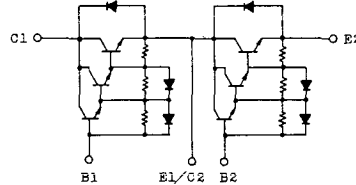


トランジスタ・モジュール (NPN, ダーリントン接続, 2個直列接続)

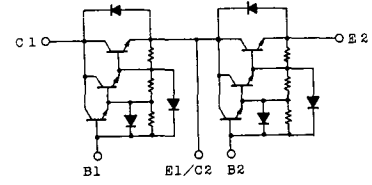
- ダーリントン・トランジスタを2個直列接続
- フリーホイール・ダイオード付
- 電極と金属ケース部が絶縁されている
- 直流電流増幅率は80以上(定格電流にて)

■等価回路

CK-1



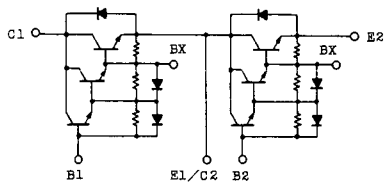
CK-2



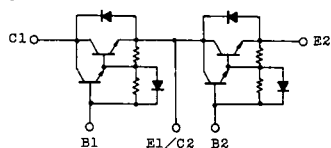
注1. $T_c=25^{\circ}\text{C}$. 注2. AC, 1分間。

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

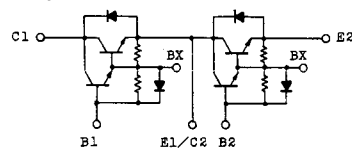
CK-3



CL-1



CL-2



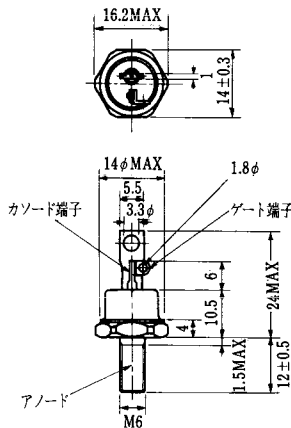
注3. スイッチング時間の * 印は typ. 値。

(T _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 (A)	I _B (A)	スイッチング時間 (μs)			I _{B1} (A)	I _{B2} (A)	V _{CC} (V)	R _L (Ω)	V _F (V)	I _F (A)	t _{rr} (μs)	I _F (A)	V _{BE} (V)	di/dt (A/μs)					R _{th(j-c)} (°C/W)		
V _{CE}	V _{BE}			t _{on}	t _{stg}	t _r															トランジスタ部	ダイオード部	
最大	最大			最大	最大	最大				最大	最大	最大	最大	最大	最大	最大	最大						
2.5	3.5	15	0.3	2	11	6	0.3	-0.9	600	40	1.5	15	1.0	15	-3	60	0.83	1.3	CK-2	2-68B2A			MG15N2CK1
2.5	3.5	15	0.3	2	11	6	0.3	-0.9	600	40	1.5	15	1.0	15	-3	60	0.83	1.3	YK-1	2-94C3A			MG15N2YK1
2.5	3.5	25	0.5	2	15	5	0.5	-0.5	600	24	1.7	25	1.0	25	-3	100	0.41	1.3	CK-2	2-68B2A			MG25N2CK2
2.5	3.5	25	0.5	2	15	5	0.5	-0.5	600	24	1.7	25	1.0	25	-3	100	0.41	1.3	YK-1	2-94C3A			MG25N2YK1
2.5	3.5	25	0.5	2	15	5	0.5	-0.5	600	24	1.7	25	1.0	25	-3	100	0.41	1.3	YK-1	2-94D1A			MG25N2YK9
2.5	3.5	25	0.5	2	14	6	0.5	-1.5	600	24	1.7	25	1.0	25	-3	100	0.41	1.3	CK-2	2-68B2A			MG25N2CK1
2.5	3.5	25	0.5	2	14	6	0.5	-1.5	600	24	1.7	25	1.0	25	-3	100	0.41	1.3	YK-1	2-94C3A			MG25N2YK1
2.0	2.5	30	0.6	1	12	2	0.6	-0.6	300	10	1.5	30	1.0	30	-3	100	0.5	1.8	CL-1	2-68A2A			MG30G2CL3
2.0	2.5	30	1.0	1	12	3	0.6	-0.6	300	10	1.6	30	1.0	30	-2	60	0.625	1.8	YL-1	2-94C3A			MG30G2YL1
2.5	3.5	40	0.8	2	17	3	0.8	-2.4	600	15	1.8	40	1.2	40	-3	100	0.31	1.3	YK-1	2-108A2A			MG40S2YK1
2.0	2.5	50	1.0	1	12	2	1.0	-1.0	300	6	1.5	50	1.0	50	-3	100	0.41	1.3	CL-1	2-68A2A			MG50G2CL3
2.0	2.5	50	1.0	1	12	2	1.0	-1.0	300	6	1.7	50	1.0	50	-3	100	0.41	1.3	YL-1	2-94C3A			MG50G2YL1A
2.5	3.5	50	1.0	2	15	5	1.0	-1.0	600	12	1.7	50	1.0	50	-3	100	0.36	1.3	CK-2	2-68B2A			MG50M2CK2
2.5	3.5	50	1.0	2	15	5	1.0	-1.0	600	12	1.7	50	1.0	50	-3	100	0.36	1.3	YK-1	2-94C3A			MG50M2YK1
2.5	3.5	50	1.0	2	15	5	1.0	-1.0	600	12	1.7	50	1.0	50	-3	100	0.36	1.3	YK-1	2-94D1A			MG50M2YK9
2.5	3.5	50	1.0	2	15	5	1.0	-3.0	600	12	1.8	50	2.0	50	-3	100	0.35	1.3	CK-2	2-68B2A			MG50N2CK1
2.5	3.2	50	1.0	2	13	4	1.0	-3.0	600	12	1.8	50	1.0	50	-3	100	0.35	1.3	YK-1	2-94C3A			MG50N2YK1
2.0	2.5	75	1.5	2	12	2	1.5	-1.5	300	4	1.5	75	2.0	75	-3	100	0.35	1.3	CL-1	2-68A2A			MG75G2CL1
2.0	2.5	75	1.5	2	12	2	1.5	-1.5	300	4	1.7	75	1.0	75	-3	100	0.36	1.3	YL-1	2-94C3A			MG75G2YL1A
2.0	2.5	75	2.0	2	12	4	2.0	-2.0	300	4	1.5	75	2.0	75	-3	100	0.35	1.3	CL-1	2-68A2A			MG75H2CL1
2.0	2.5	75	2.0	2	12	4	2.0	-2.0	300	4	1.7	75	1.0	75	-3	100	0.35	1.3	YL-1	2-94C3A			MG75H2YL1A

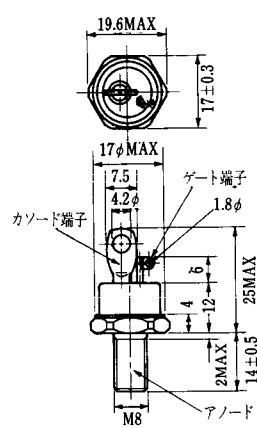
FD-1



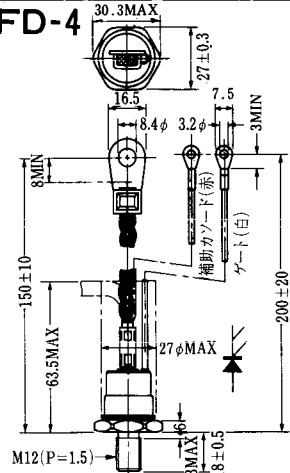
FD-2



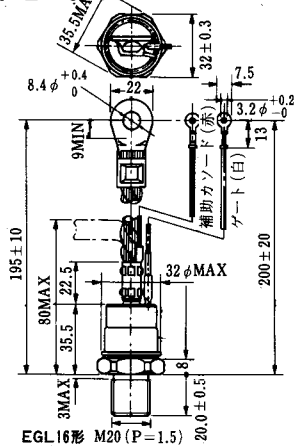
FD-3



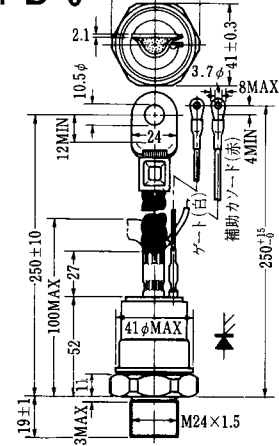
FD-4



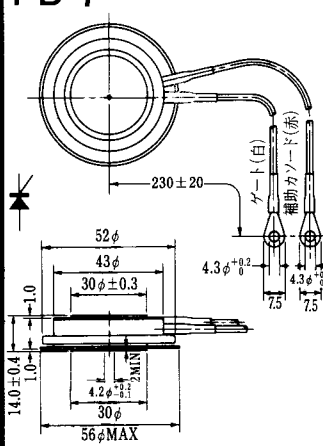
FD-5



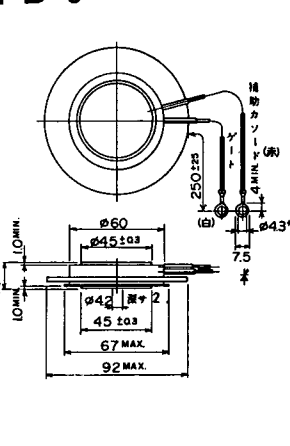
FD-6



FD-7



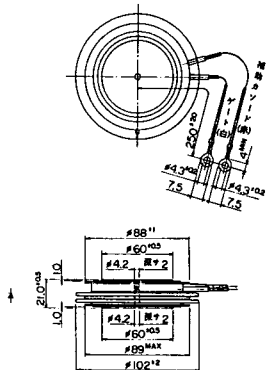
FD-8



FD-9



FD-10

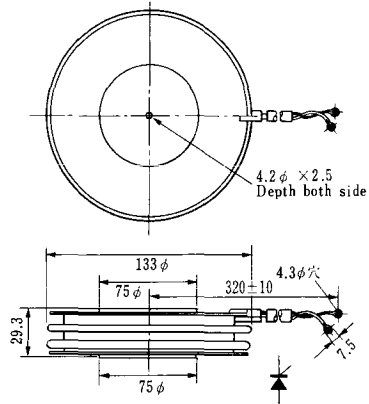


FD-12





H-17

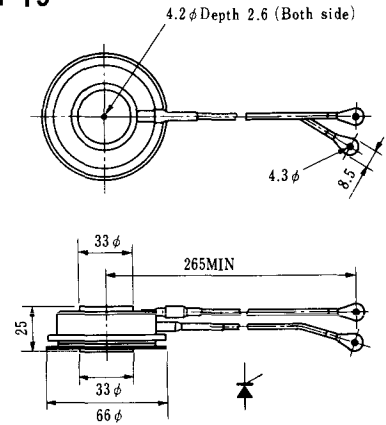


H-18

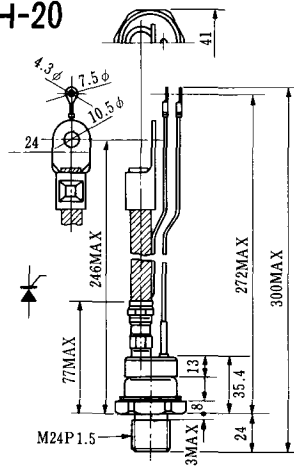


Unit in mm (inch)

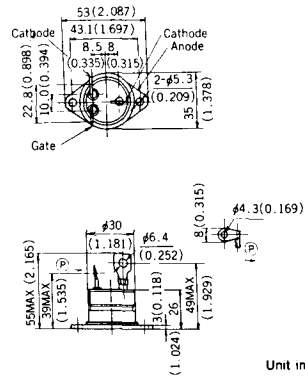
H-19



H-20

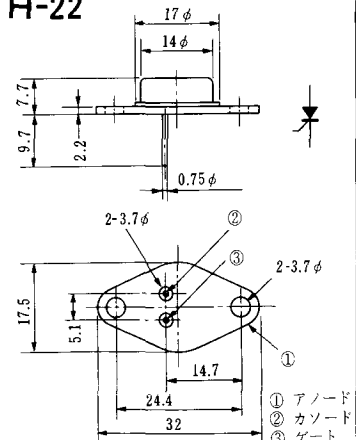


H-21



Unit in mm (inch)

H-22



① アノード
② カソード
③ ゲート

H-23

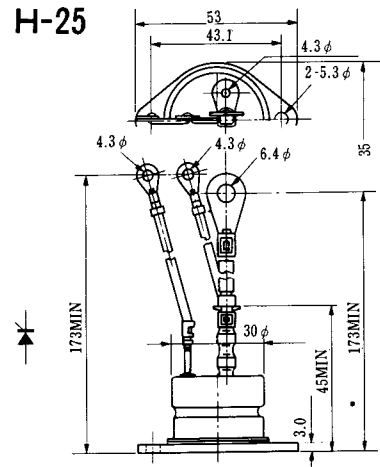


① アノード
② カソード
③ ゲート

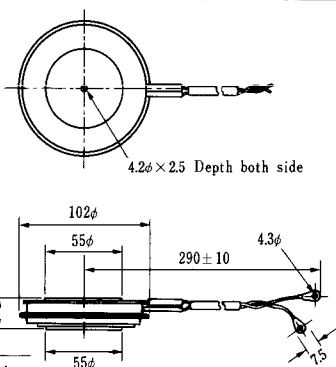
H-24



H-25



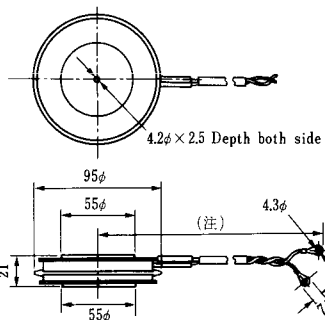
H-26



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

CA12	
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H-27

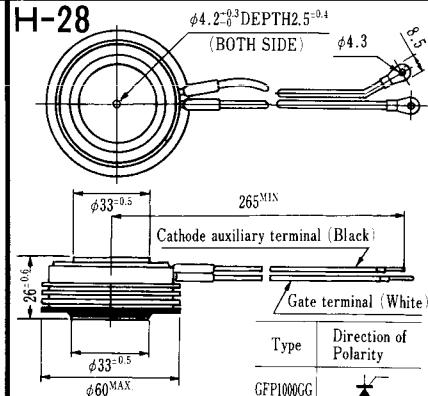


Type	Direction of polarity
------	-----------------------

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

H-28



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

GFP100GG	
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Weight: 360(g)

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



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



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

M-1



M-2



M-3



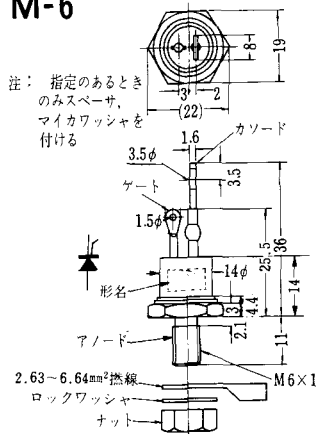
M-4



M-5



M-6



M-7



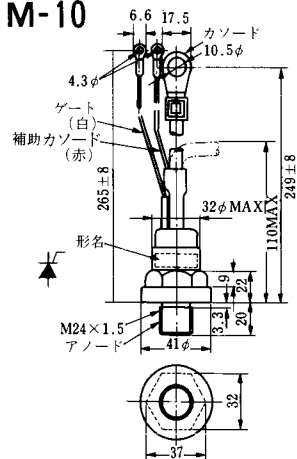
M-8



M-9



M-10



M-11



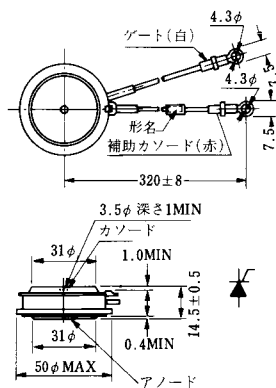
M-12



M-13



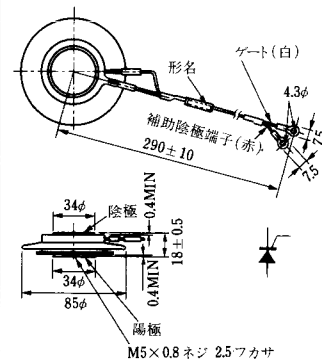
M-14



M-15



M-16





M-25



M-26



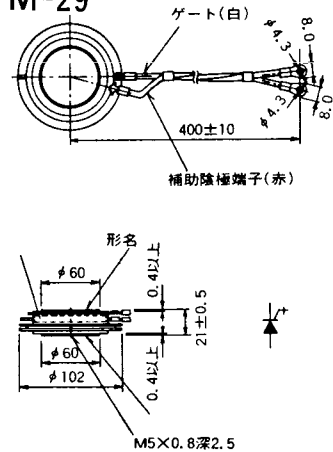
M-27



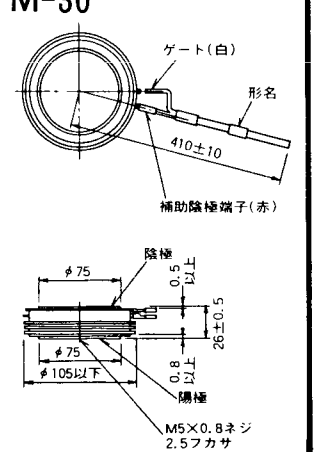
M-28



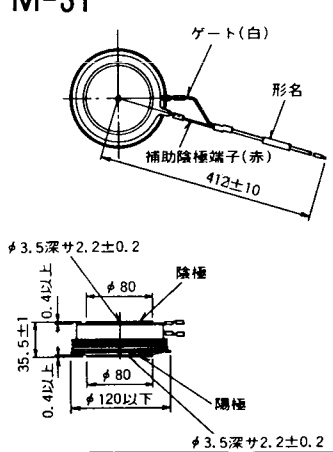
M-29



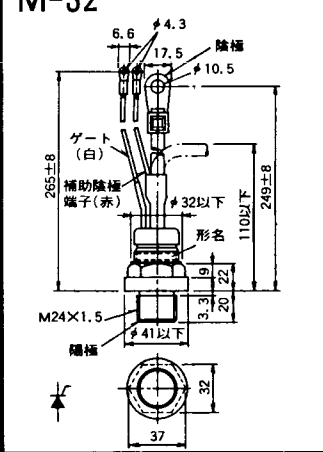
M-30



M-31



M-32



M-33



M-34



MT-1



MT-2



MT-3



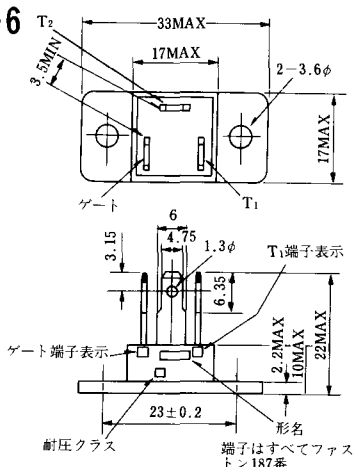
MT-4



MT-5



MT-6



MT-7



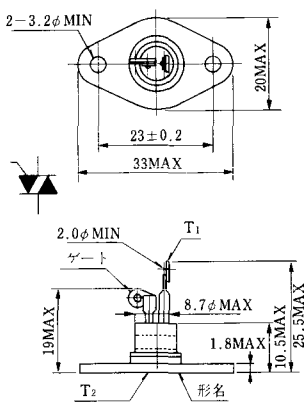
MT-8



MT-9



MT-10



MT-11



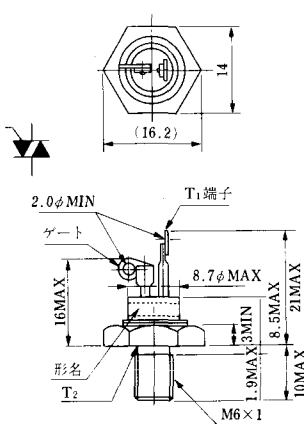
MT-12



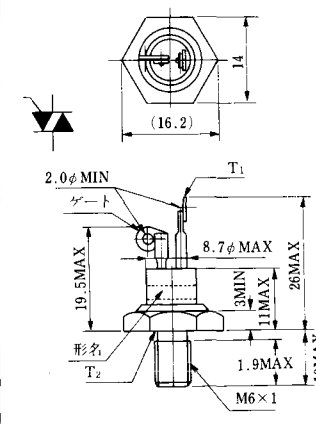
MT-13



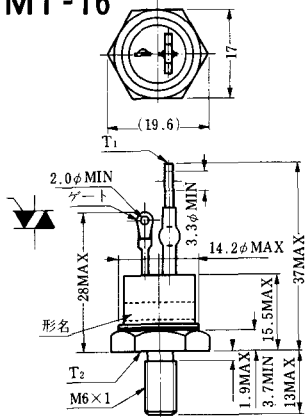
MT-14



MT-15



MT-16

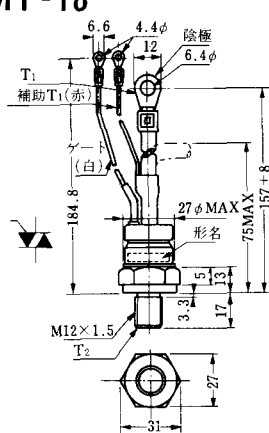


MT-17

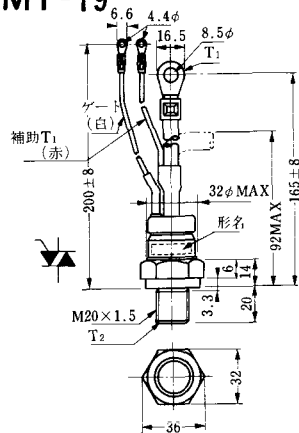


端子詳細図

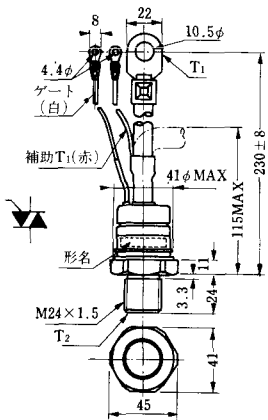
MT-18



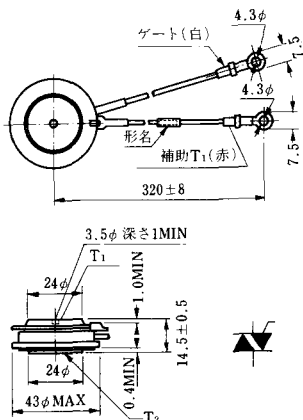
MT-19



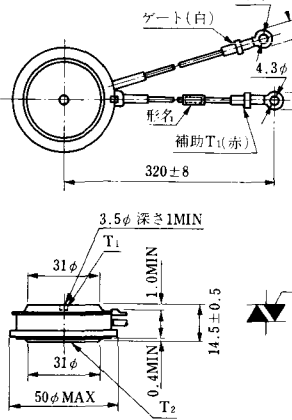
MT-20



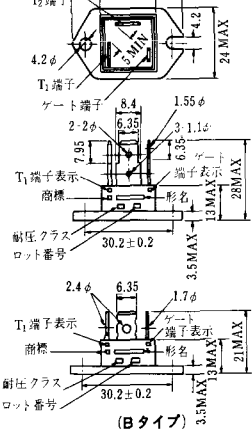
MT-21

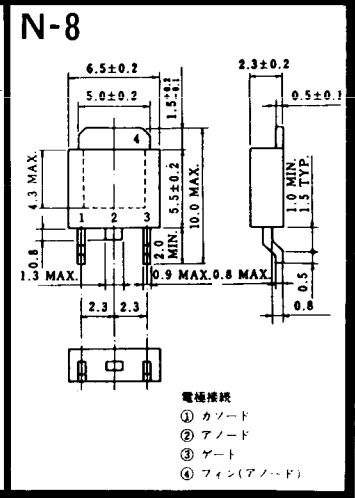
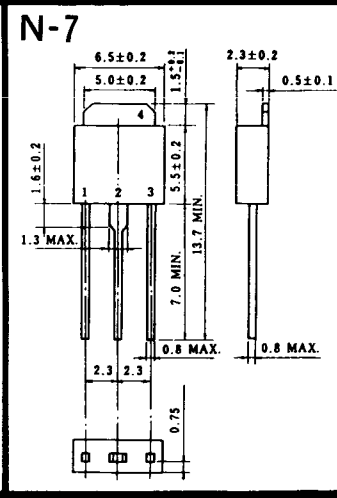
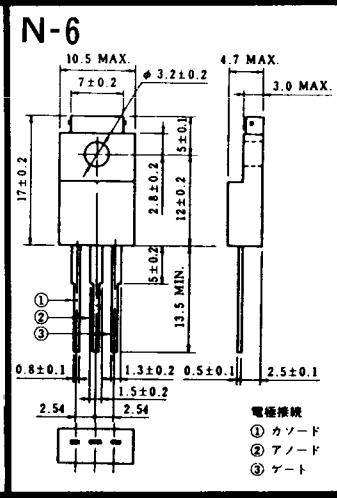
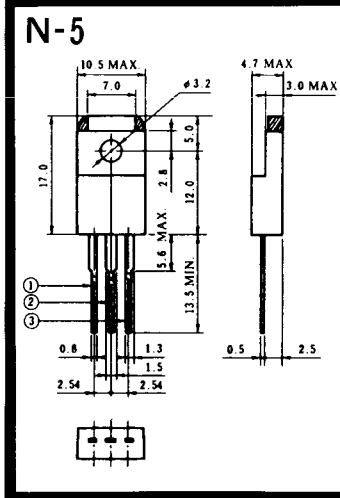
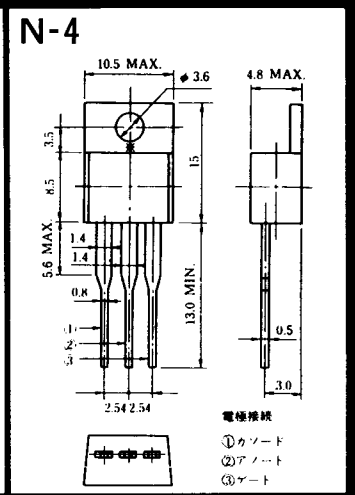
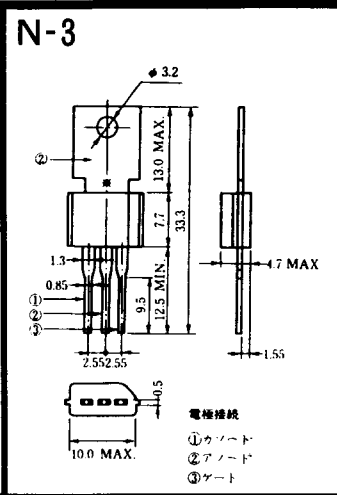
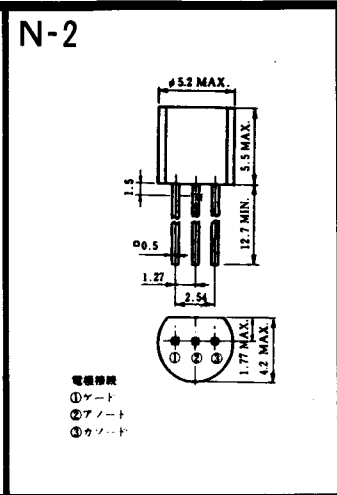
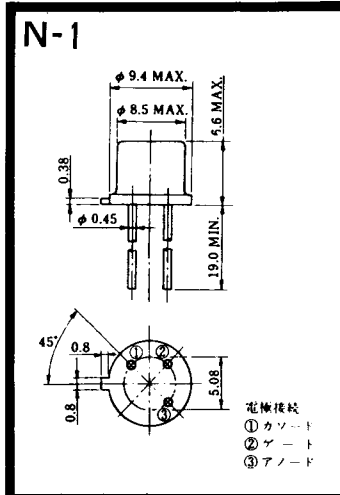


MT-22



MT-23





NI-9

259RW
309RW



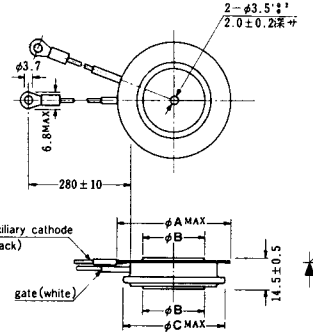
NI-10

259RW_{JL}
309RW_{JL}



NI-11

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



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

NI-12

403PAB
503PAB
503PLB



NI-13

1003PA
1003PAB
1003PLF
1003PLH
1503PA



NI-14

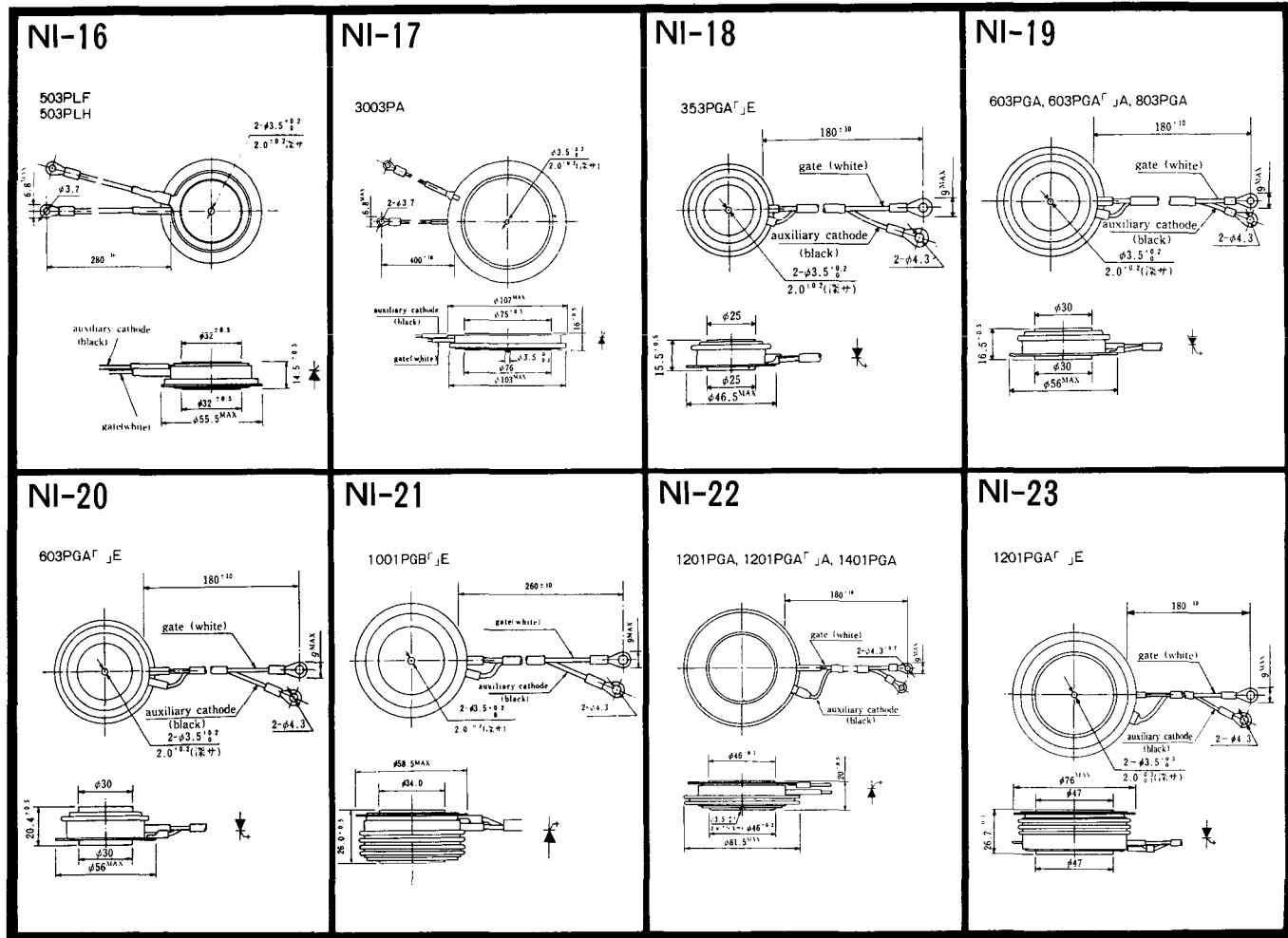
358RGA



NI-15

359RGA





NI-24

2001PGB^r JE



NI-25

NI-26

NT-1



電極接続
① T₁
② ゲート
③ T₂

NT-2



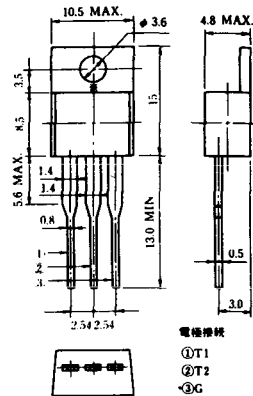
電極接続
① T₁
② ゲート
③ T₂

NT-3



電極接続
① T₁
② T₂
③ ゲート

NT-4



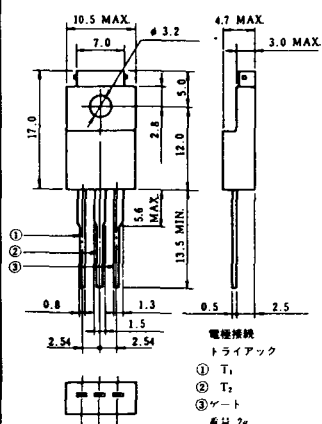
電極接続
① T₁
② T₂
③ G

NT-5



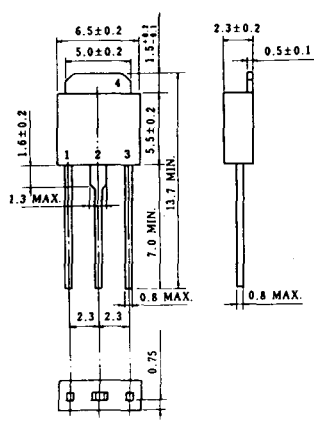
電極接続
トライアック
① T₁
② T₂
③ ゲート
φ 2g

NT-6

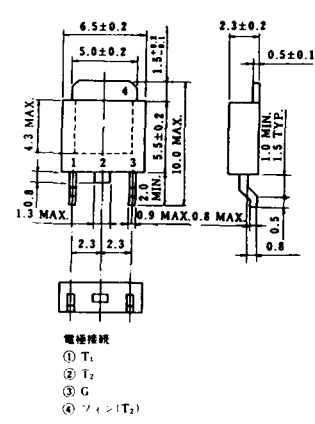


電極接続
トライアック
① T₁
② T₂
③ ゲート
φ 2k

NT-7

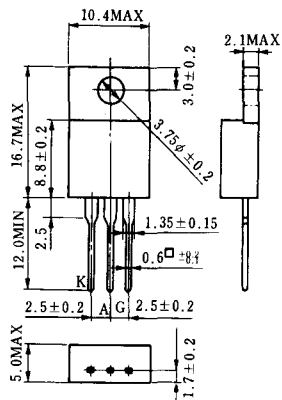


NT-8

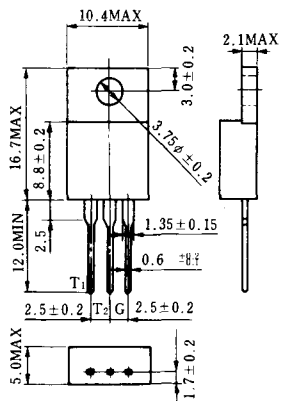


電極接続
① T₁
② T₂
③ G
④ シェン(T₂)

S-1



ST-1



SA-1



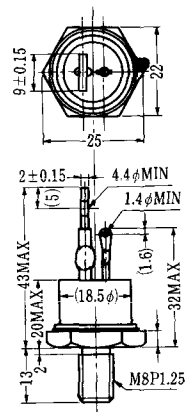
SA-2



SA-3



SA-4



SA-5



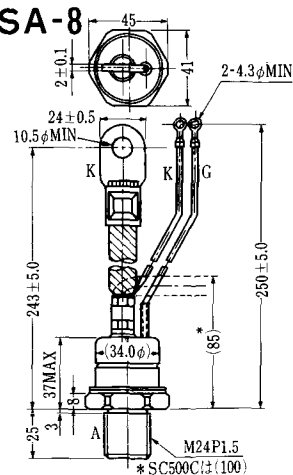
SA-6



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



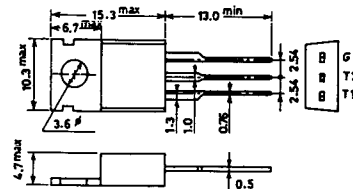
1142



1144



1155

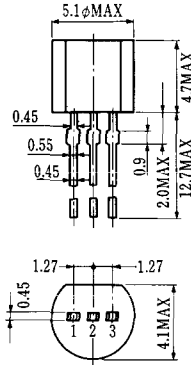


1192A



G: Gate

T-1 (13-5A1A)



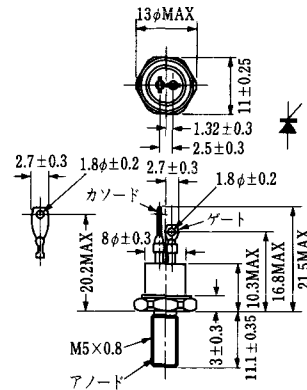
- 1 ゲート
- 2 アノード
- 3 カソード

T-2 (13-8A1A)



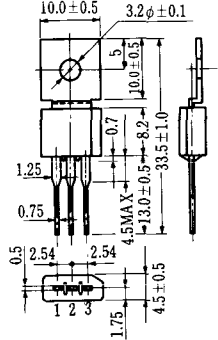
1. カソード
2. ゲート
3. アノード(ケース)

T-3 (13-8C1A)



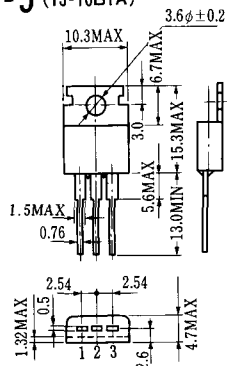
アノード

T-4 (13-10A1A)



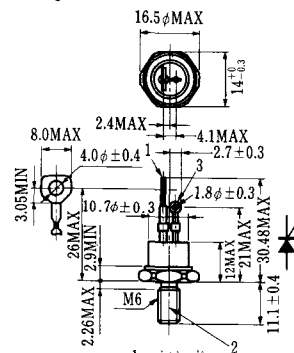
- 1 カソード
- 2 アノード
- 3 ゲート

T-5 (13-10B1A)



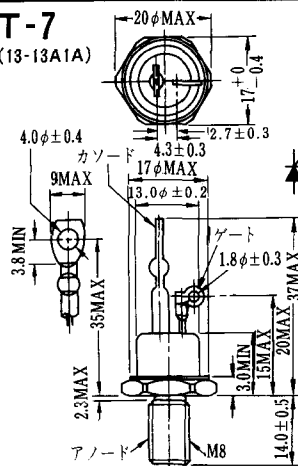
- 1 カソード
- 2 アノード
- 3 ゲート

T-6 (13-11D1A)



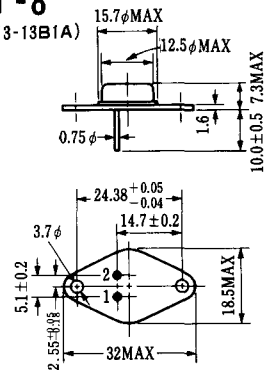
- 1 カソード
- 2 アノード
- 3 ゲート

T-7 (13-13A1A)



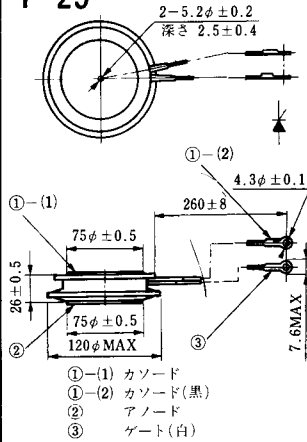
アノード

T-8 (13-13B1A)



1. ゲート
2. カソード
3. アノード(ケース)

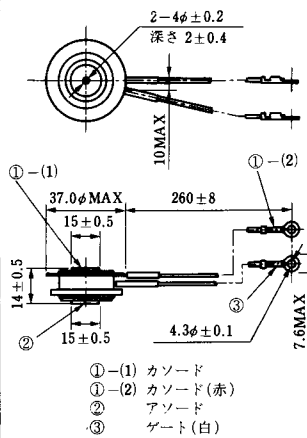
T-25 (13-120A2A)



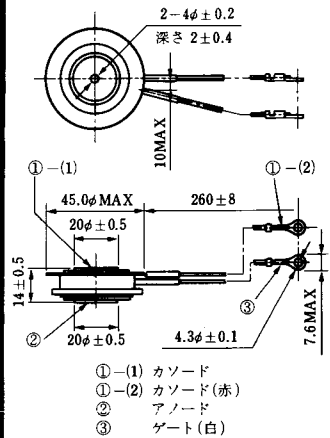
T-26 (13-150A1A)



T-27 (13-37A1A)



T-28 (13-45E1A)



T-29 (13-51A1A)



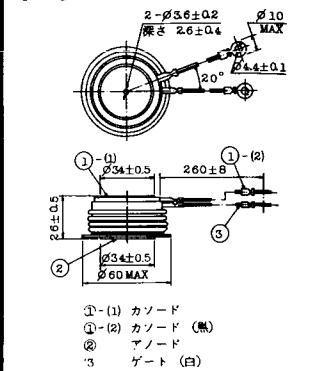
T-30 (13-57A1A)



T-31 (13-100E1A)



T-32 (13-60E3A)



T-41 (13-28A2A)



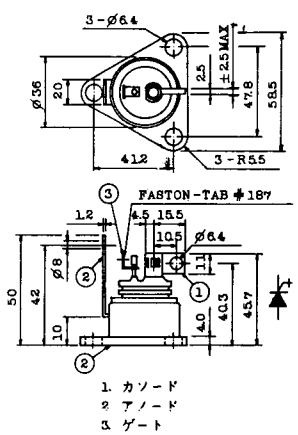
T-42 (13-45F1A)



T-43 (13-60E2A)



T-44 (13-36A1A)



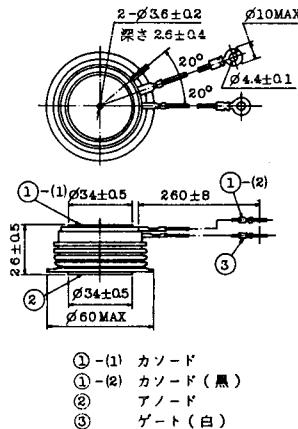
T-45 (13-51B1A)



T-46 (13-36B1A)



T-47 (13-60E1A)



T-48 (13-93C1A)

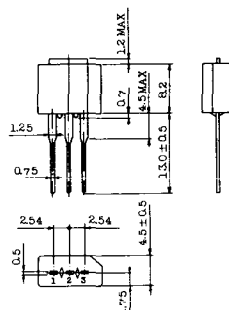


T-49 (13-75A1A)



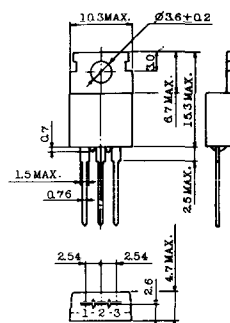
- 1-(1) カソード
- 1-(2) カソード (黒)
- 2 アノード
- 3 ゲート (白)

T-50 (13-10A3A)



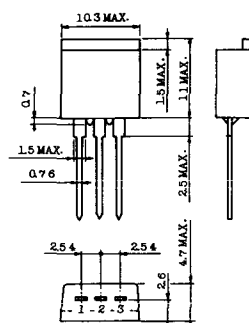
- 1 カソード
- 2 アノード
- 3 ゲート

T-51 (13-10D1A)



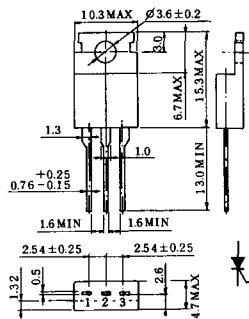
- 1 カソード
- 2 アノード
- 3 ゲート

T-52 (13-10D2A)



- 1 カソード
- 2 アノード
- 3 ゲート

T-53 (13-10E1B)



- 1 カソード
- 2 アノード
- 3 ゲート

T-54 (13-10F1B)



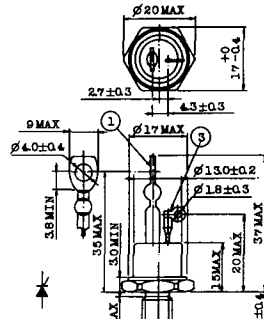
- 1 カソード
- 2 アノード
- 3 ゲート

T-55 (13-5A1D)



- 1 カソード
- 2 アノード
- 3 アノード

T-56 (13-13C1A)



- 1 カソード
- 2 アノード
- 3 ゲート

T-57 (12-16C1A)



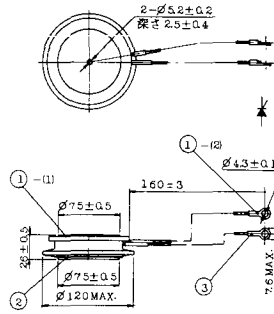
1. アノード (主)
2. ゲート (主)
3. カソード (共通)
4. ゲート (補助)
5. アノード (補助)

T-58 (13-10H1B)



1. カソード
2. アノード
3. ゲート

T-59 (13-120A1A)



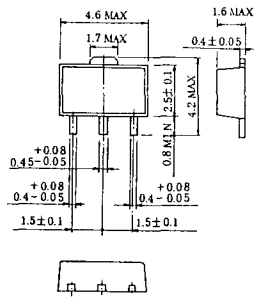
- 1-(1) カソード
- 1-(2) カソード (黒)
2. アノード
3. ゲート (白)

T-60



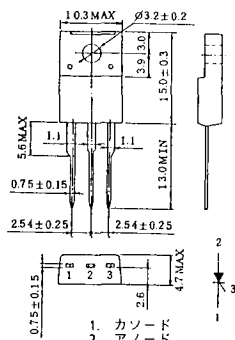
1. カソード
2. アノード
3. ゲート

T-61 (13-5B1A)



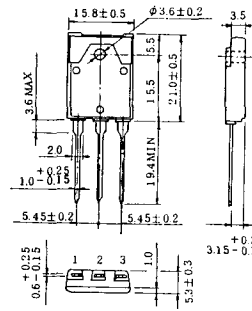
1. ゲート
2. アノード
3. カソード

T-62 (13-10H1A)



1. カソード
2. アノード
3. ゲート

T-63 (13-16A1B)



1. カソード
2. アノード
3. ゲート

TT-1



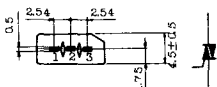
- 1 ゲート
- 2 T₂
- 3 T₁

TT-2



- 1 T₁
- 2 ゲート
- 3 T₂

TT-3



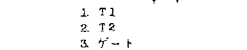
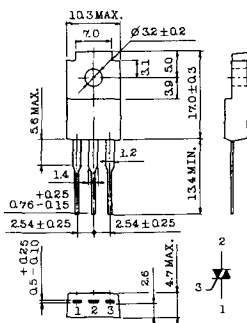
- 1 T₁
- 2 T₂
- 3 ゲート

TT-4



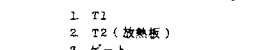
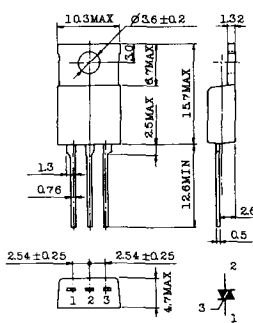
- 1 T₁
- 2 T₂
- 3 ゲート

TT-5



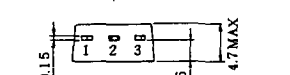
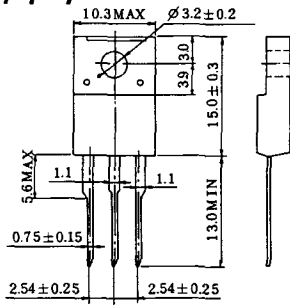
- 1 T₁
- 2 T₂
- 3 ゲート

TT-6



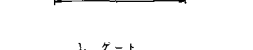
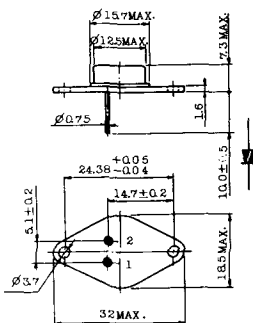
- 1 T₁
- 2 T₂ (放熱板)
- 3 ゲート

TT-7



- 1 T₁
- 2 T₂
- 3 ゲート

TT-8



- 1 ゲート
- 2 T₁
- T₂ (ケース)



TS-8



- 1. ベース
- 2. エミッタ
コレクタ
(ケース)

S-62A1A



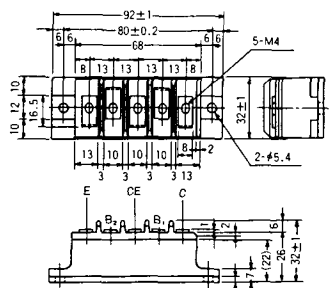
S-80A1A



S-88D1A



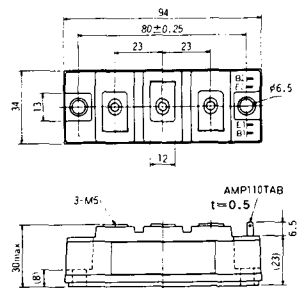
S-92B1A



S-94B1A



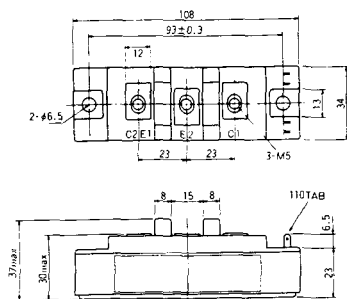
S-94B1B



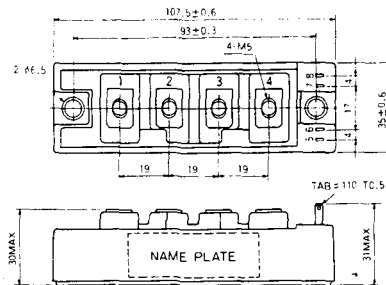
S-108B1A



S-108B1B



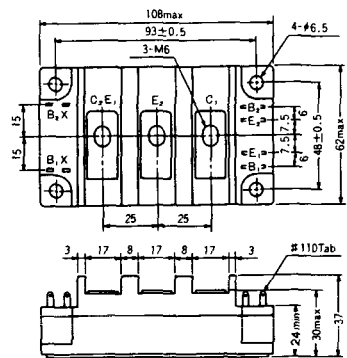
S-108B1C



S-108B2A



S-108B2B



2-22B1A



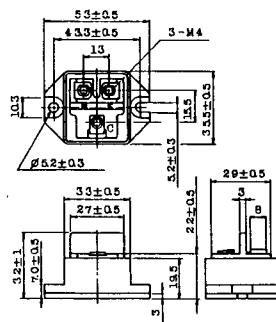
2-27A4A



2-33C1A



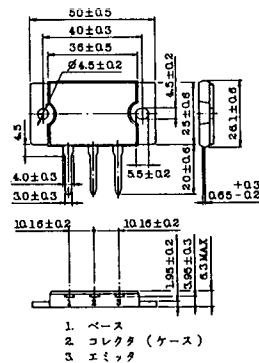
2-33D1A



2-33F1A



2-37A1A



2-48A3A



2-48A3B



2-48A4A



2-64A2A



2-64A2B



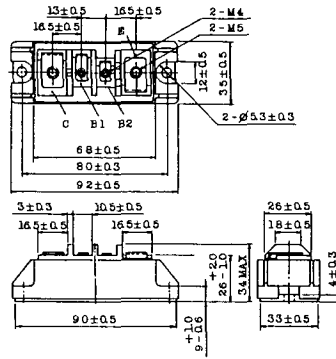
2-68A2A



2-68B2A



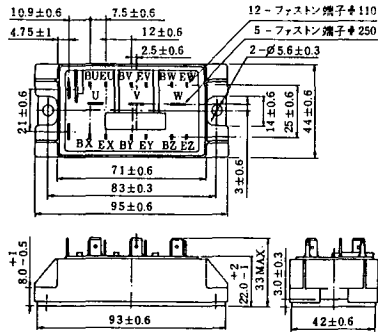
2-68C1A



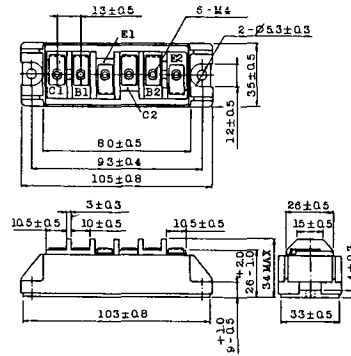
2-68D2A



2-72A3A



2-80A1A



2-80B1A



2-94D1A



2-96A3A



2-96A4A



2-98B1A



2-98C2A



2-108A2A



2-108B1A



2-109A3A



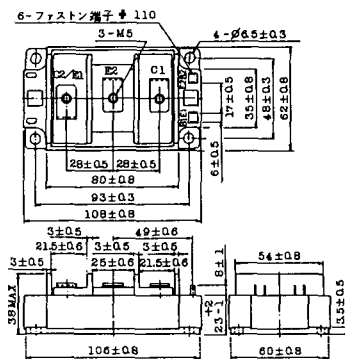
2-109A4A



2-109B3A



2-109B4A



M-101



M-102



M-103



M-104



M-105



M-106



M-107



M-116



M-201



M-202



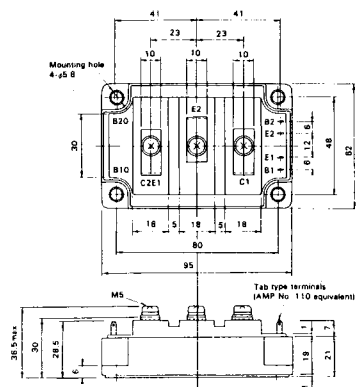
M-203



M-204



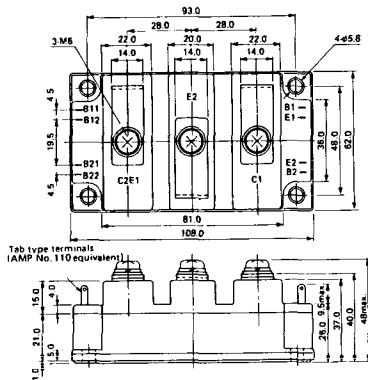
M-205



M-206



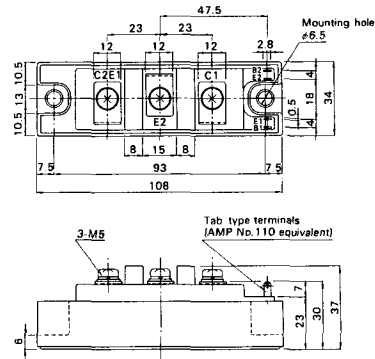
M-207



M-208



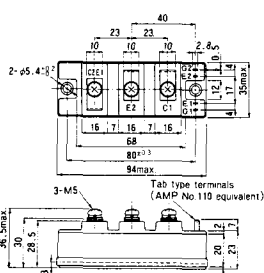
M-209



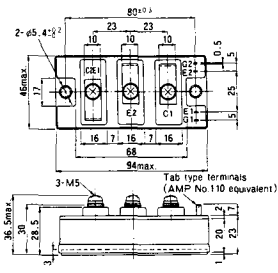
M-210



M-211



M-212



M-213



M-214

M-215



M-216



M-217



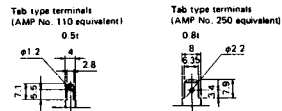
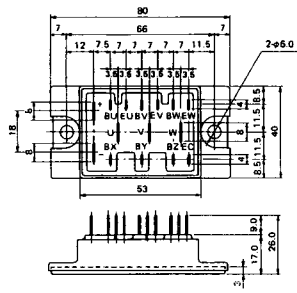
M-218



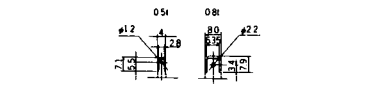
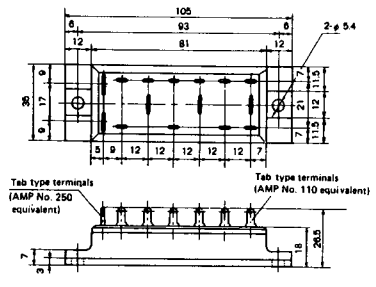
M-219



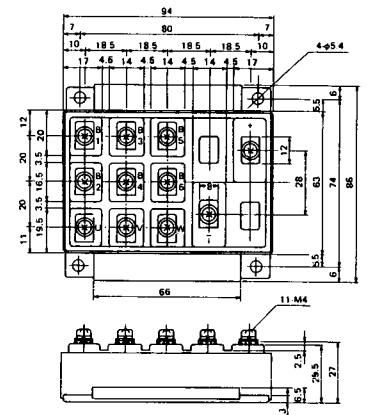
M-601



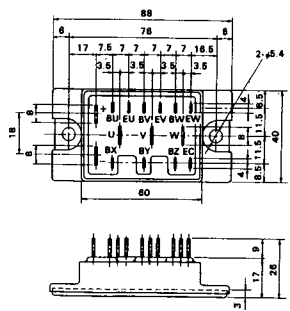
M-602



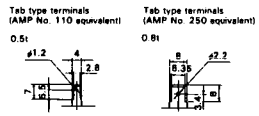
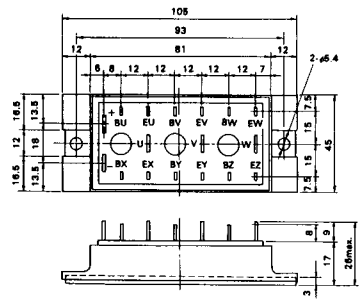
M-603



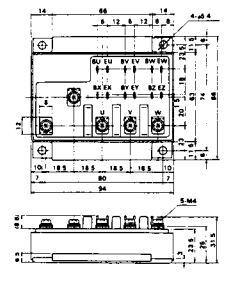
M-604



M-605



M-606



M-607



M-608



M-609



M-610



M-616



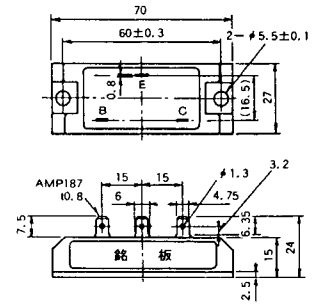
M-1A1A



M-2A1A



M-2B1A



M-2B2A



M-2C2A



M-2D4A



M-3C1A



M-3D6A



M-3E6A



M-4A1A



M-4A2A



M-4A1B



M-4A2B



M-4B2A



M-5A1A



M-5A1B



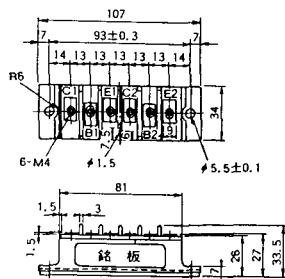
M-5A2A



M-5B2A



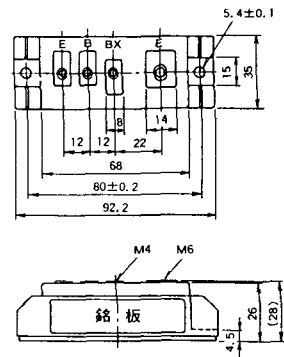
M-5C2A



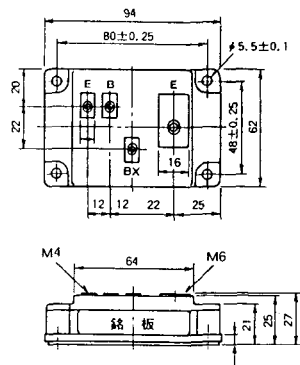
M-5D2A



M-6A1A



M-7A1A



M-7B1A



M-8A1A



M-8A1B



M-8A2A



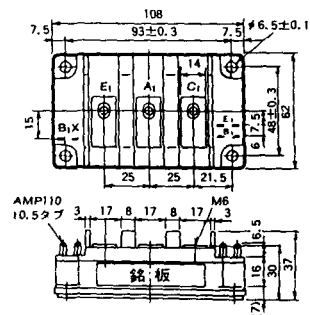
M-8A2B



M-8B2A



M-9A1A



M-9A2A



M-10A2A



M-10A2B



M-11A2A



M-12A6A



M-12B6A



M-12B6B



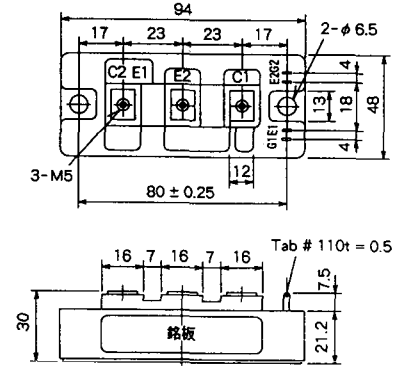
M-4A2D



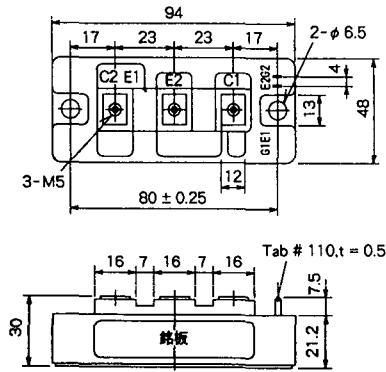
M-4A2E



M-4C2A



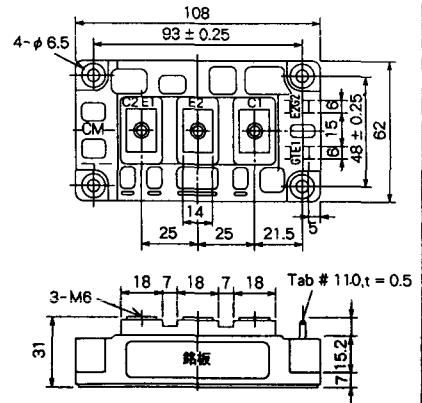
M-4C2B



M-9B1C



M-9D2A



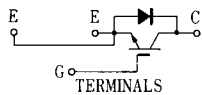
M-9D2B



M-10A2C



H-101



Weight :480g

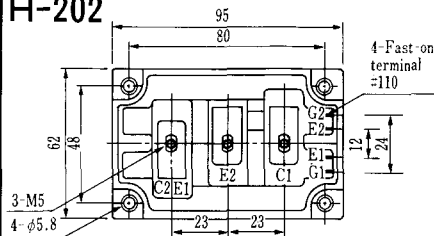
TERMINALS

H-201



Weight: 200g

H-202



Weight: 360g

LF-J



LF-K



