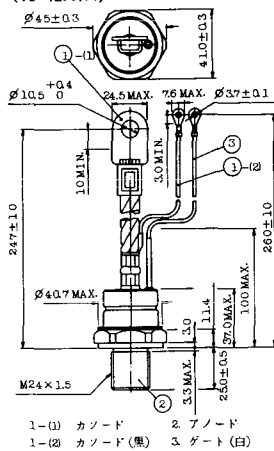
T-7 (13-13A1A)



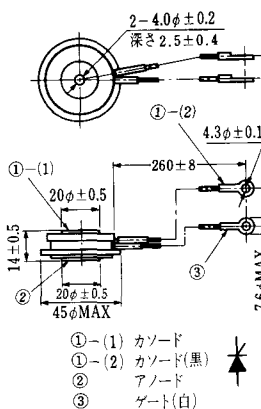
T-8 (13-13B1A)



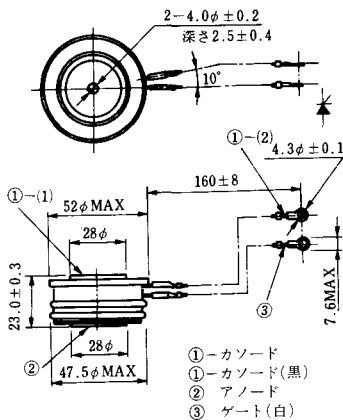
T-17 (13-42A1A)



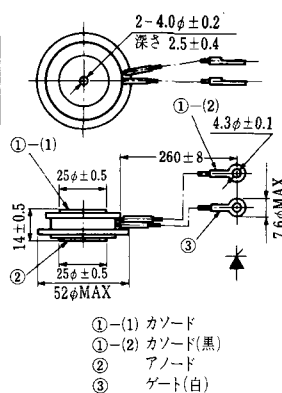
T-18 (13-45D1A)



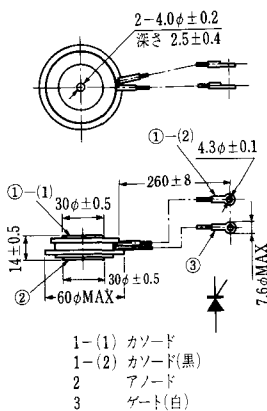
T-19 (13-52B1A)



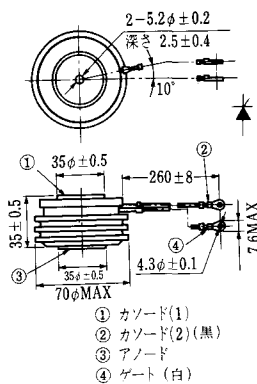
T-20 (13-52C1A)



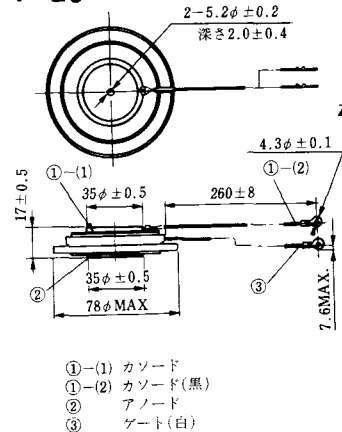
T-21 (13-60A1A)



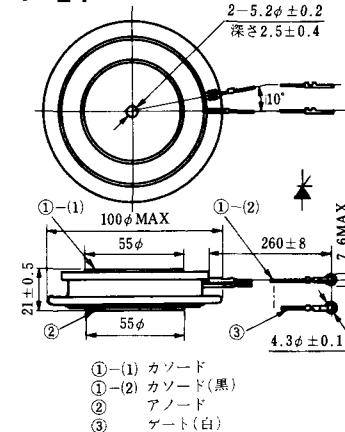
T-22 (13-70C1A)

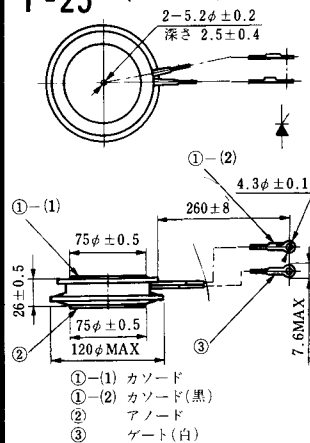
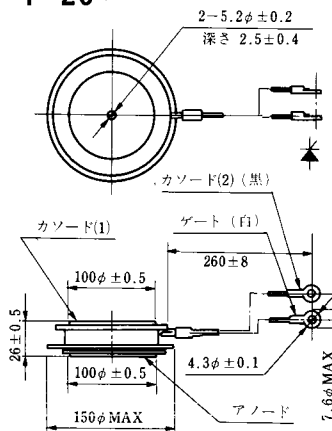
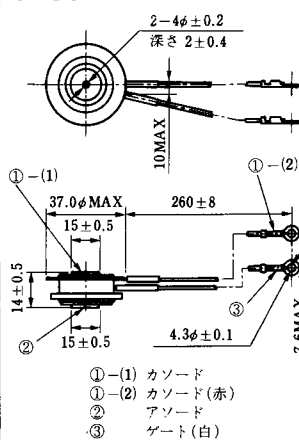
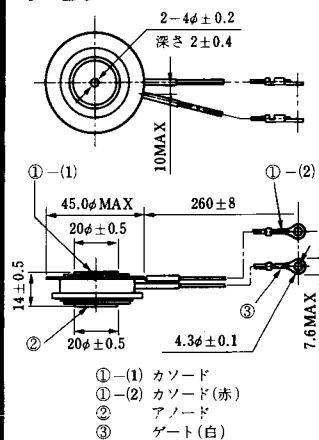
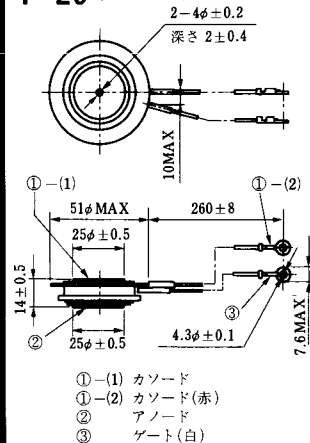
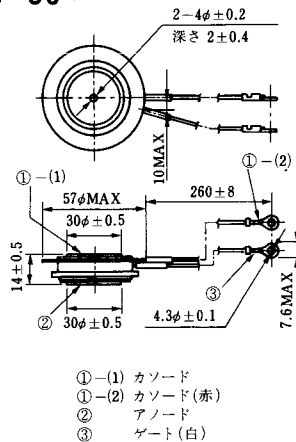
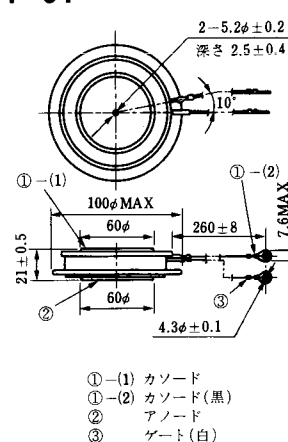
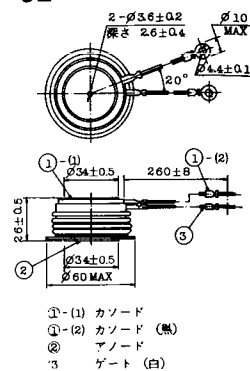


T-23 (13-78A1A)

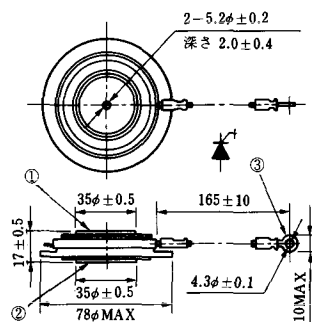


T-24 (13-100C1A)



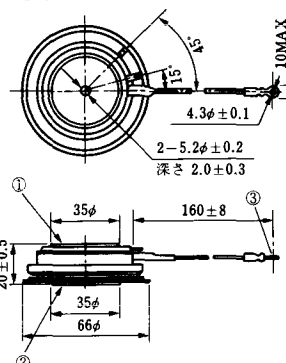
T-25 (13-120A2A)**T-26** (13-150A1A)**T-27** (13-37A1A)**T-28** (13-45E1A)**T-29** (13-51A1A)**T-30** (13-57A1A)**T-31** (13-100E1A)**T-32** (13-60E3A)

T-33 (13-78B1A)



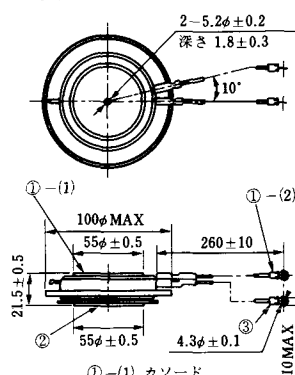
- ① カソード
- ② アノード
- ③ ゲート

T-34 (13-66A1A)



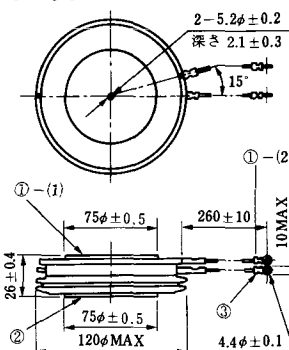
- ① カソード
- ② アノード
- ③ ゲート

T-35 (13-100D1A)



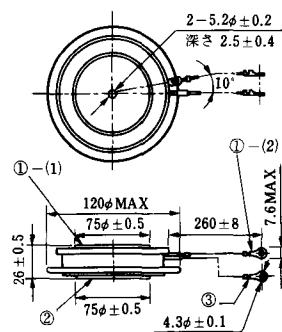
- ①-(1) カソード
- ①-(2) カソード(黒)
- ② アノード
- ③ ゲート(白)

T-36 (13-120E1A)



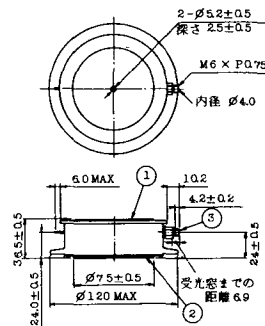
- ①-(1) カソード
- ①-(2) カソード(黒)
- ② アノード
- ③ ゲート(白)

T-37 (13-120A1A)



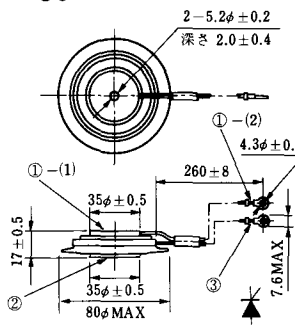
- ①-(1) カソード
- ①-(2) カソード(黒)
- ② アノード
- ③ ゲート(白)

T-38 (13-120C1A)



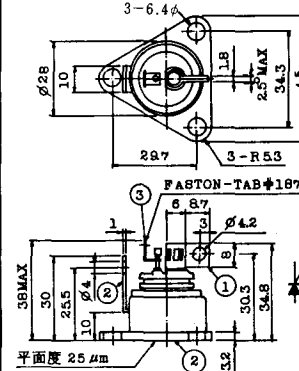
- ① カソード
- ② アノード
- ③ ゲート

T-39 (13-80B1A)



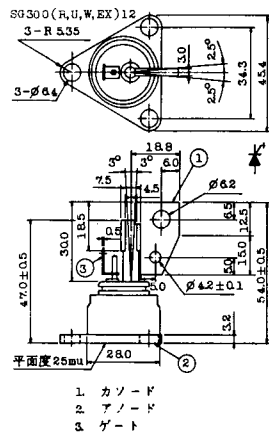
- ①-(1) カソード
- ①-(2) カソード(黒)
- ② アノード
- ③ ゲート(白)

T-40 (13-28A1A)

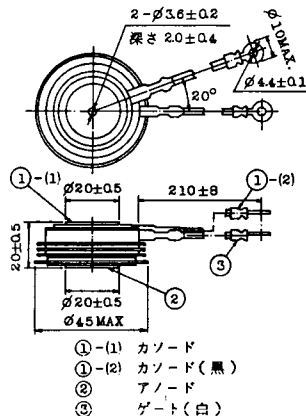


- 1. カソード
- 2. アノード
- 3. ゲート

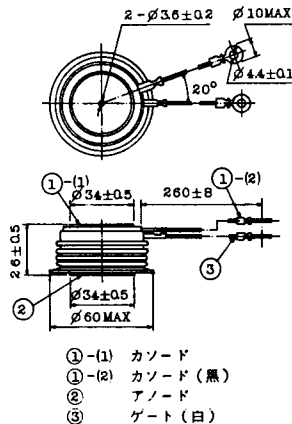
T-41 (13-28A2A)



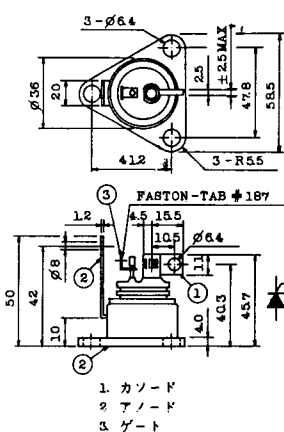
T-42 (13-45F1A)



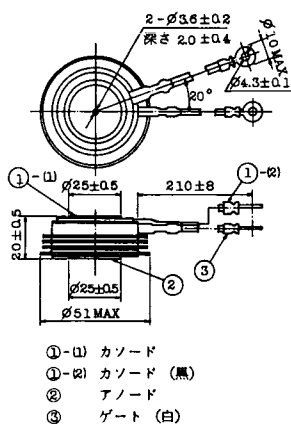
T-43 (13-60E2A)



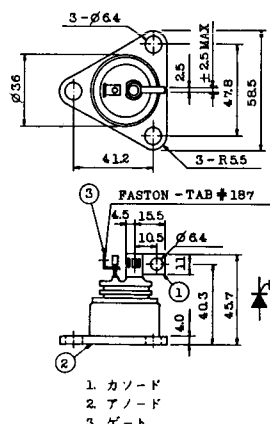
T-44 (13-36A1A)



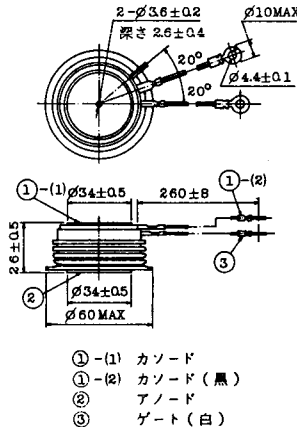
T-45 (13-51B1A)



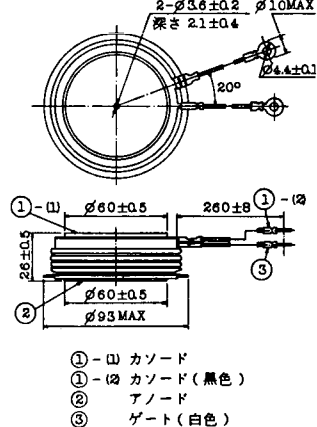
T-46 (13-36B1A)



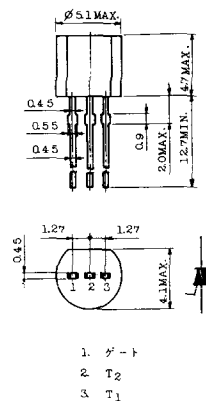
T-47 (13-60E1A)



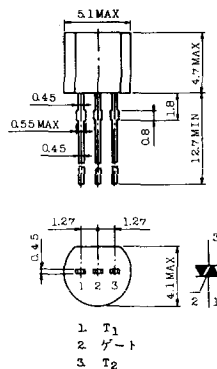
T-48 (13-93C1A)



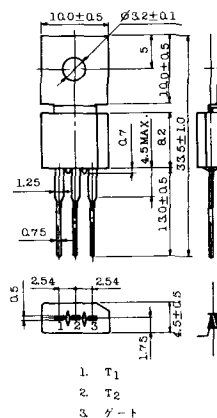
TT-1



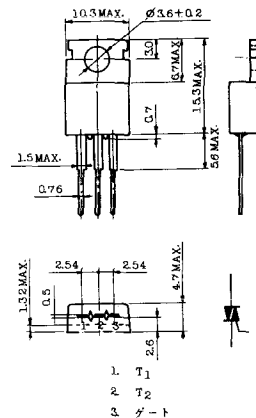
TT-2



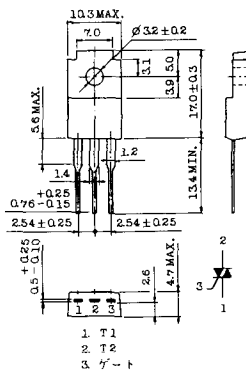
TT-3



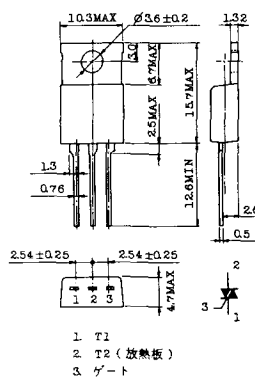
TT-4



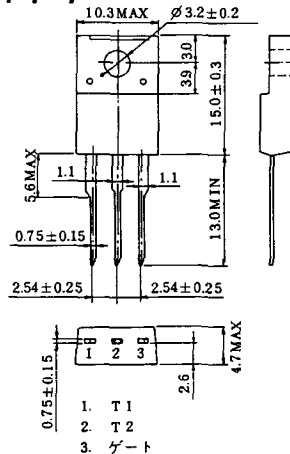
TT-5



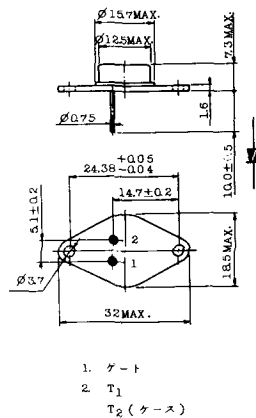
TT-6



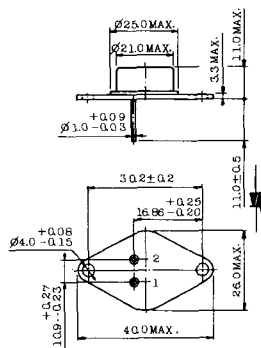
TT-7



TT-8

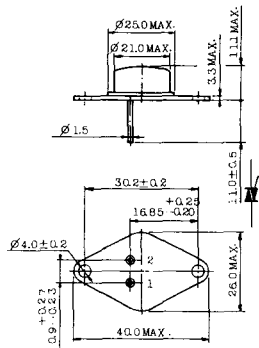


TT-9



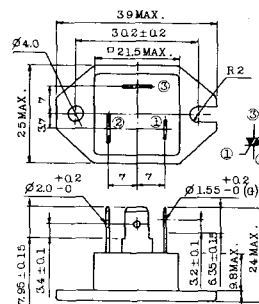
1. ゲート
2. T₁
3. T₂ (ケース)

TT-10



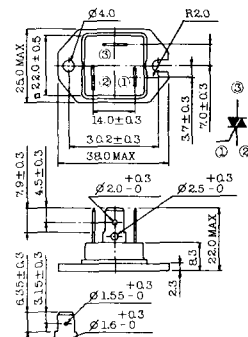
1. ゲート
2. T₁
3. T₂ (ケース)

TT-11



1. ゲート (ファストン端子 #187)
2. T₁ (" #250)
3. T₂ (" #250)

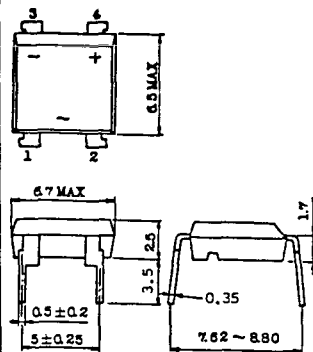
TT-12



ゲート端子詳細

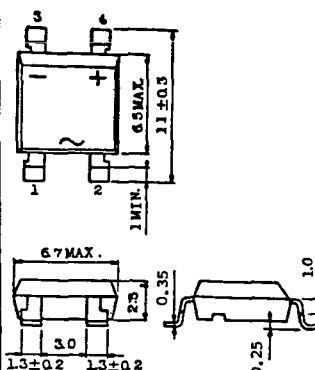
- ① ゲート (ファストン端子 #187)
- ② T₁ (" #250)
- ③ T₂ (" #250)

TT-13



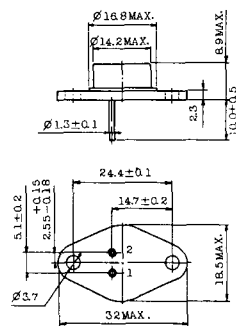
- 1, 2: T₂
- 3: GATE
- 4: T₁

TT-14



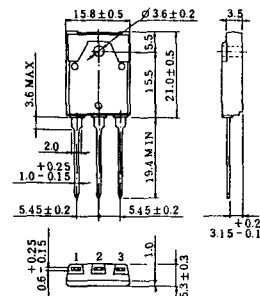
- 1, 2: T₂
- 3: GATE
- 4: T₁

TT-15 (13-14A1B)



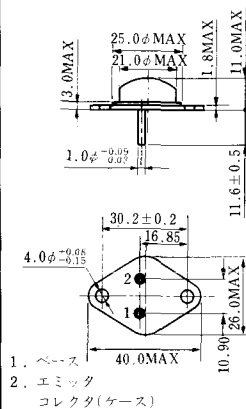
1. ゲート
2. T₁
- T₂ (ケース)

TT-16 (13-16A1A)

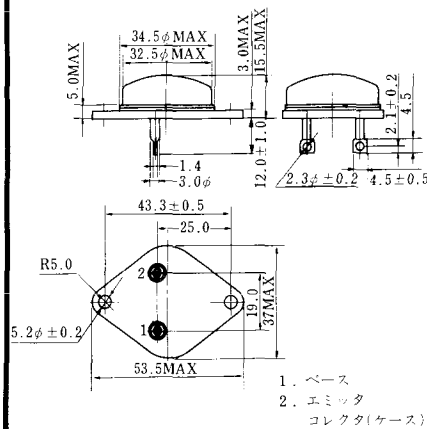


1. T₁
2. T₂
3. ゲート

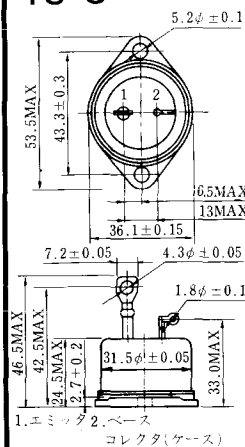
TS-1



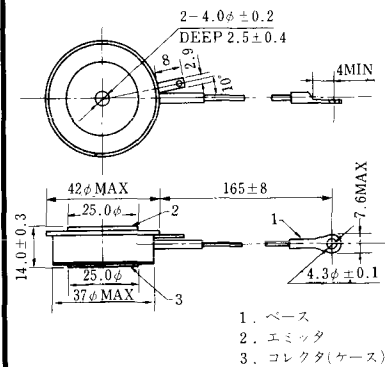
TS-2



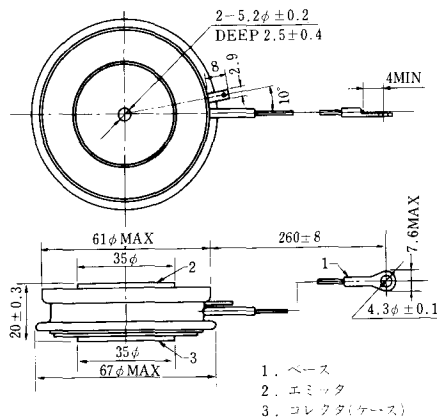
TS-3



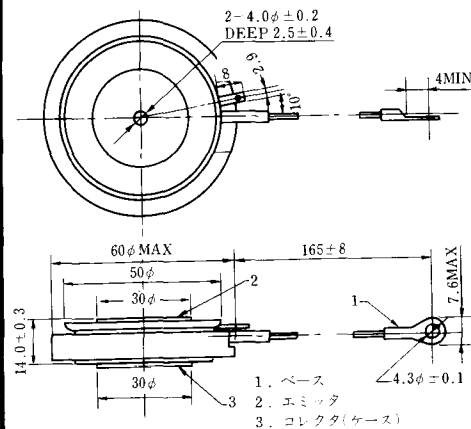
TS-4



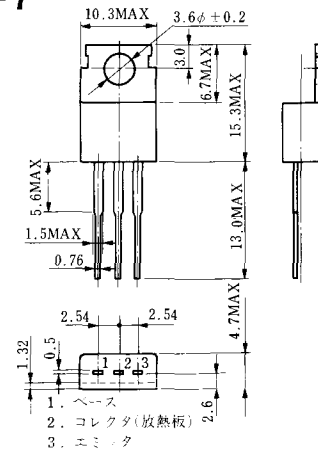
TS-5

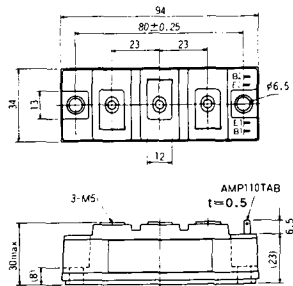
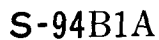
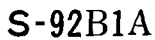
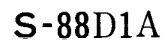
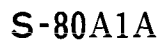


TS-6

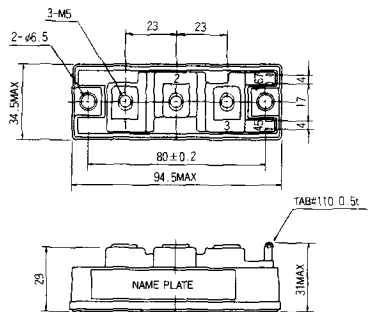


TS-7

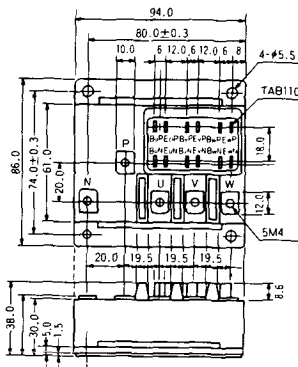




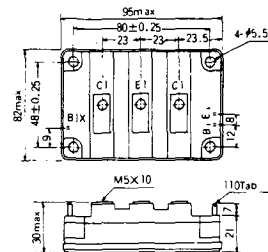
S-94B2A



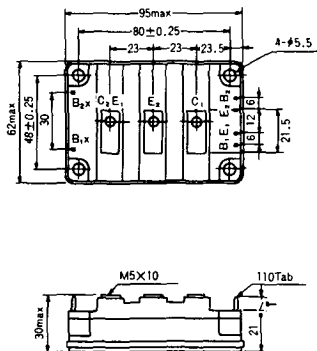
S-94D1A



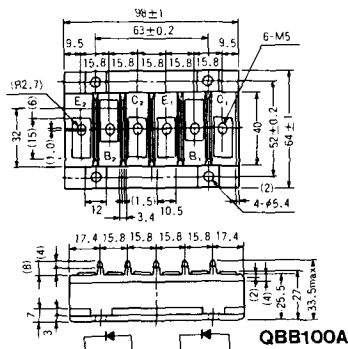
S-95A1A



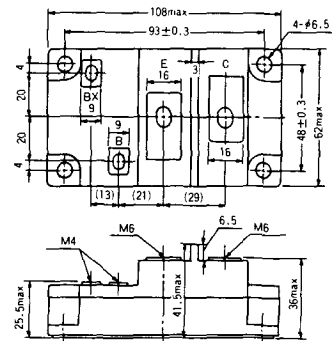
S-95B1A



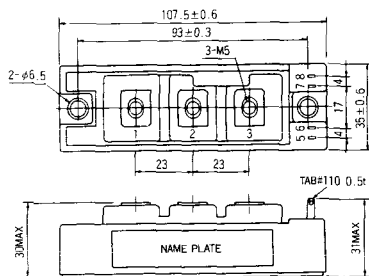
S-98B1B



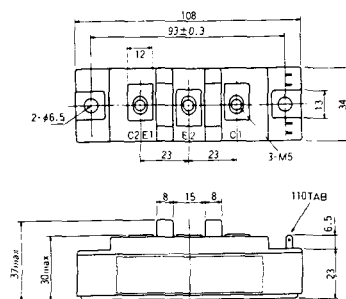
S-108A2A



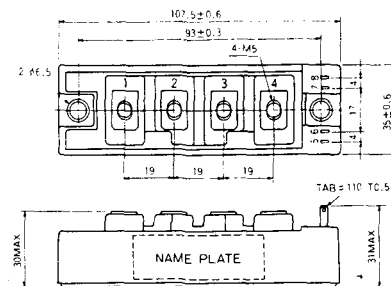
S-108B1A



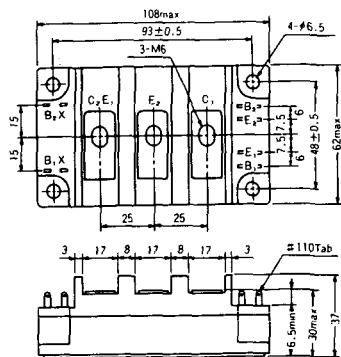
S-108B1B



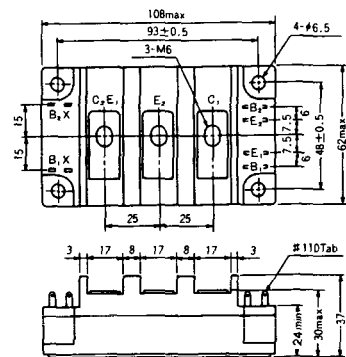
S-108B1C



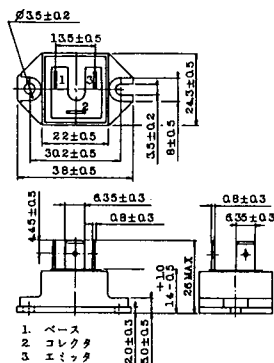
S-108B2A



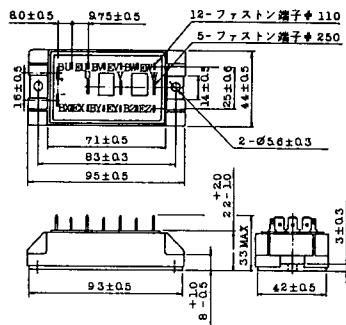
S-108B2B



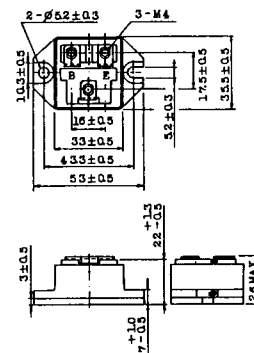
2-22B1A



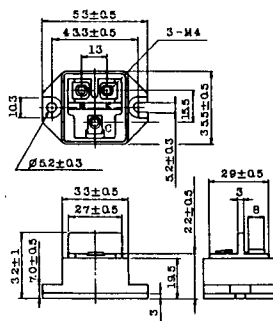
2-27A4A



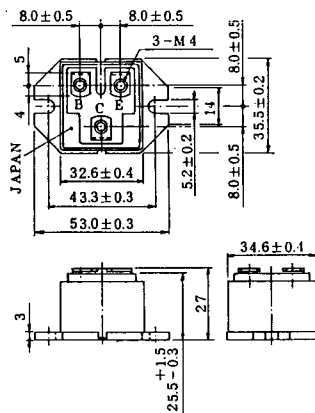
2-33C1A



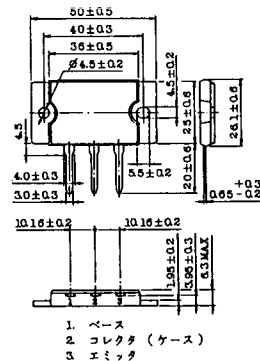
2-33D1A



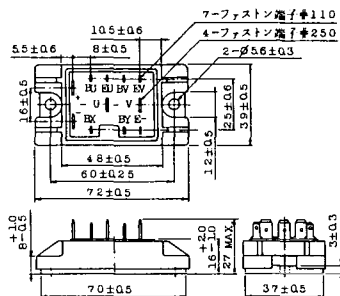
2-33F1A



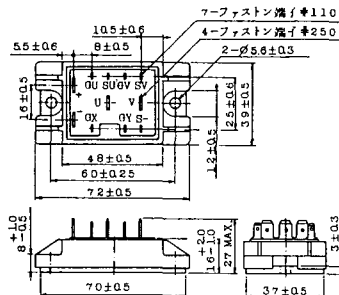
2-37A1A



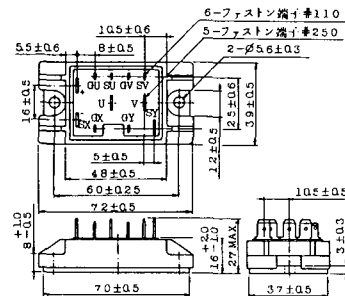
2-48A3A



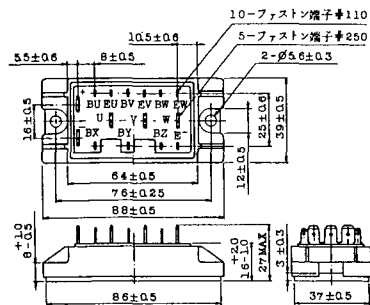
2-48A3B



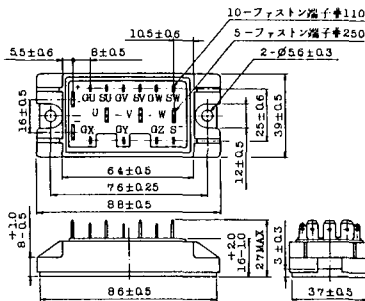
2-48A4A



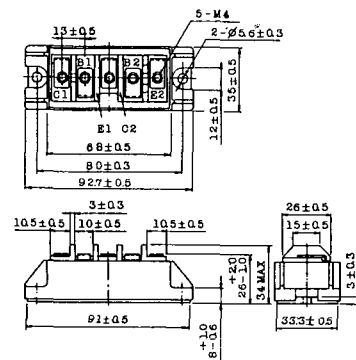
2-64A2A



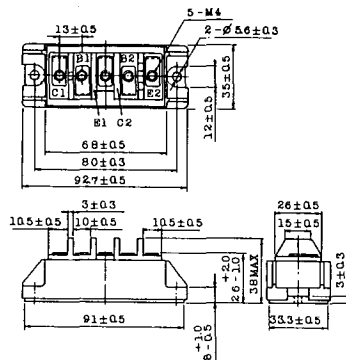
2-64A2B



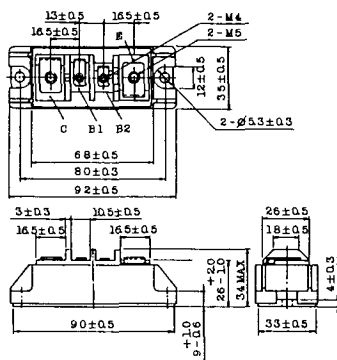
2-68A2A



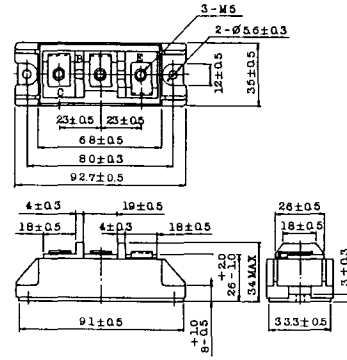
2-68B2A



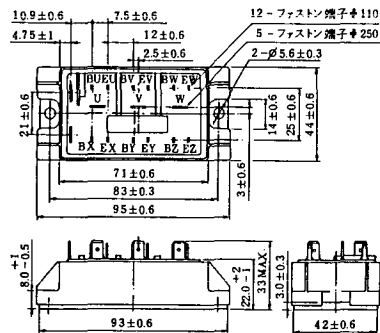
2-68C1A



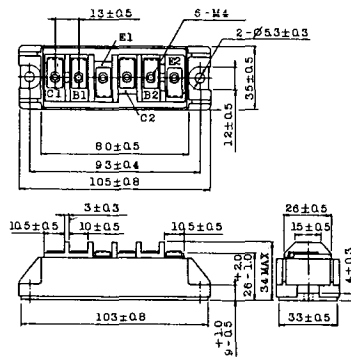
2-68D2A



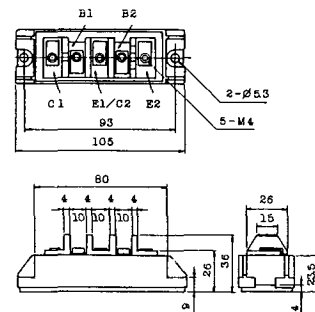
2-72A3A



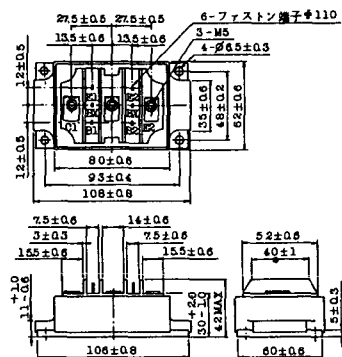
2-80A1A



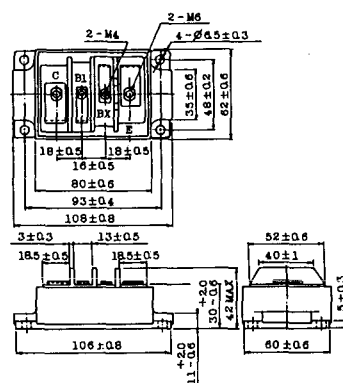
2-80B1A



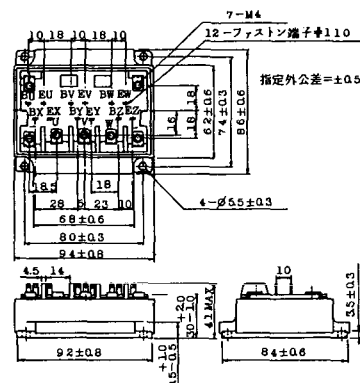
2-80C1A



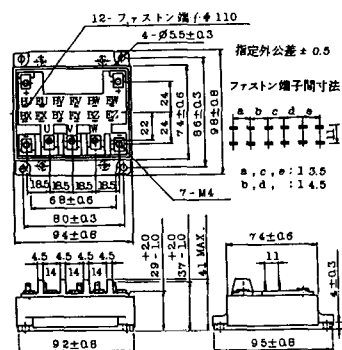
2-80D2A



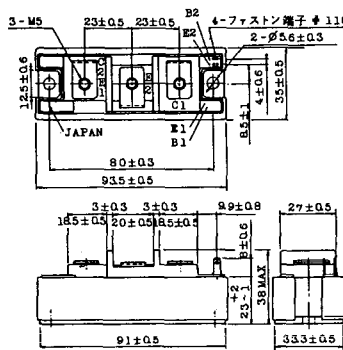
2-94A2A



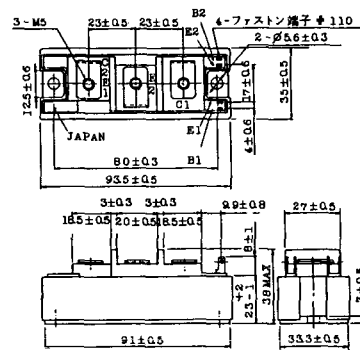
2-94B1A



2-94C2A

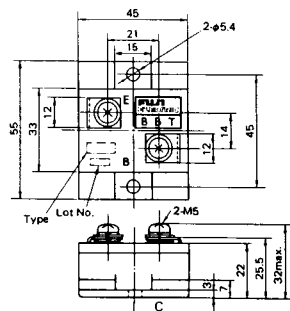


2-94C3A



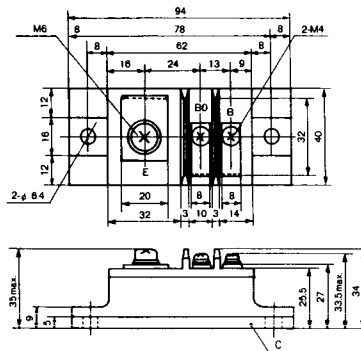
BBT-II

BBTII
1D200A-020



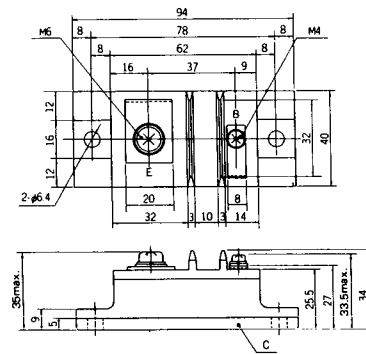
BBT-III

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



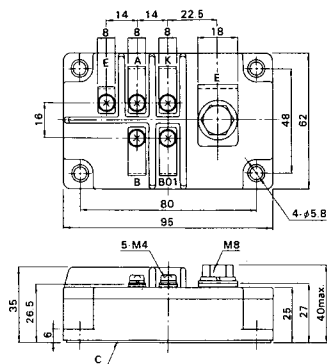
BBT-III

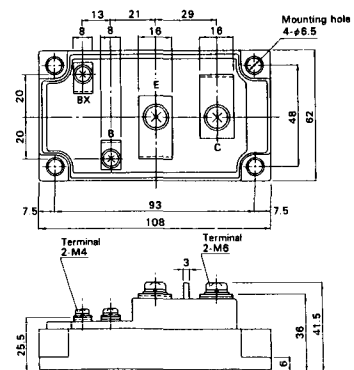
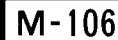
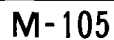
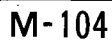
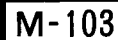
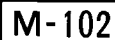
BBTIII
ETN01-055
ET1257



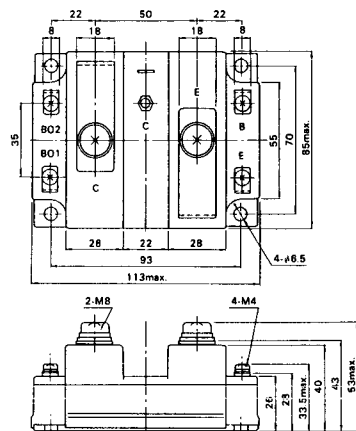
BBT-IV

BBTIV
1D500A-030

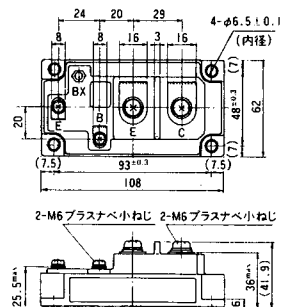




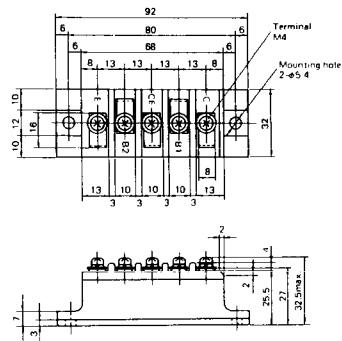
M-107



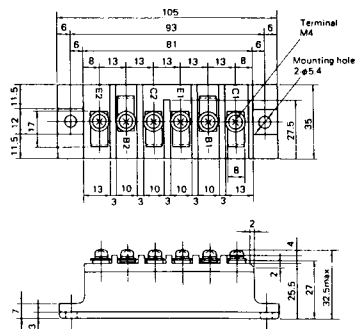
M-116



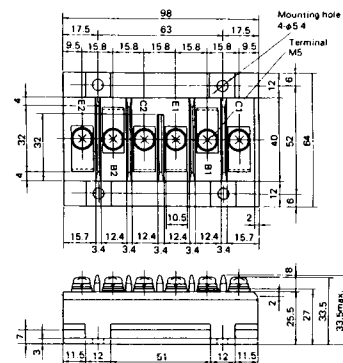
M-201



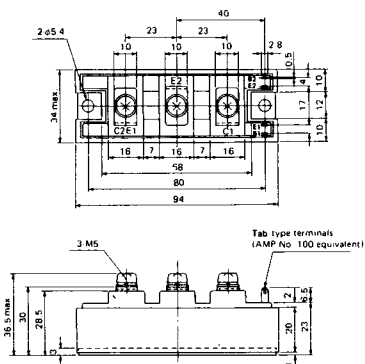
M-202



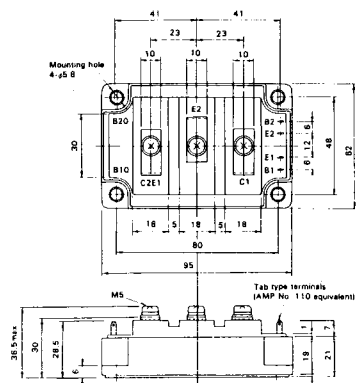
M-203



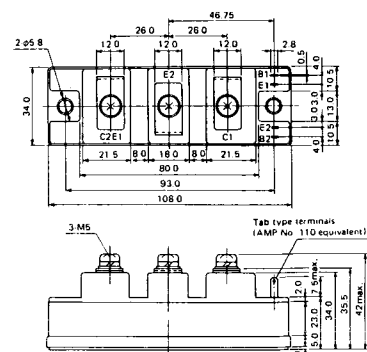
M-204



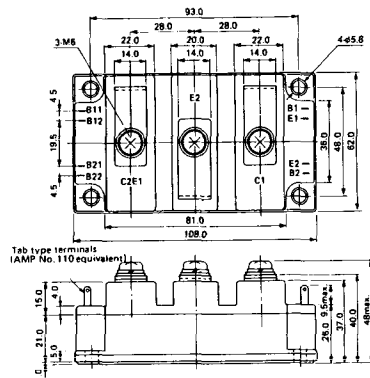
M-205



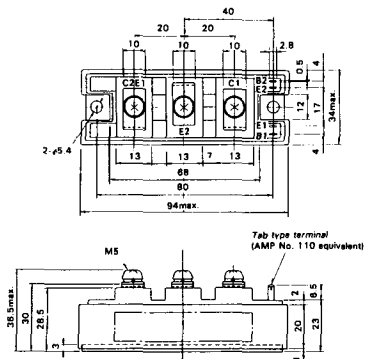
M-206



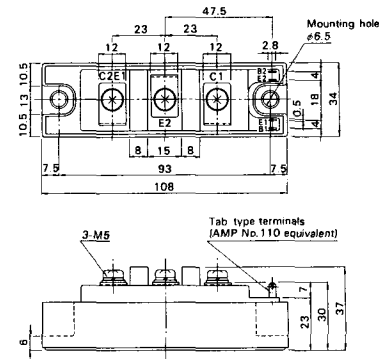
M-207



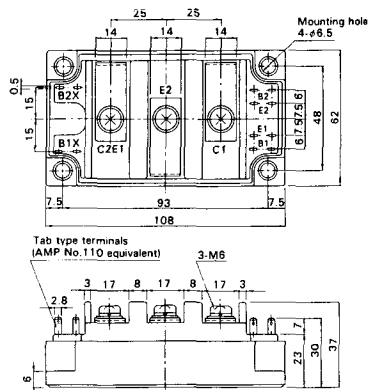
M-208



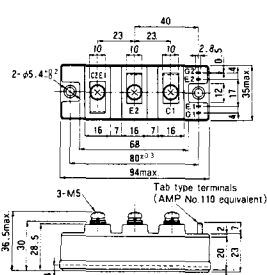
M-209



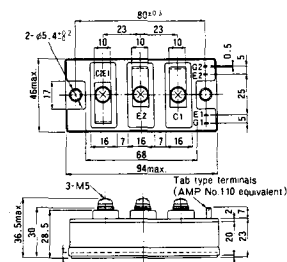
M-210



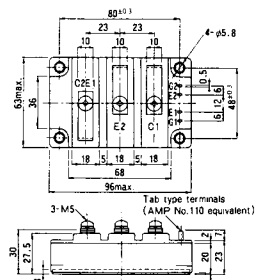
M-211



M-212

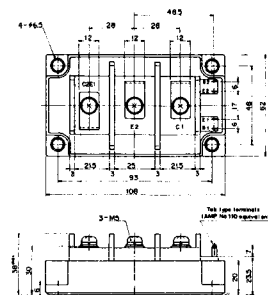


M-213

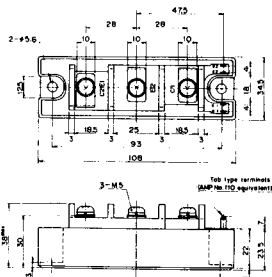


M-214

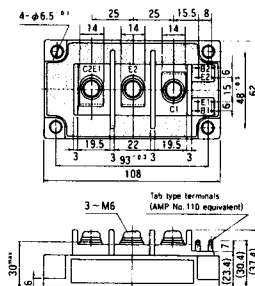
M-215



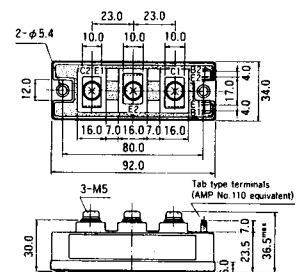
M-216



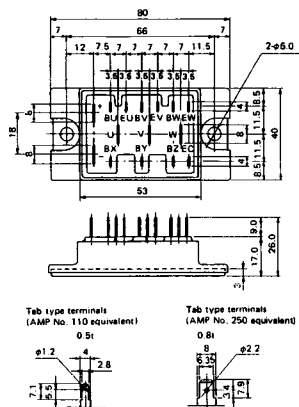
M-217



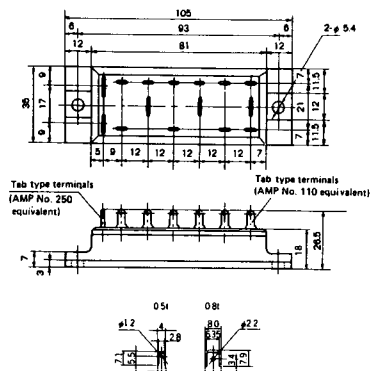
M-218



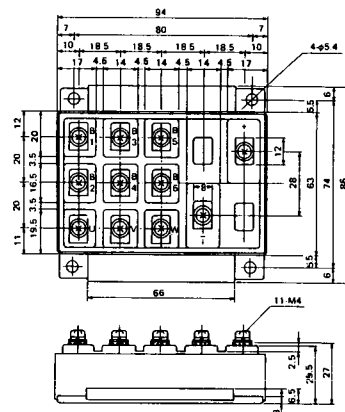
M-601



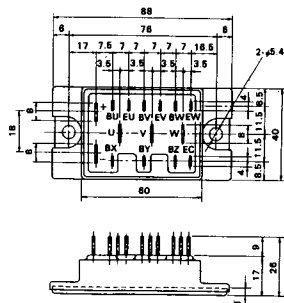
M-602



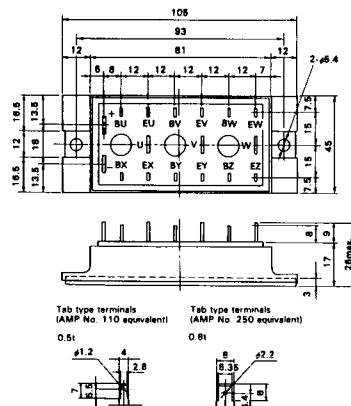
M-603



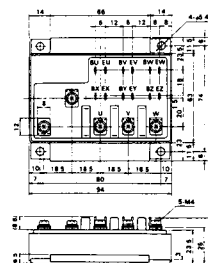
M-604



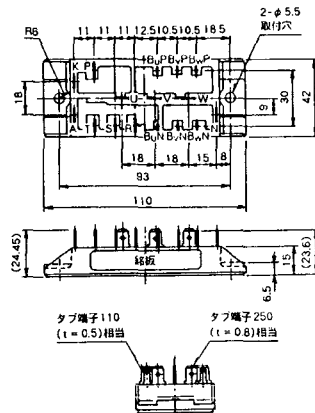
M-605



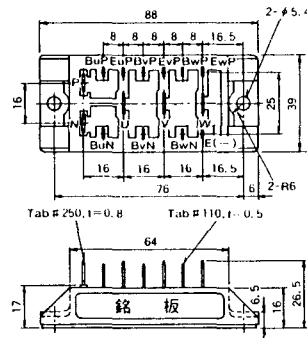
M-606



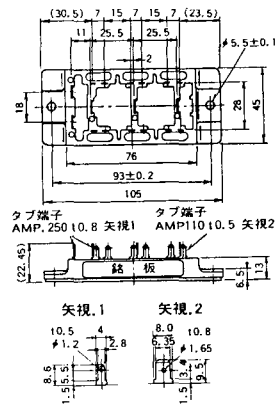
M-2E6A



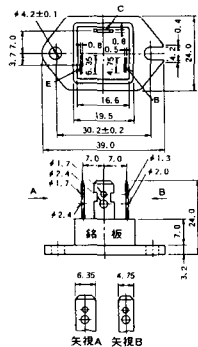
M-2F6A



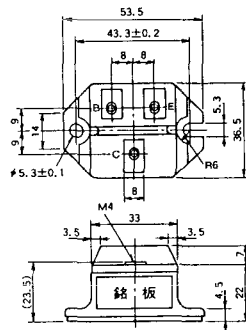
M-2G6A



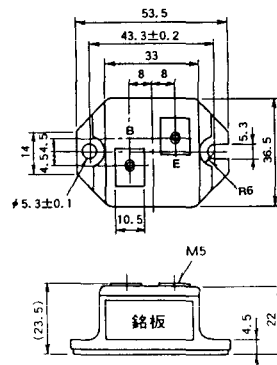
M-3A1A



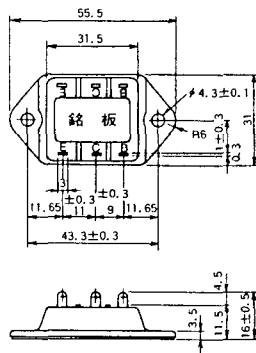
M-3B1A



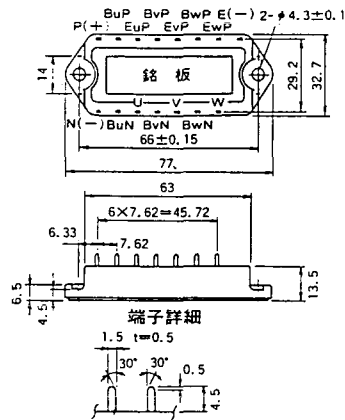
M-3B1B



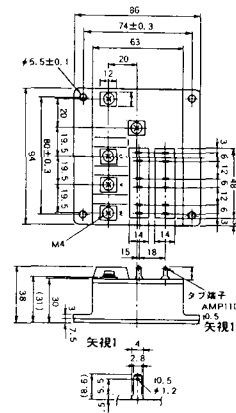
M-3C1A



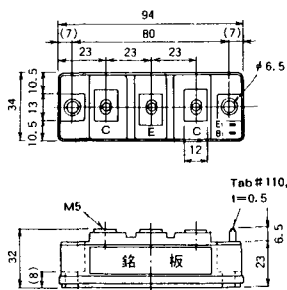
M-3D6A



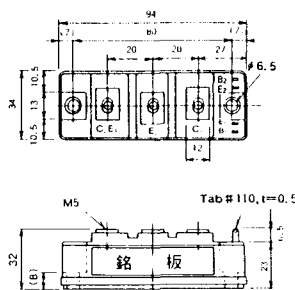
M-3E6A



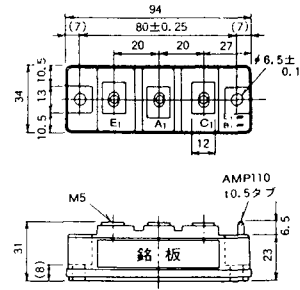
M-4A1A



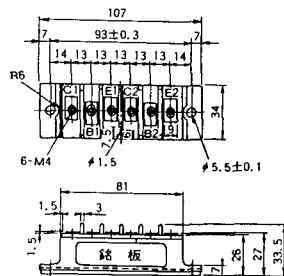
M-4A2A



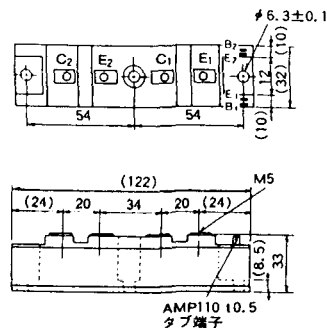
M-4A1B



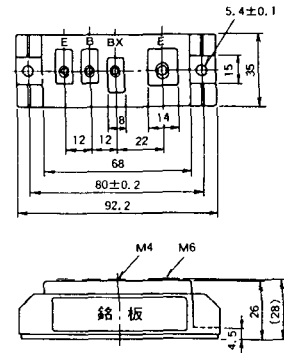
M-5C2A



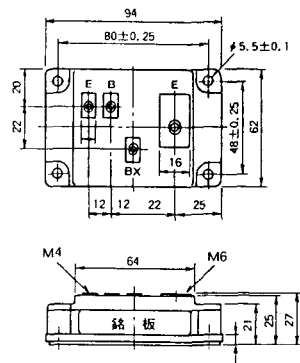
M-5D2A



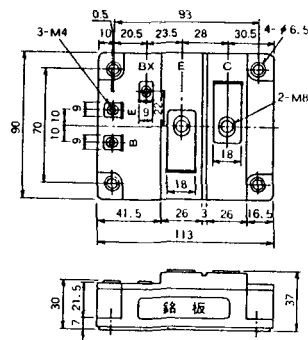
M-6A1A



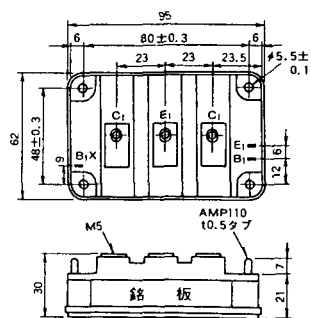
M-7A1A



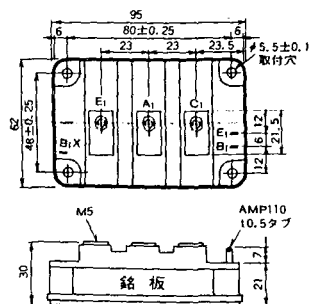
M-7B1A



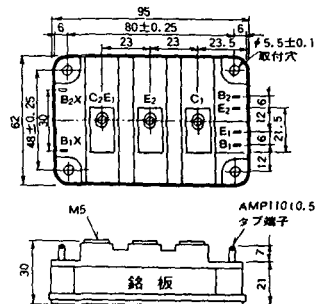
M-8A1A



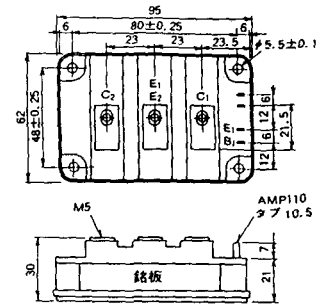
M-8A1B



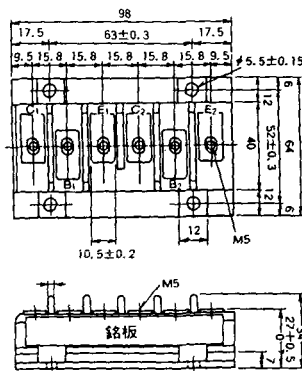
M-8A2A



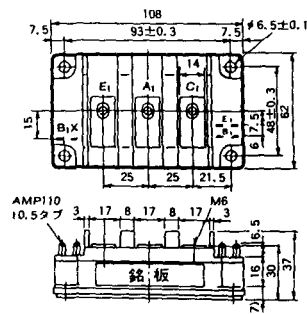
M-8A2B



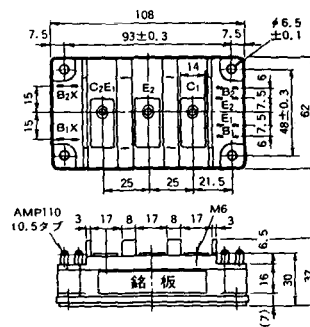
M-8B2A



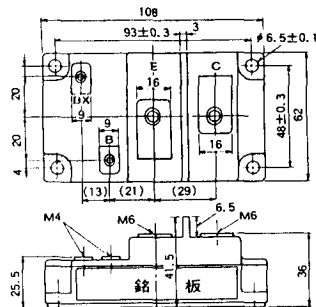
M-9A1A



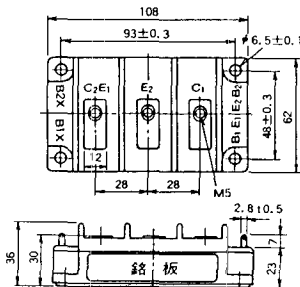
M-9A2A



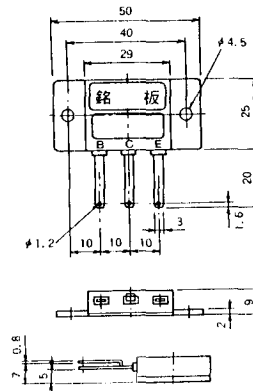
M-9B1A



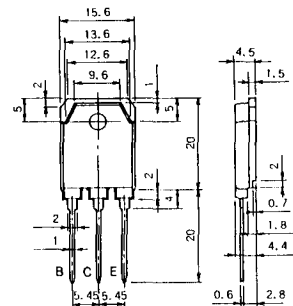
M-9C2A



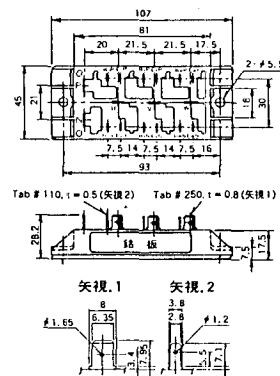
M-1A1B



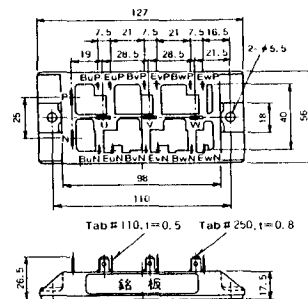
M-1A1C



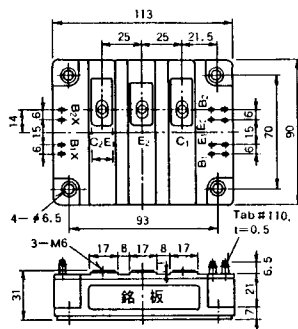
M-2E6B



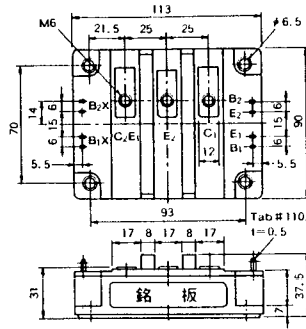
M-2E6C



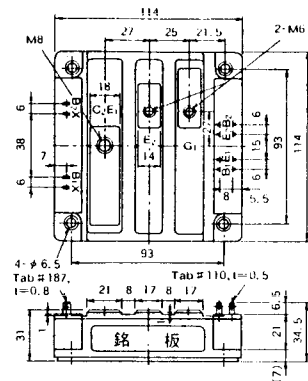
M-10A2A



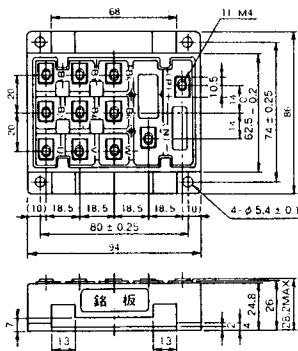
M-10A2B



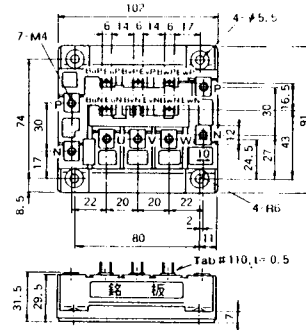
M-11A2A



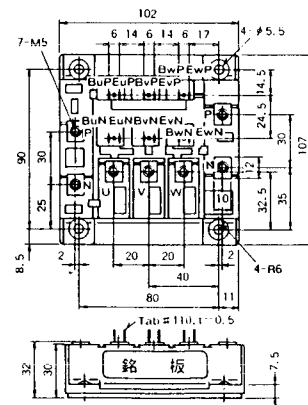
M-12A6A



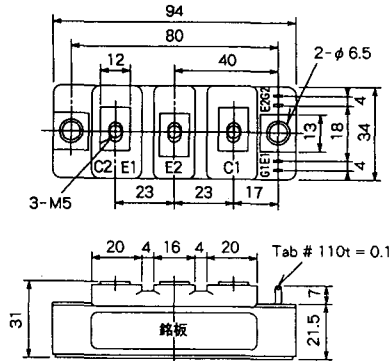
M-12B6A



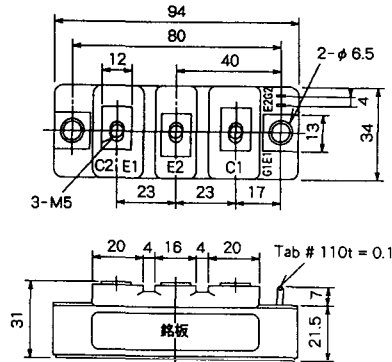
M-12B6B



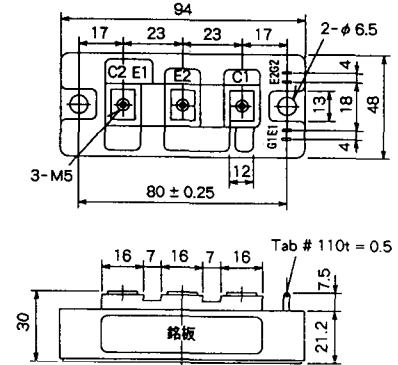
M-4A2D



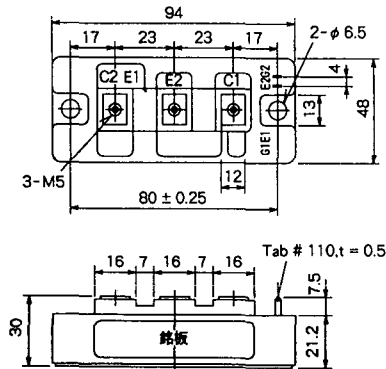
M-4A2E



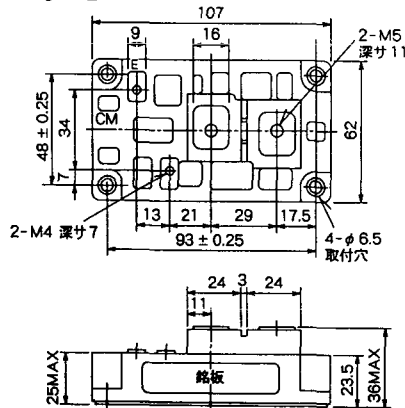
M-4C2A



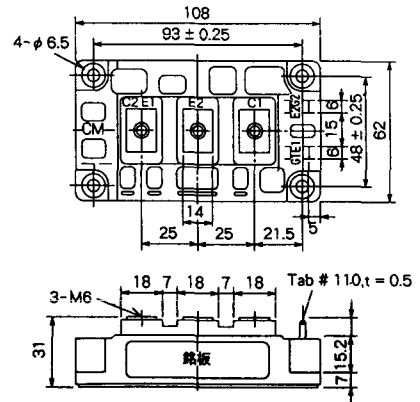
M-4C2B



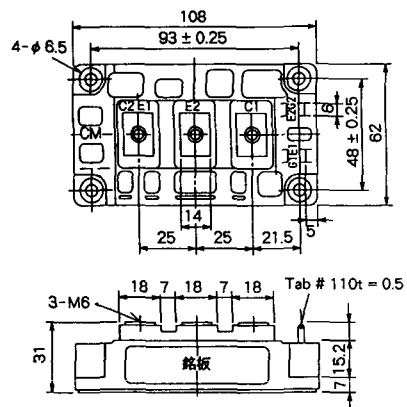
M-9B1C



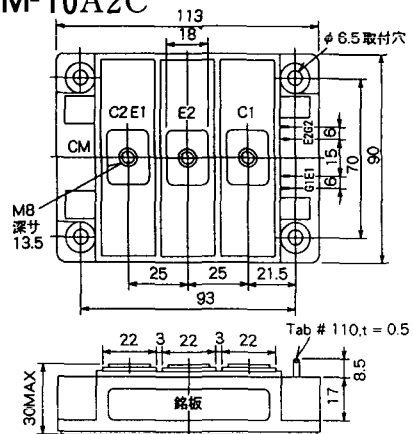
M-9D2A



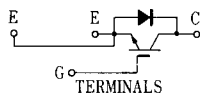
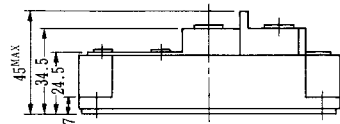
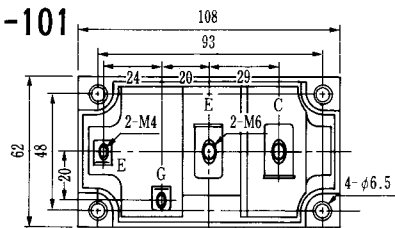
M-9D2B



M-10A2C



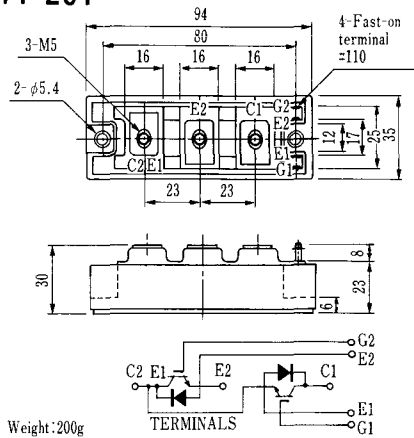
H-101



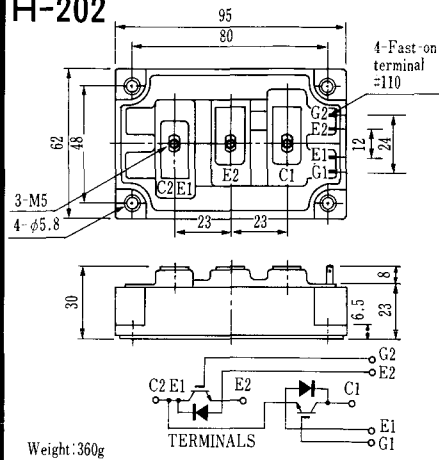
Weight :480g

TERMINALS

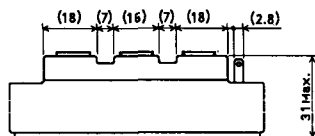
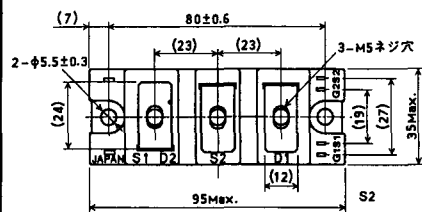
H-201



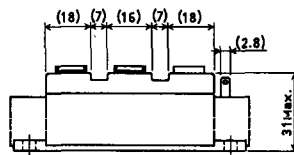
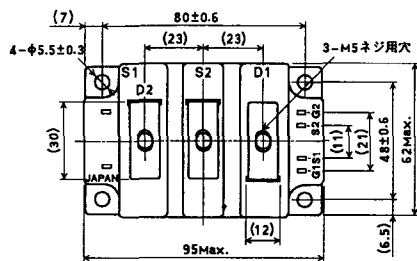
H-202



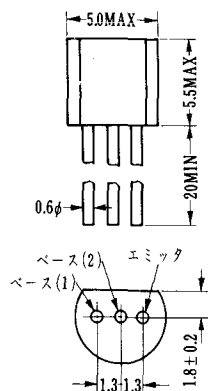
LF-J



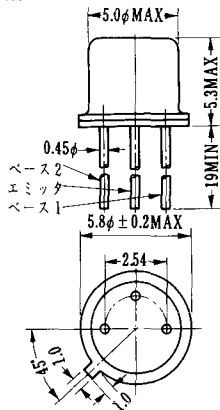
LF-K



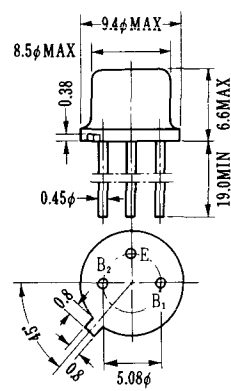
U-1



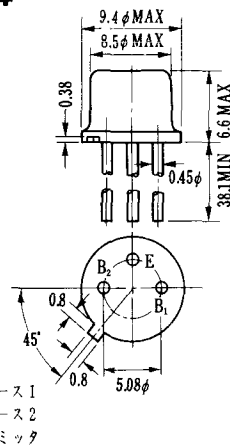
U-2



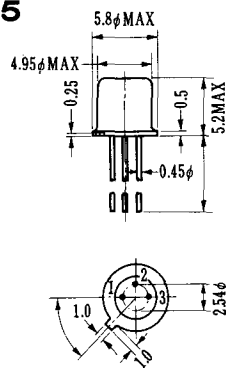
U-3



U-4

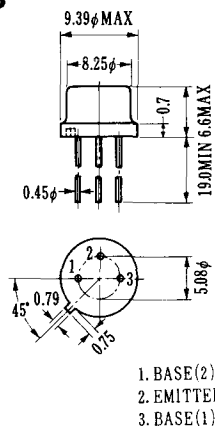


U-5



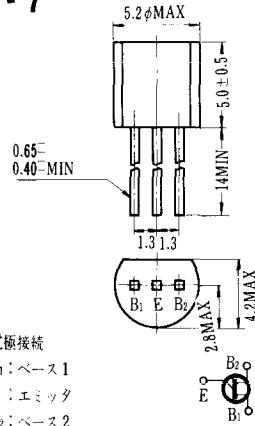
1. BASE 1
2. EMITTER
3. BASE 2 (CASE)

U-6



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

U-7



U-8

