

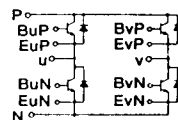
トランジスタ・モジュール (NPN, 単相/三相ブリッジ)

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

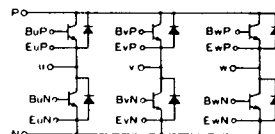
Yellow Card No. : E80276 (N)
File No. : E80271

■ 等価回路

BA-1A



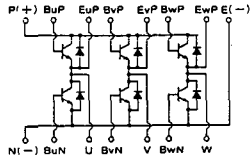
TA-1A



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

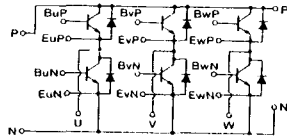
型名	最大定格 (T _J =25°C)											電 気 的 特 性									
	V _{CB0}	V _{CEX} (SUS) (注1)	V _{EB0}	I _c	I _B	I _F	I _{FM} (注2)	P _c (注3)	T _J	T _{stg}	V _{iso} (注4)	I _{CEX}		I _{EB0}		V _{CE0} (SUS)		h _{FE}			
	(V)	(V)	(V)	(A)	(A)	(A)	(A)	(W)	(°C)	(°C)	(V)	最大 (mA)	V _{CE} (V)	V _{EB} (V)	最大 (mA)	V _{EB} (V)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

TA-1B



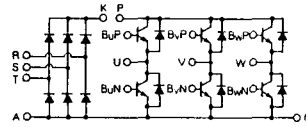
注) トランジスタはすべてダーリントン

TA-1C

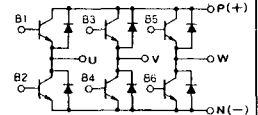


注) トランジスタはすべてダーリントン

KD-1A



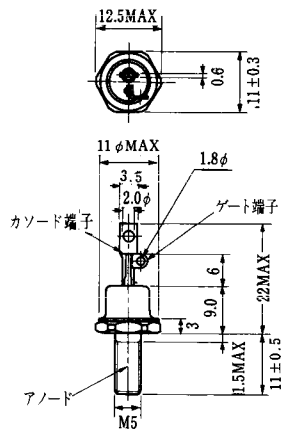
TX 1A



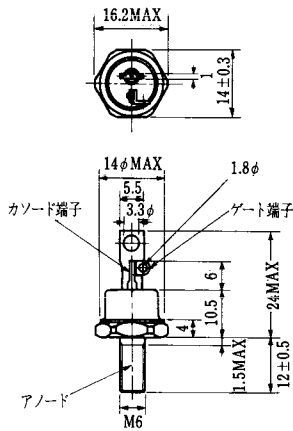
注) トランジスタはすべてダーリントン

飽和電圧 (V)		(T _J = 25°C)						エミッタ・コレクタ間ダイオード						熱抵抗		等価回路	外形図	記	事	型	名	
V _{CE}	V _{BE}	I _C	I _B	スイッチング時間 (μs)			I _{B1}	I _{B2}	V _{CC}	I _C	V _F		t _{rr}		θ _{J-C} (°C/W)							
				t _{on}	t _{off}	t _r					V _F	I _F	μs	I _F	V _{BE}							di/dt
最大	最大	(A)	(A)	最大	最大	最大	(A)	(A)	(V)	(A)	最大	(A)	最大	(A)	(V)	(A/μs)	最大	最大				
2.0	2.5	20	0.28	1.5	12	2.0	0.4	-0.4	300	20	1.5	20					0.8	2.2	BA-1A	M-2D4A	UL認定済	QM20BA-H
2.0	2.5	10	0.13	1.5	10	2.5	0.2	-0.2	300	10	1.5	10					1.5	2.5	TA-1A	M-2G6B	UL認定済	QM10TD-H
2.0	2.5	10	0.04	1.5	10	2.0	0.06	-0.2	300	10	1.5	10					1.7	2.8	TA-1B	M-3D6A	UL認定済	QM10TC-HB
2.0	2.5	10	0.04	1.5	10	2.0	0.06	-0.2	300	10	1.5	10					1.7	2.8	KD-1A	M-3D6B	UL認定済	QM10KD-HB
2.0	2.5	15	0.2	1.5	9.5	2.5	0.3	-0.3	250	15	1.5	15					1.5	2.5	TA-1A	M-2G6B	UL認定済	QM15TD-9
2.0	2.5	15	0.06	1.5	10	2.0	0.09	-0.3	250	15	1.5	15					1.7	2.8	TA-1A	M-2G6A	UL認定済	QM15TD-9B
2.0	2.5	15	0.2	1.5	9.5	2.5	0.3	-0.3	250	15	1.5	15					1.5	2.5	TA-1B	M-2F6A	UL認定済	QM15TC-9
2.0	2.5	15	0.06	1.5	10	2.0	0.09	-0.3	250	15	1.5	15					1.5	2.5	TA-1B	M-2F6A	UL認定済	QM15TC-9B
2.5	3.5	15	0.3	2.5	15	3.0	0.3	-0.3	600	15	1.5	15					0.8	1.2	TA-1A	M-2E6B	UL認定済	QM15TB-2H
3.0	3.5	15	0.06	2.0	10	3.0	0.09	-0.3	600	15	1.8	15					0.8	2.0	TA-1A	M-2E6B	UL認定済	QM15TB-2HB
3.0	3.5	15	0.3	2.5	15	3.0	0.3	-0.3	600	15	1.5	15					0.8	1.2	TA-1A	M-2E6B	UL認定済	QM15TB-24
2.0	2.5	15	0.2	1.5	10	3.0	0.3	-0.3	300	15	1.5	15					1.2	2.5	TA-1A	M-2G6B	UL認定済	QM15TD-H
2.0	2.5	15	0.06	1.5	10	2.0	0.09	-0.3	300	15	1.5	15					1.65	2.8	TA-1A	M-2G6B	UL認定済	QM15TD-HB
2.0	2.5	15	0.06	1.5	10	2.0	0.09	-0.3	300	15	1.5	15					1.65	2.8	KD-1A	M-2F6A	UL認定済	QM15KD-HB
2.0	2.5	20	0.28	1.5	9.5	2.5	0.4	-0.4	250	20	1.5	20					1.2	2.5	TA-1A	M-2G6B	UL認定済	QM20TD-9
2.0	2.5	20	0.08	2.0	10	2.0	0.12	-0.4	250	20	1.5	20					1.65	2.8	TA-1A	M-2G6A	UL認定済	QM20TD-9B
2.0	2.5	20	0.08	2.0	10	2.0	0.12	-0.4	250	20	1.5	20					1.25	2.5	TA-1B	M-2F6A	UL認定済	QM20TC-9B
2.0	2.5	20	0.28	1.5	12	2.0	0.4	-0.4	300	20	1.5	20					1.2	2.2	TA-1A	M-2G6B	UL認定済	QM20TD-H

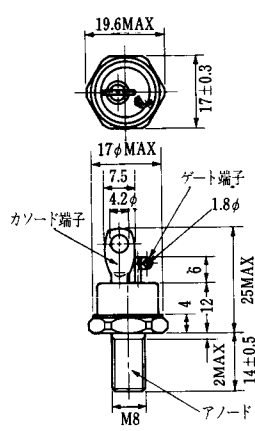
FD-1



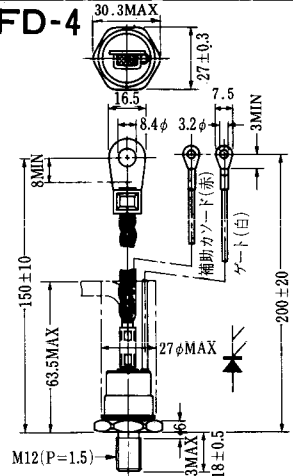
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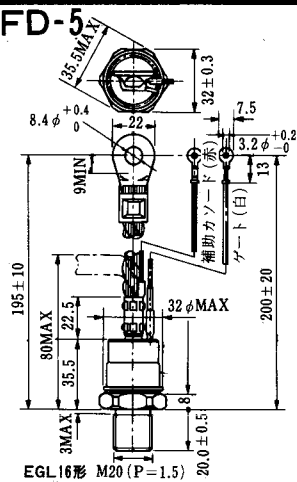
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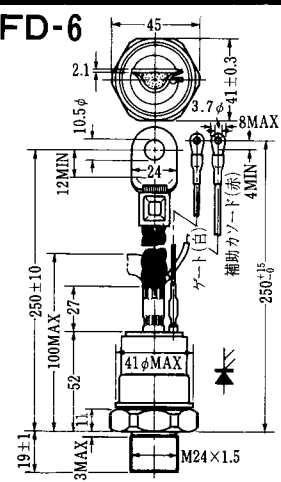
FD-4



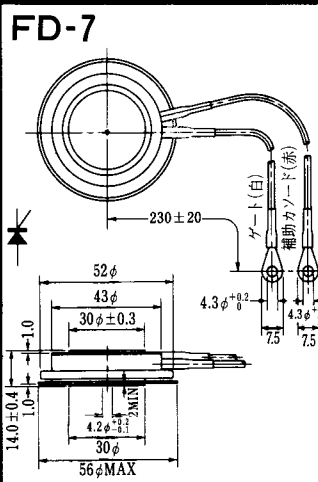
FD-5



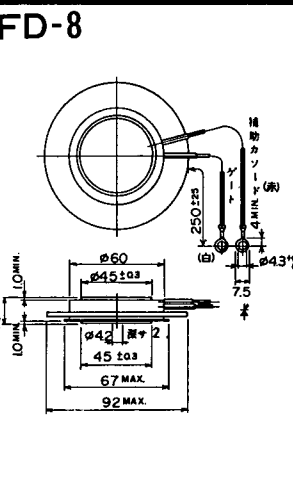
FD-6



FD-7



FD-8



FD-9



FD-10



FD-11

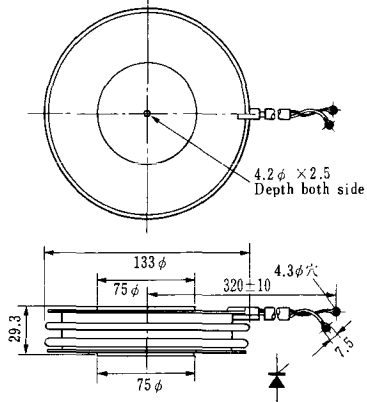
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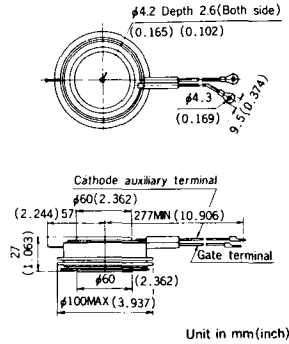


《寸法図単位：mm》

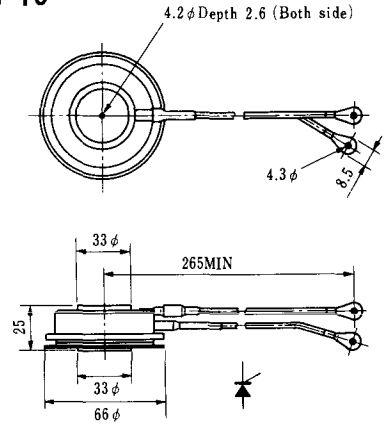
H-17



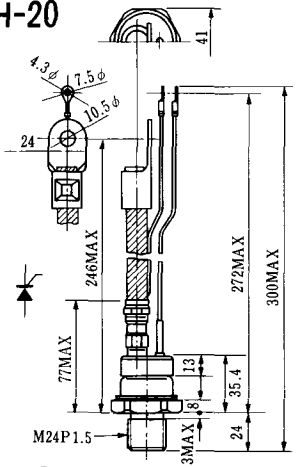
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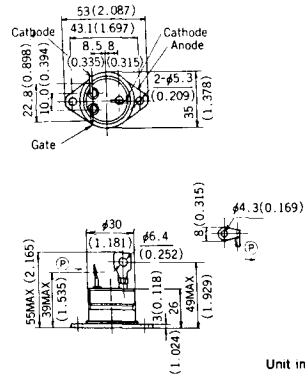
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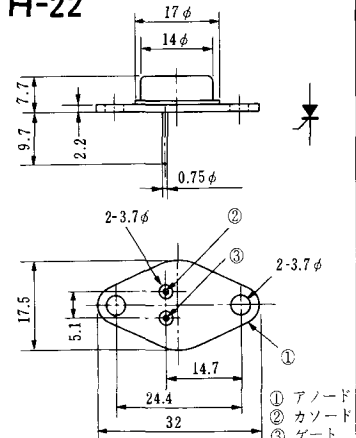
H-20



H-21



H-22



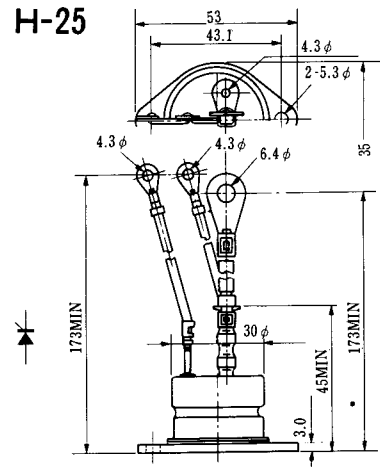
H-23



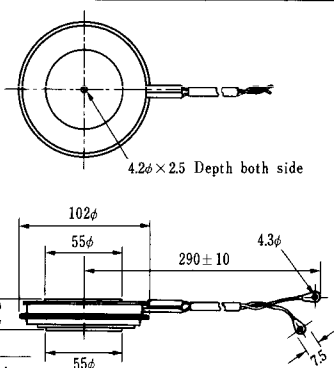
H-24



H-25



H-26



Type	Direction of polarity
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CA12	
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H-27

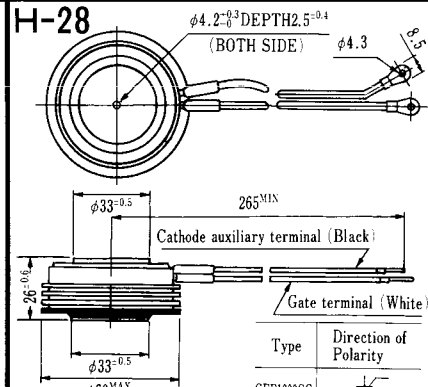


Type	Direction of polarity
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CF11V	
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(注) CC11V : 400 ± 10
CF11V : 250 ± 10

H-28



Type	Direction of Polarity
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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)



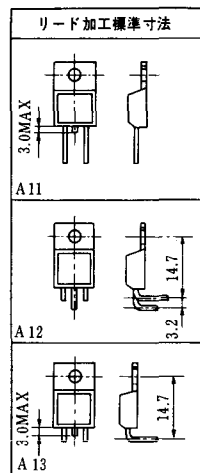
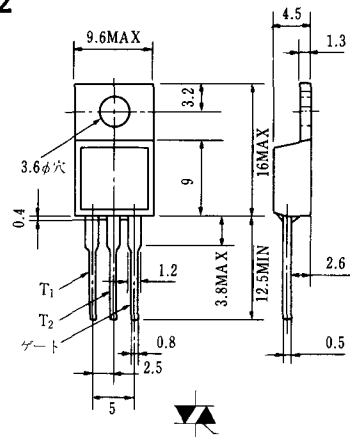
Note : The thickness is a dimension in press at the rated mounting force. Weight: 1,460(g)

HT-1

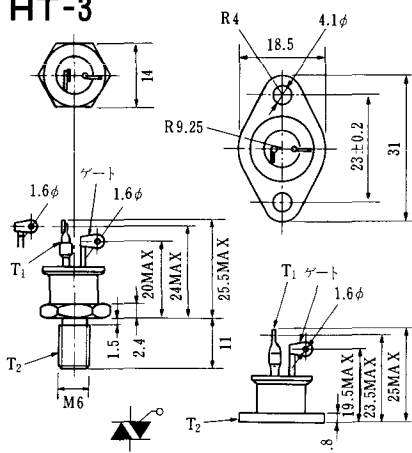


Unit in mm (inch)

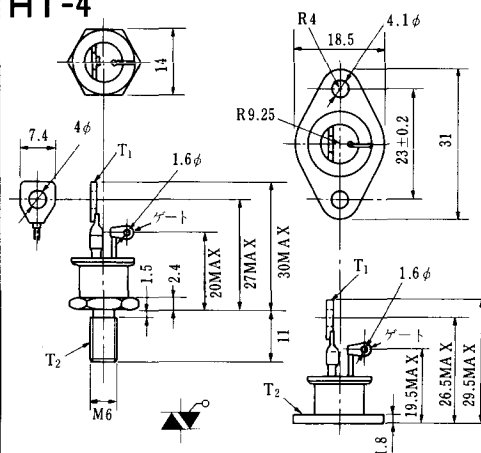
HT-2



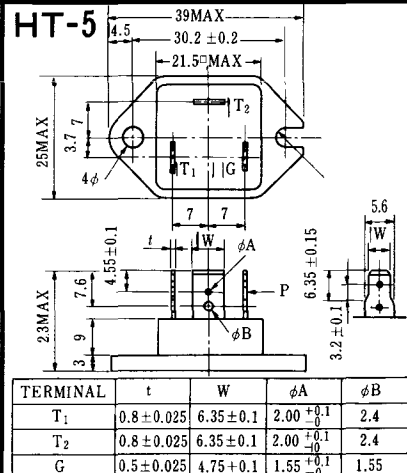
HT-3



HT-4



HT-5



M-1



M-2



M-3



M-4



M-5



M-6



M-7



M-8



M-9



M-10



M-11



M-12



M-13



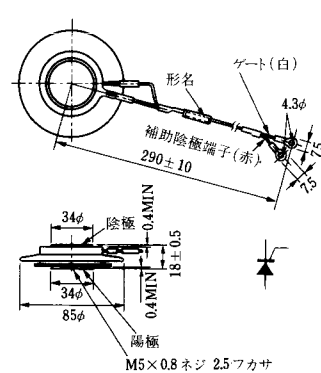
M-14



M-15



M-16





M-25



M-26



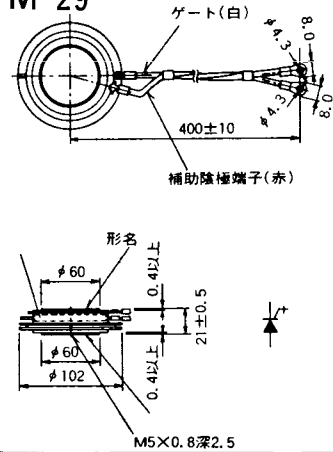
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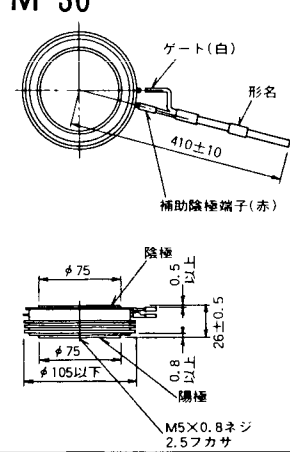
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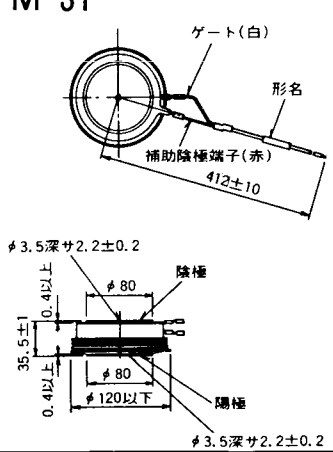
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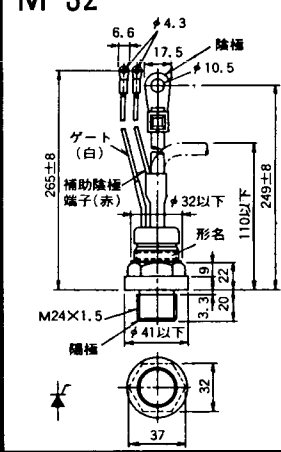
M-30



M-31



M-32



M-33



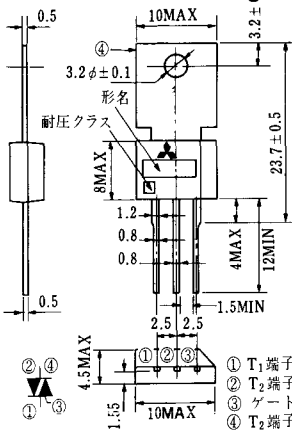
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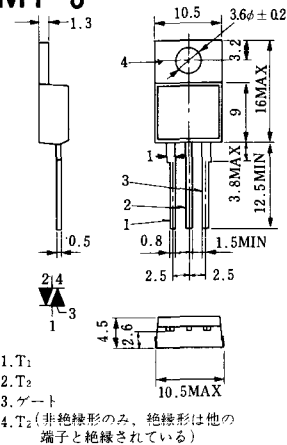
MT-1



MT-2



MT-3



MT-4



MT-5



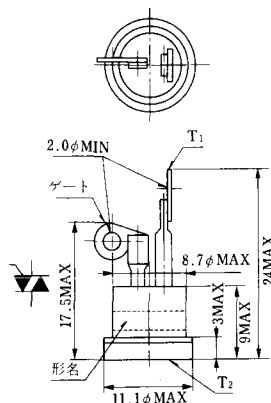
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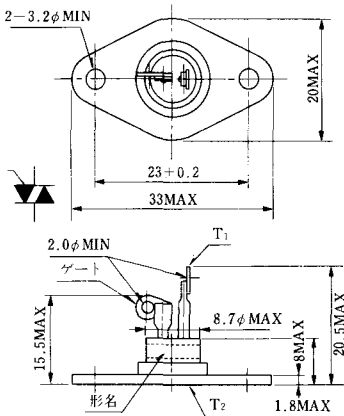
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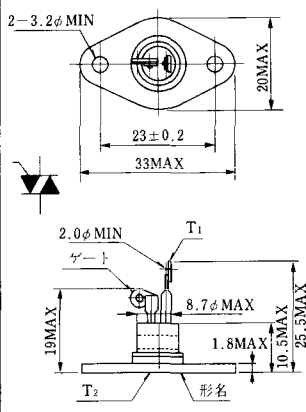
MT-8



MT-9



MT-10



MT-11



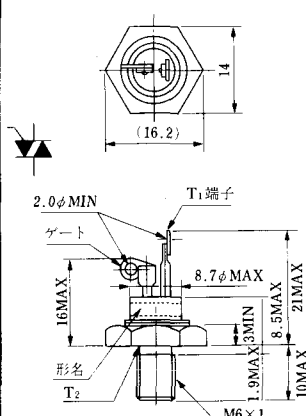
MT-12



MT-13



MT-14



MT-15



MT-16



MT-17



MT-18



MT-19



MT-20



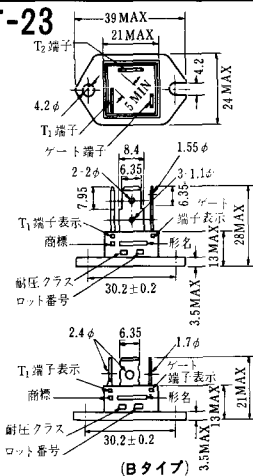
MT-21



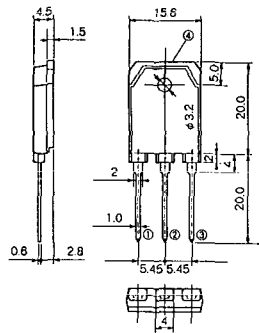
MT-22



MT-23

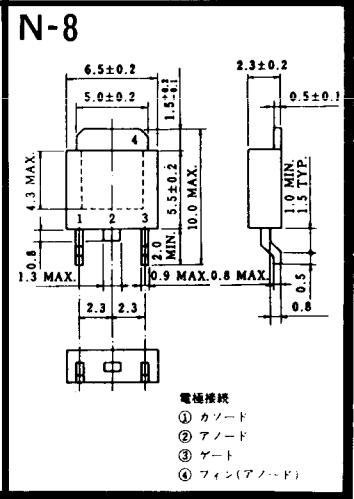
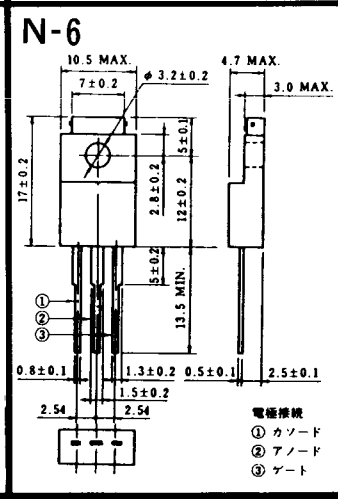
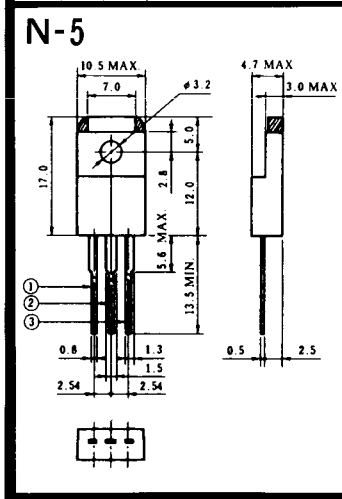
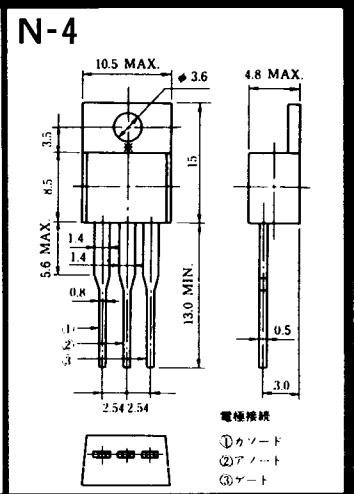
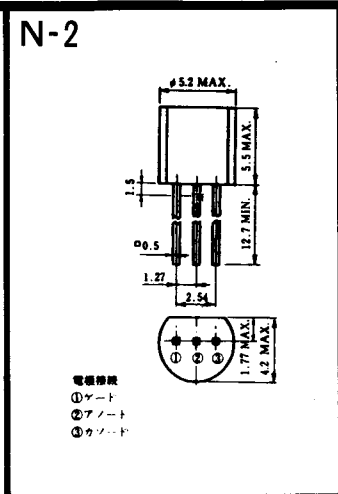
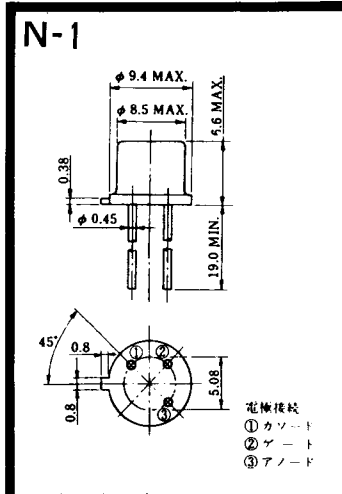


MT-24



TO - 3P

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



N-9



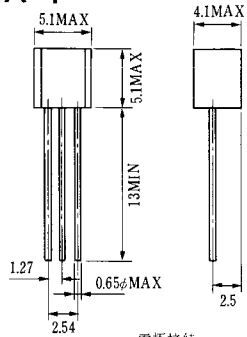
電極標紙

K : カソード

A : アノード

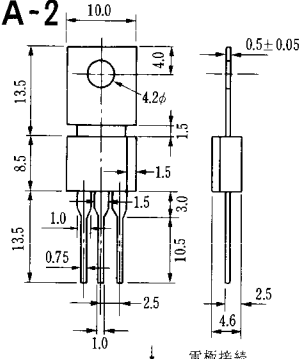
G : ゲート

NA-1



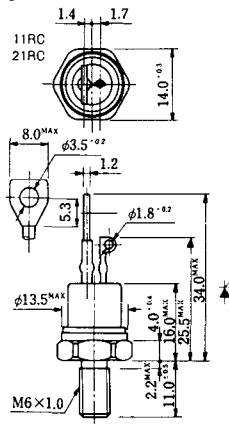
電極接続
1. ゲート
2. アノード
3. カソード
JEDEC: TO-92

NA-2



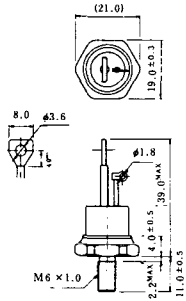
電極接続
1. カソード
2. アノード
3. ゲート
JEDEC: TO-202AA

NI-1



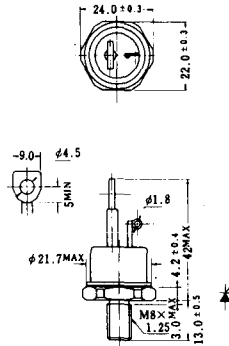
NI-2

29RD



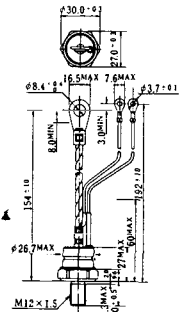
NI-3

39RC
59RC
39RF
59RF



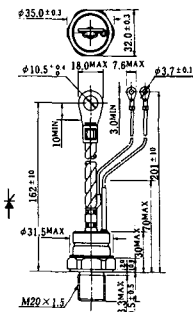
NI-4

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



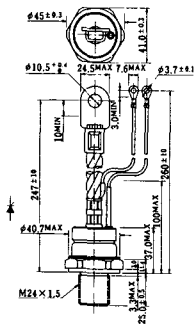
NI-5

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



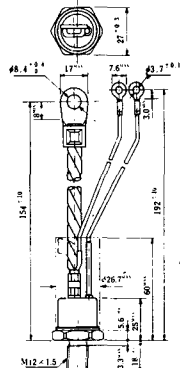
NI-6

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



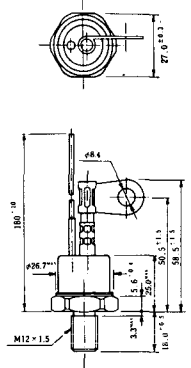
NI-7

89RW_{JL}
129RW_{JL}



NI-8

89RW
129RW



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



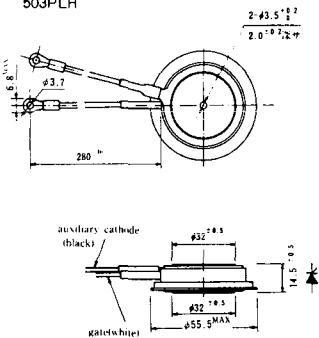
NI-15

359RGA



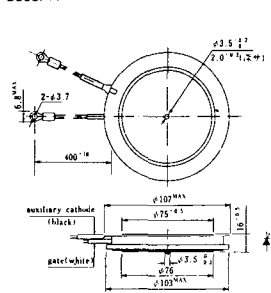
NI-16

503PLF
503PLH



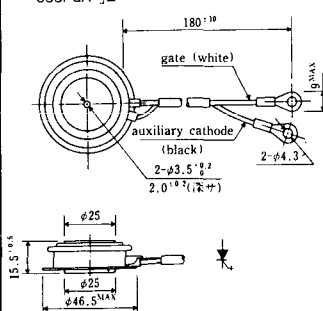
NI-17

3003PA



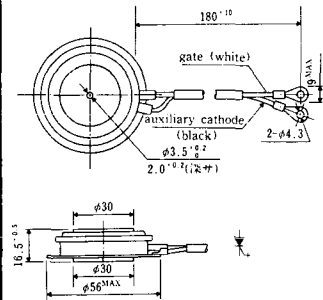
NI-18

353PGA「E



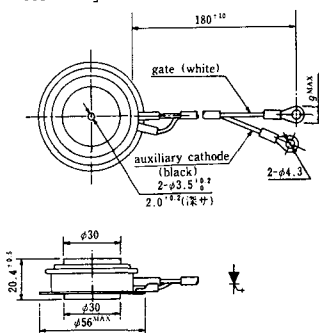
NI-19

603PGA, 603PGA「A, 803PGA



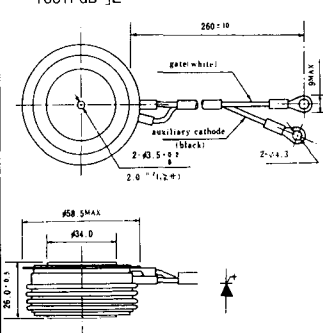
NI-20

603PGA「E



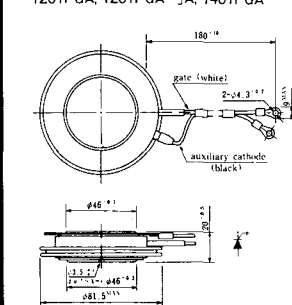
NI-21

1001PGB「E



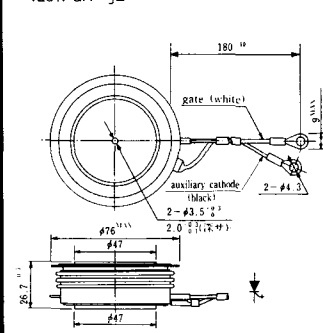
NI-22

1201PGA, 1201PGA「A, 1401PGA



NI-23

1201PGA「E



NI-24

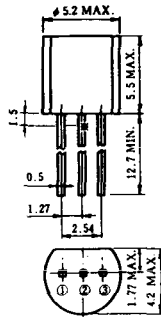
2001PGB^r JE



NI-25

NI-26

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

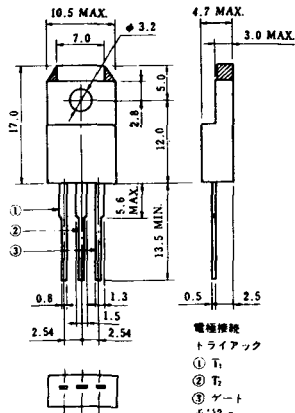
NT-4



電極接続

- ① T₁
- ② T₂
- ③ G

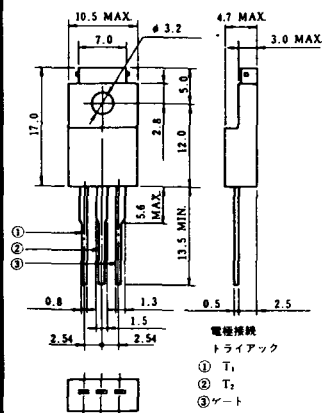
NT-5



電極接続
トライアック

- ① T₁
- ② T₂
- ③ ゲート

NT-6



電極接続
トライアック

- ① T₁
- ② T₂
- ③ ゲート

NT-7



NT-8



電極接続

- ① T₁
- ② T₂
- ③ G
- ④ シェン(T₂)

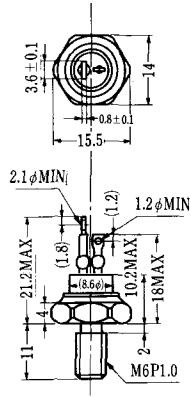
S-1



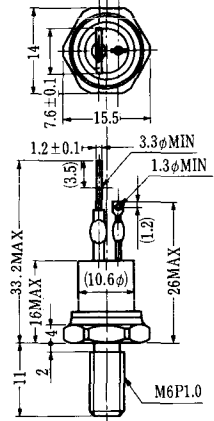
ST-1



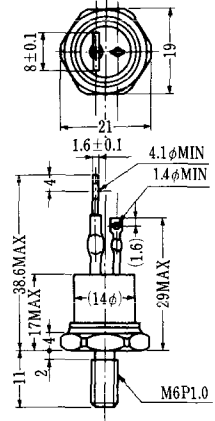
SA-1



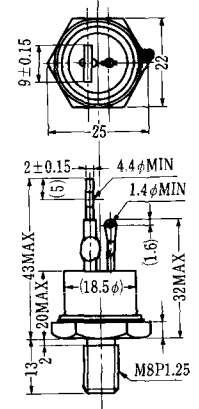
SA-2



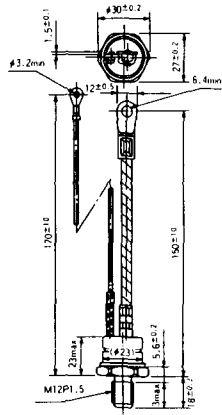
SA-3



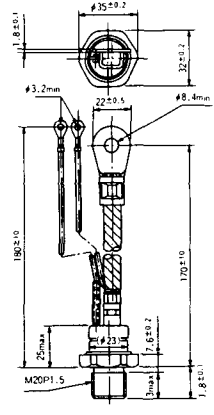
SA-4



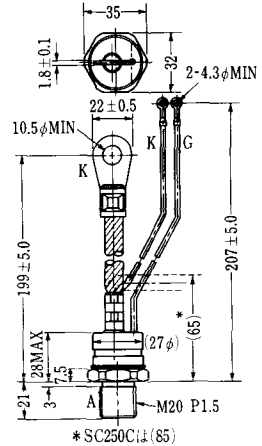
SA-5



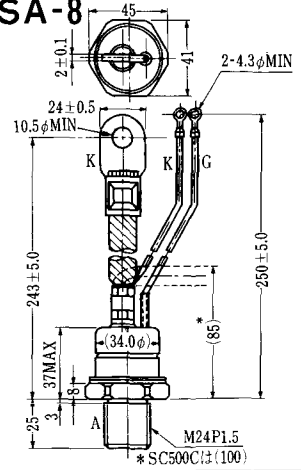
SA-6



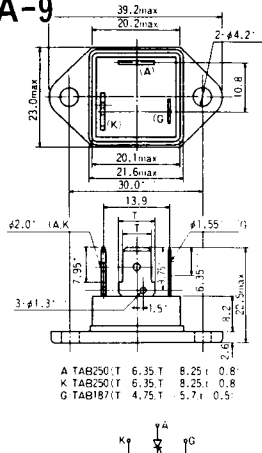
SA-7



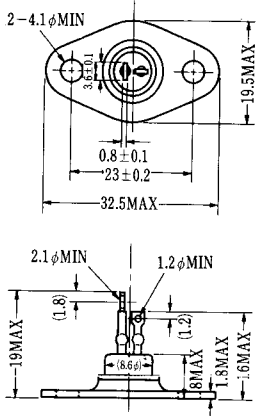
SA-8



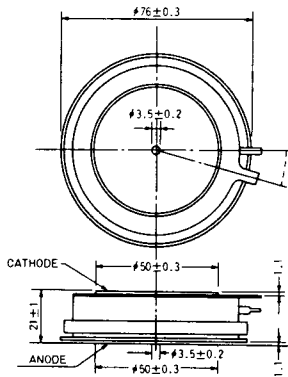
SA-9



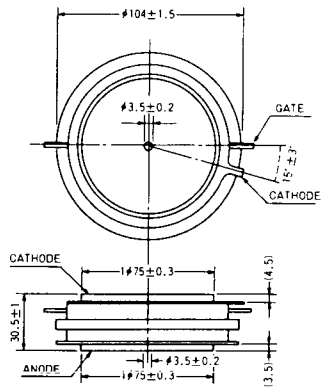
SA-10



SA-11



SA-12

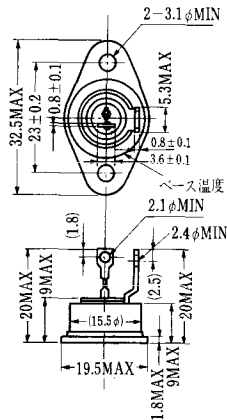


SAT-1



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

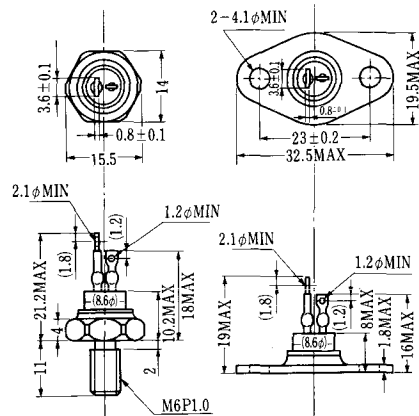
SAT-2



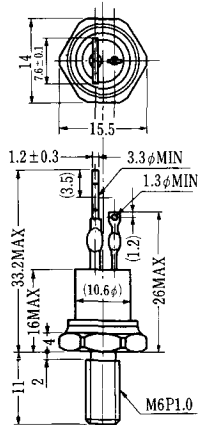
SAT-3



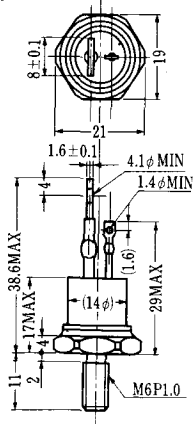
SAT-4



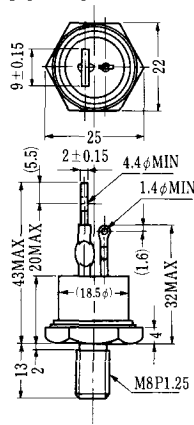
SAT-5



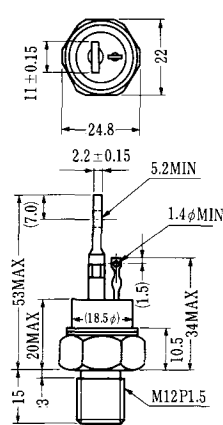
SAT-6



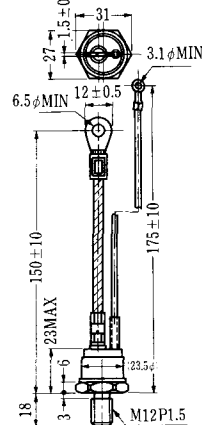
SAT-7



SAT-8



SAT-9



SAT-10



SAT-11

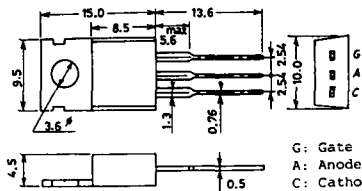


SY-1 (1096A)



C: Cathode
A: Anode
G: Gate

SY-2 (1151)



G: Gate
A: Anode
C: Cathode

SY-3 (1104)



G: Gate
A: Anode
C: Cathode

SY-4 (1150)



G: Gate
A: Anode
C: Cathode

1097A



G: Gate

1102



1141



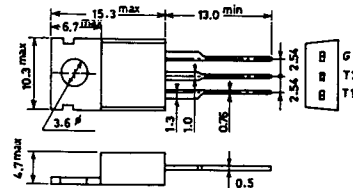
1142



1144



1155

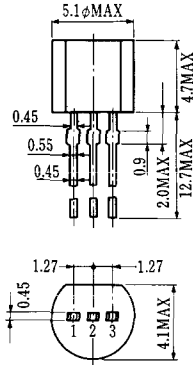


1192A



G: Gate

T-1 (13-5A1A)



- 1 ゲート
- 2 アノード
- 3 カソード

T-2 (13-8A1A)



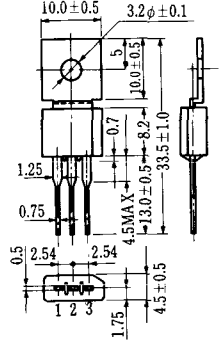
1. カソード
2. ゲート
3. アノード(ケース)

T-3 (13-8C1A)



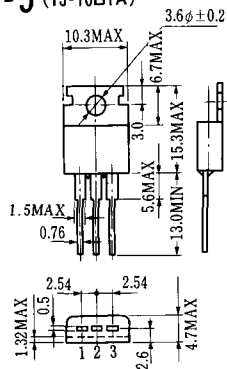
カソード
ゲート
アノード

T-4 (13-10A1A)



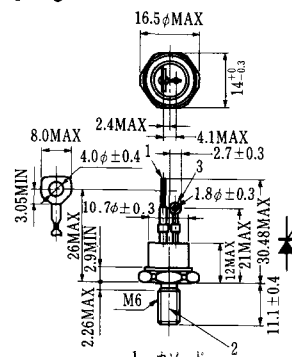
- 1 カソード
- 2 アノード
- 3 ゲート

T-5 (13-10B1A)



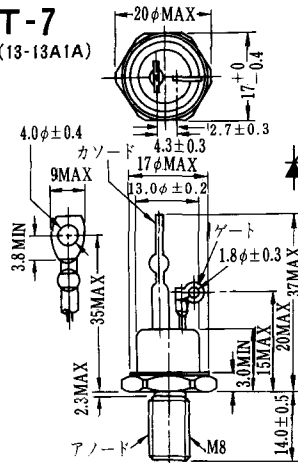
- 1 カソード
- 2 アノード
- 3 ゲート

T-6 (13-11D1A)



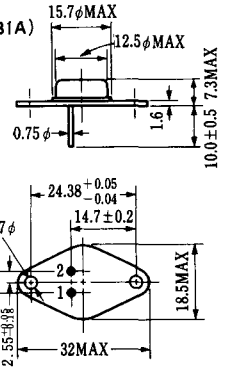
- 1 カソード
- 2 アノード
- 3 ゲート

T-7 (13-13A1A)



カソード
ゲート
アノード

T-8 (13-13B1A)



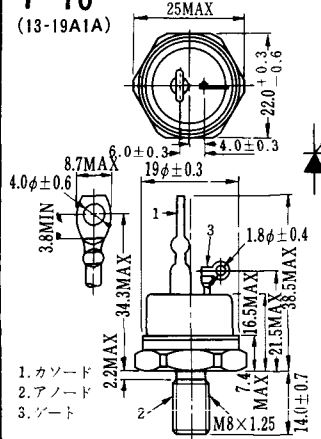
1. ゲート
2. カソード
3. アノード(ケース)

T-9 (13-14A1A)



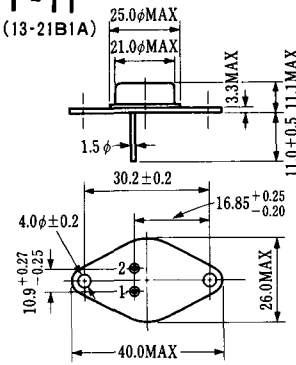
1. ゲート
2. カソード
- アノード(ケース)

T-10 (13-19A1A)



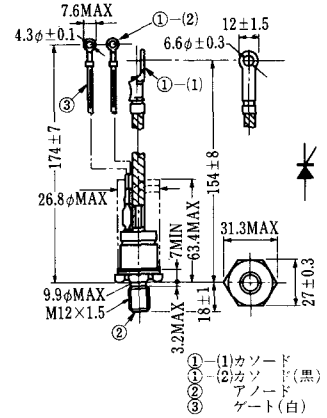
1. カソード
2. アノード
3. ゲート

T-11 (13-21B1A)



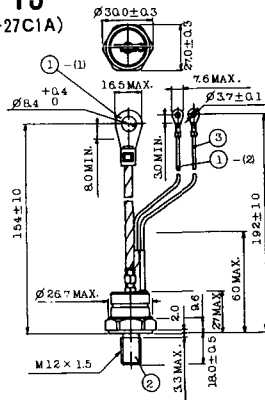
1. ゲート
2. カソード
- アノード(ケース)

T-12 (13-27B1B)



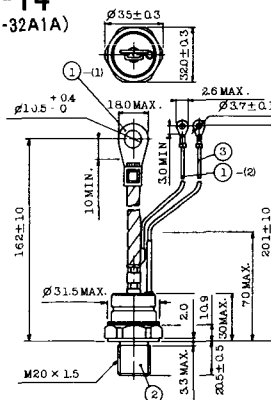
- ①(1) カソード
- ①(2) カソード(黒)
- ② アノード
- ③ ゲート(白)

T-13 (13-27C1A)



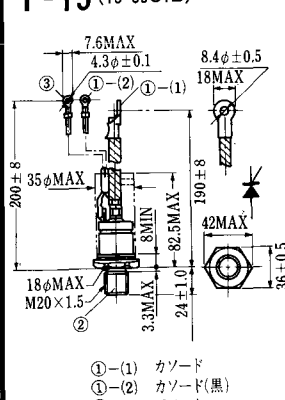
- 1-(1) カソード
- 1-(2) カソード(黒)
- 2 アノード
- 3 ゲート(白)

T-14 (13-32A1A)



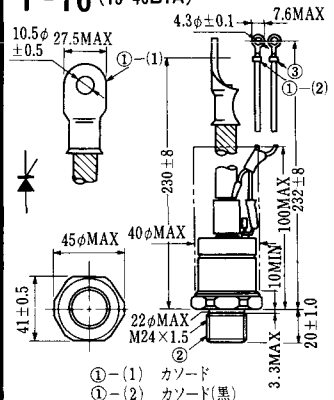
- 1-(1) カソード
- 1-(2) カソード(黒)
- 2 アノード
- 3 ゲート(白)

T-15 (13-35C1B)



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

T-16 (13-40B1A)



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

T-17 (13-42A1A)



T-18 (13-45D1A)



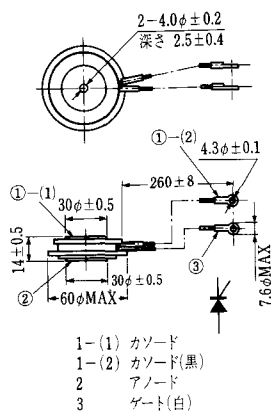
T-19 (13-52B1A)



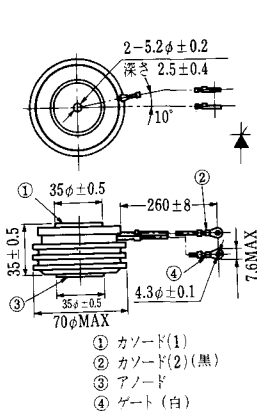
T-20 (13-52C1A)



T-21 (13-60A1A)



T-22 (13-70C1A)



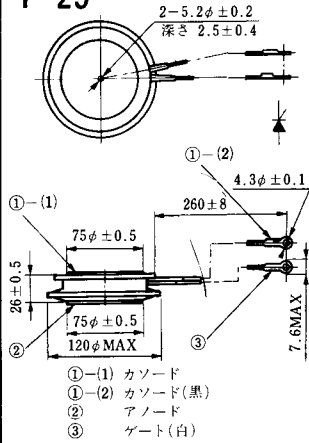
T-23 (13-78A1A)



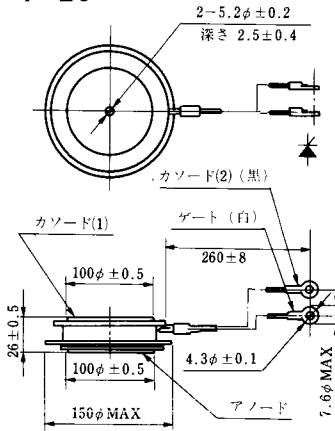
T-24 (13-100C1A)



T-25 (13-120A2A)



T-26 (13-150A1A)



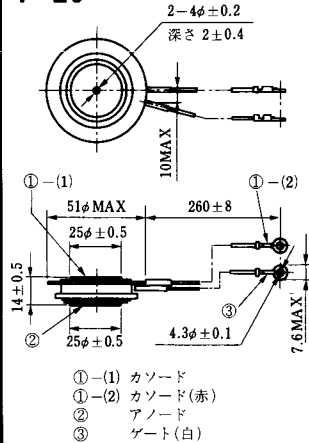
T-27 (13-37A1A)



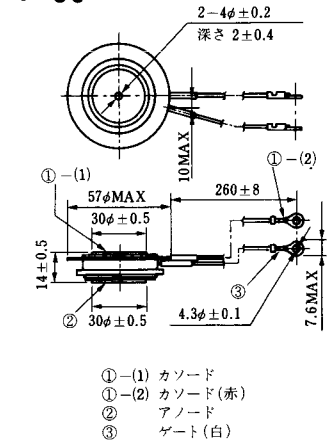
T-28 (13-45E1A)



T-29 (13-51A1A)



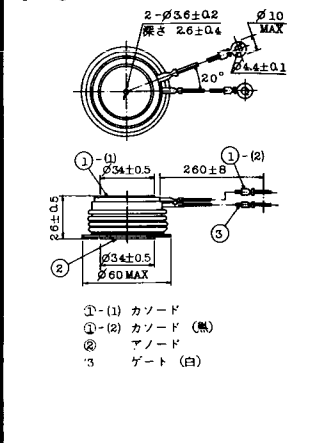
T-30 (13-57A1A)



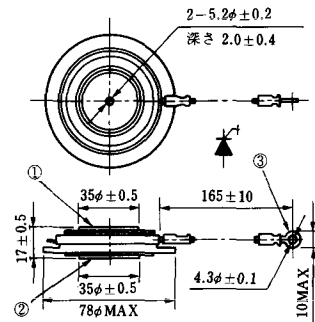
T-31 (13-100E1A)



T-32 (13-60E3A)

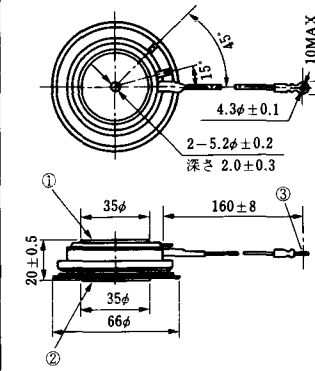


T-33 (13-78B1A)



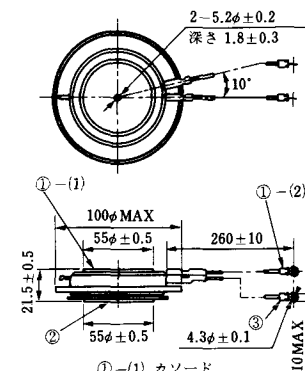
- ① カソード
- ② アノード
- ③ ゲート

T-34 (13-66A1A)



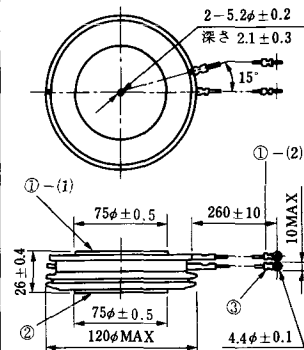
- ① カソード
- ② アノード
- ③ ゲート

T-35 (13-100D1A)



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

T-36 (13-120E1A)



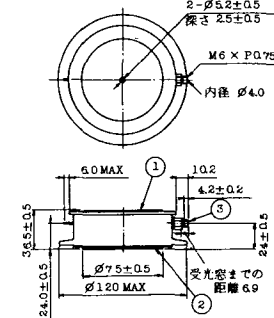
- ①-(1) カソード
- ①-(2) カソード(黒)
- ② アノード
- ③ ゲート(白)

T-37 (13-120A1A)



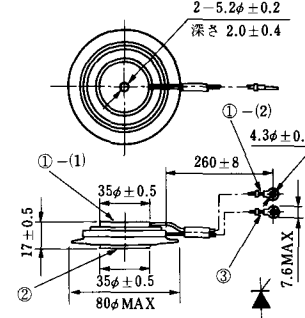
- ①-(1) カソード
- ①-(2) カソード(黒)
- ② アノード
- ③ ゲート(白)

T-38 (13-120C1A)



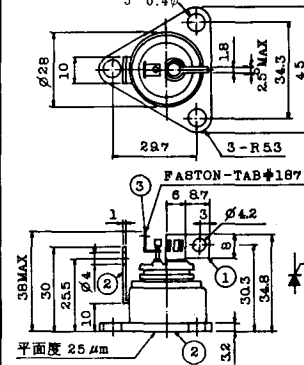
- ① カソード
- ② アノード
- ③ ゲート

T-39 (13-80B1A)



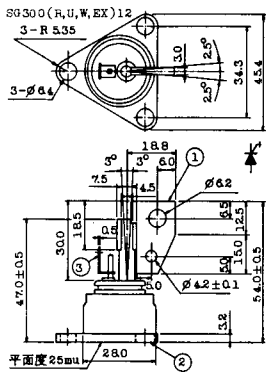
- ①-(1) カソード
- ①-(2) カソード(黒)
- ② アノード
- ③ ゲート(白)

T-40 (13-28A1A)



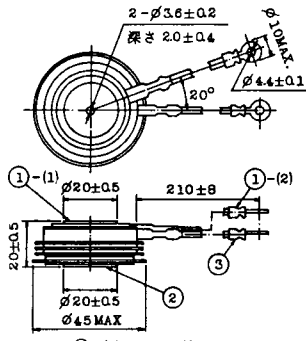
- 1. カソード
- 2. アノード
- 3. ゲート

T-41 (13-28A2A)



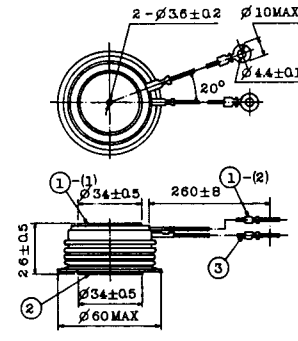
- 1 カソード
- 2 アノード
- 3 ゲート

T-42 (13-45F1A)



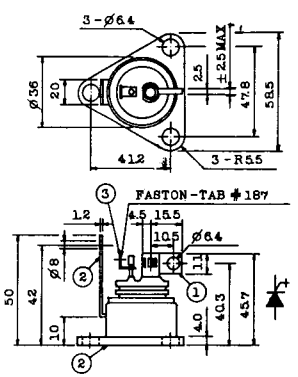
- ①-①) カソード
- ①-②) カソード(黒)
- ②) アノード
- ③) ゲート(白)

T-43 (13-60E2A)



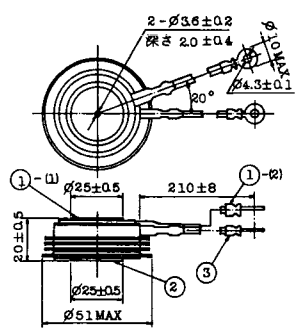
- ①-①) カソード
- ①-②) カソード(黒)
- ②) アノード
- ③) ゲート(白)

T-44 (13-36A1A)



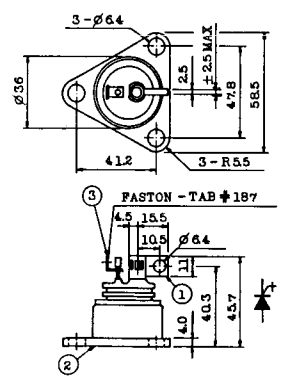
- 1 カソード
- 2 アノード
- 3 ゲート

T-45 (13-51B1A)



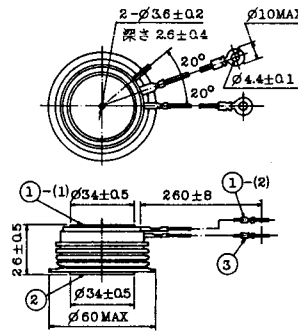
- ①-①) カソード
- ①-②) カソード(黒)
- ②) アノード
- ③) ゲート(白)

T-46 (13-36B1A)



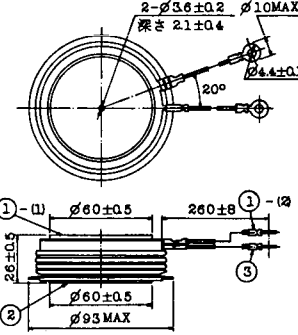
- 1 カソード
- 2 アノード
- 3 ゲート

T-47 (13-60E1A)



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

T-48 (13-93C1A)



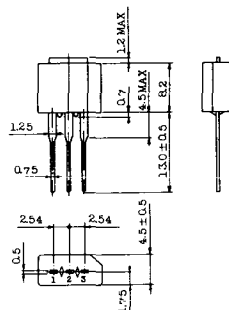
- ①-①) カソード
- ①-②) カソード(黒色)
- ②) アノード
- ③) ゲート(白色)

T-49 (13-75A1A)



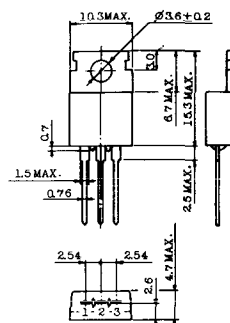
- 1-(1) カソード
- 1-(2) カソード (黒)
- 2 アノード
- 3 ゲート (白)

T-50 (13-10A3A)



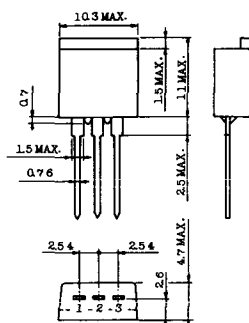
- 1 カソード
- 2 アノード
- 3 ゲート

T-51 (13-10D1A)



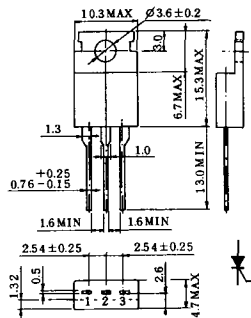
- 1 カソード
- 2 アノード
- 3 ゲート

T-52 (13-10D2A)



- 1 カソード
- 2 アノード
- 3 ゲート

T-53 (13-10E1B)



- 1 カソード
- 2 アノード
- 3 ゲート

T-54 (13-10F1B)



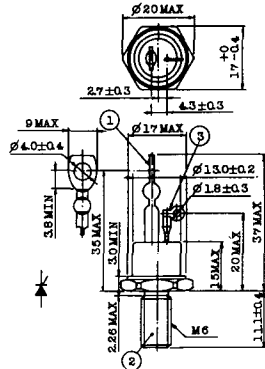
- 1 カソード
- 2 アノード
- 3 ゲート

T-55 (13-5A1D)



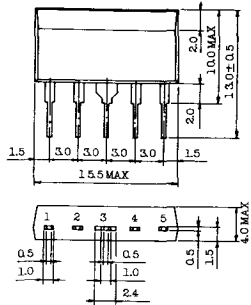
- 1 カソード
- 2 アノード
- 3 アノード

T-56 (13-13C1A)



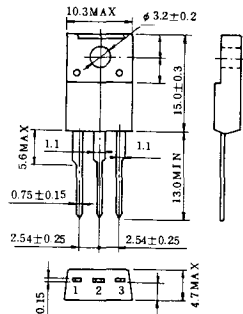
- 1 カソード
- 2 アノード
- 3 ゲート

T-57 (12-16C1A)



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

T-58 (13-10H1B)



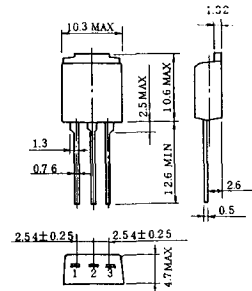
1. カソード
2. アノード
3. ゲート

T-59 (13-120A1A)



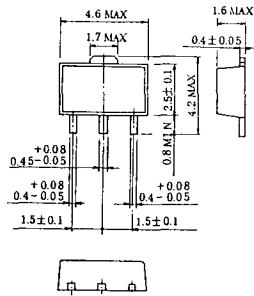
- 1-(1) カソード
- 1-(2) カソード (黒)
- 2 アノード
- 3 ゲート (白)

T-60



1. カソード
2. アノード
3. ゲート

T-61 (13-5B1A)



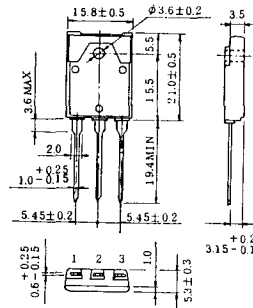
1. ゲート
2. アノード
3. カソード

T-62 (13-10H1A)



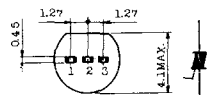
1. カソード
2. アノード
3. ゲート

T-63 (13-16A1B)



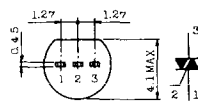
1. カソード
2. アノード
3. ゲート

TT-1



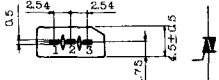
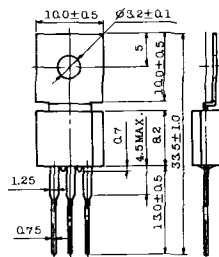
- 1 ゲート
- 2 T₂
- 3 T₁

TT-2



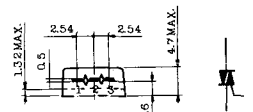
- 1 T₁
- 2 ゲート
- 3 T₂

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



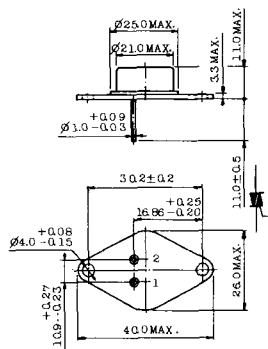
- 1 T₁
- 2 T₂
- 3 ゲート

TT-8



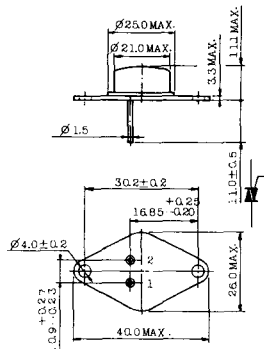
- 1 ゲート
- 2 T₁
- T₂ (ケース)

TT-9



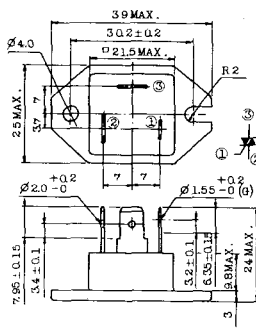
1. ゲート
2. T₁
3. T₂ (ケース)

TT-10



1. ゲート
2. T₁
3. T₂ (ケース)

TT-11



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

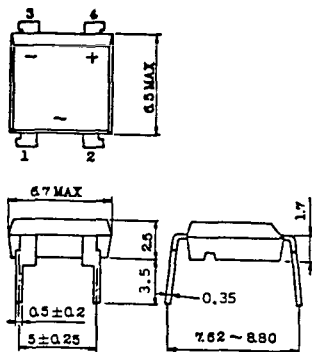
TT-12



ゲート端子詳細

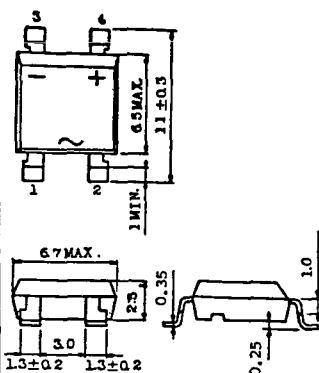
- ① ゲート (フーストン端子 #187)
- ② T₁ (" #250)
- ③ T₂ (" #250)

TT-13



- 1, 2: T₂
- 3: GATE
- 4: T₁

TT-14



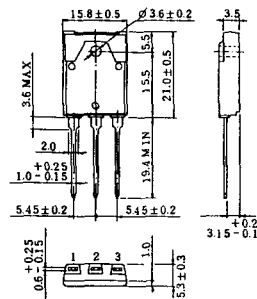
- 1, 2: T₂
- 3: GATE
- 4: T₁

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

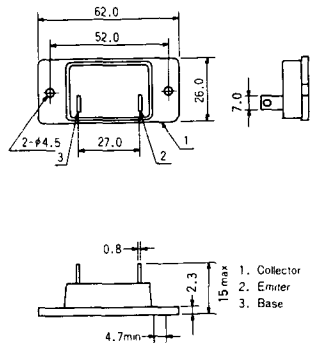


TS-8

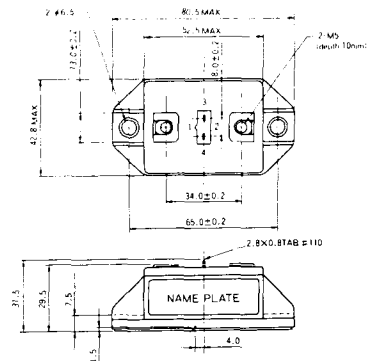


- 1. ベース
- 2. エミッタ
コレクタ
(ケース)

S-62A1A



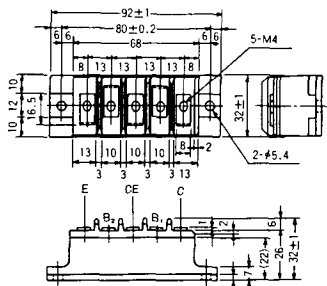
S-80A1A



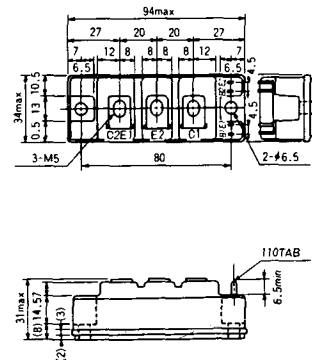
S-88D1A



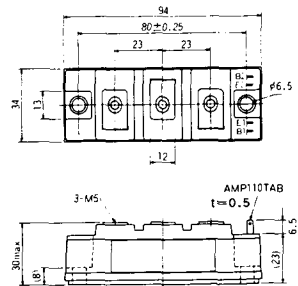
S-92B1A



S-94B1A



S-94B1B



S-94B2A



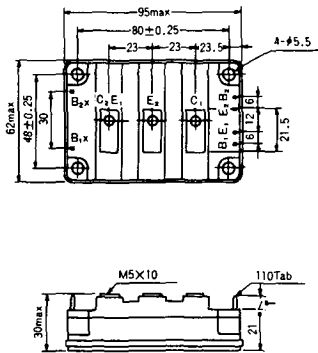
S-94D1A



S-95A1A



S-95B1A



S-98B1B



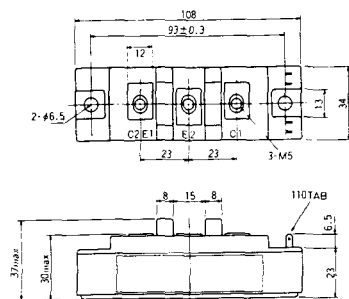
S-108A2A



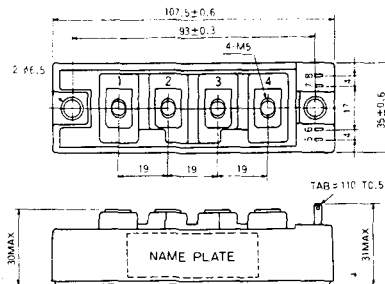
S-108B1A



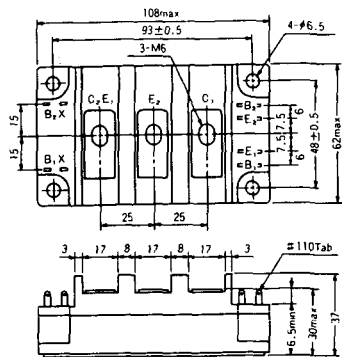
S-108B1B



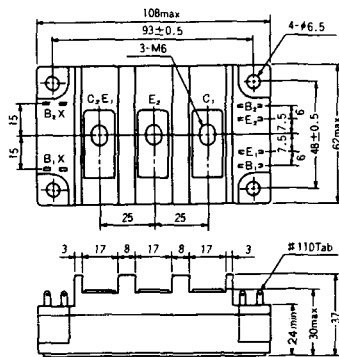
S-108B1C



S-108B2A



S-108B2B



2-22B1A



2-27A4A



2-33C1A



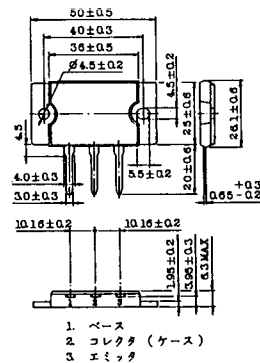
2-33D1A



2-33F1A



2-37A1A



1. スイス
2. コレクタ (ケース)
3. ハミツク

2-48A3A



2-48A3B



2-48A4A



2-64A2A



2-64A2B



2-68A2A



2-68B2A



2-68C1A



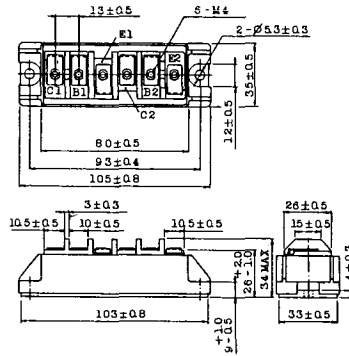
2-68D2A



2-72A3A



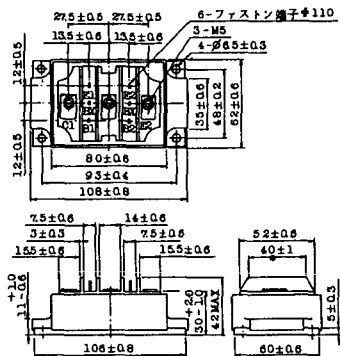
2-80A1A



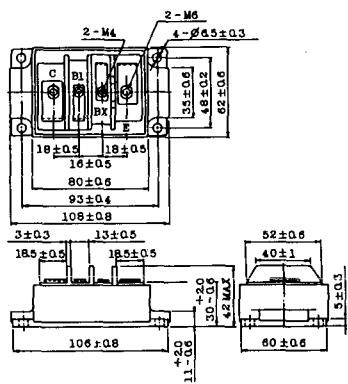
2-80B1A



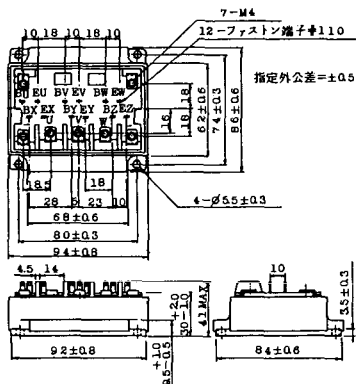
2-80C1A



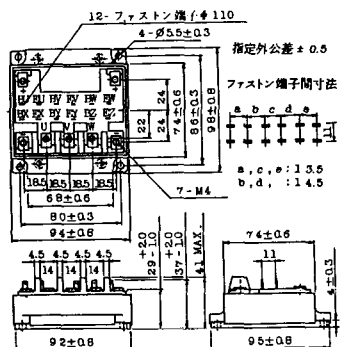
2-80D2A



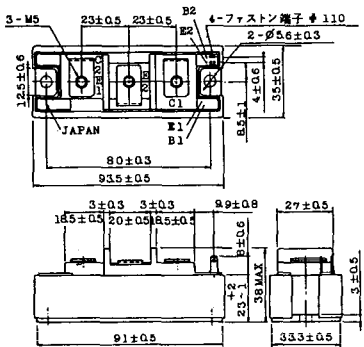
2-94A2A



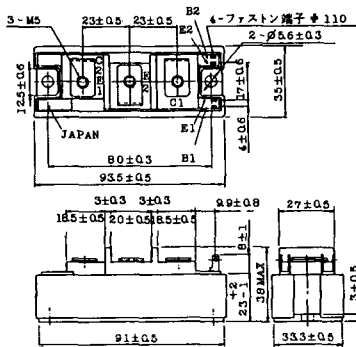
2-94B1A



2-94C2A



2-94C3A



2-94D1A



2-96A3A



2-96A4A



2-98B1A



2-98C2A



2-108A2A



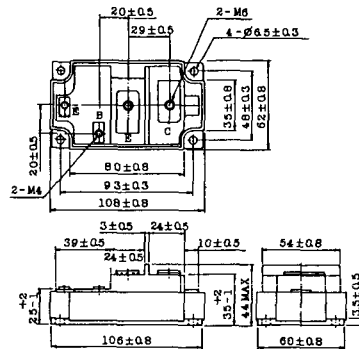
2-108B1A



2-109A3A



2-109A4A



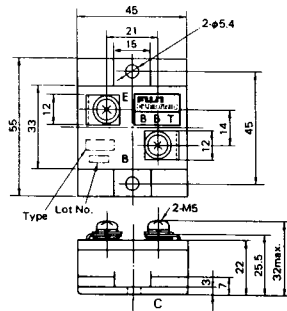
2-109B3A



2-109B4A

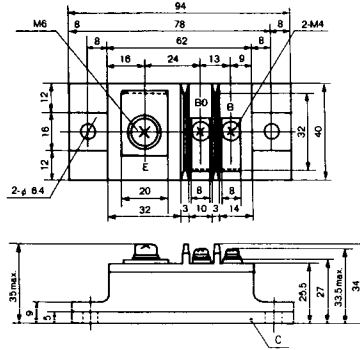


BBT-II BBTII
1D200A-020



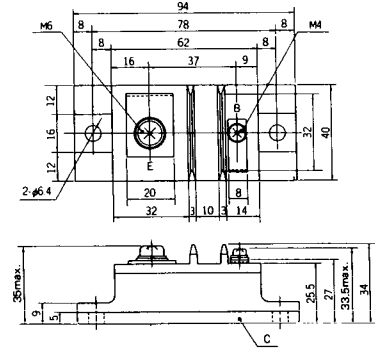
BBT-III

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



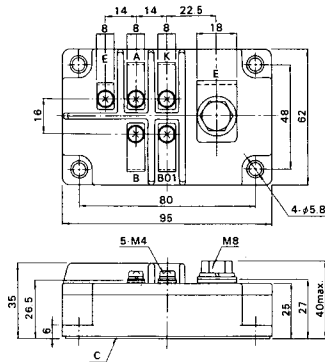
BBT-III

BBTIII
ETN01-055
ET1257

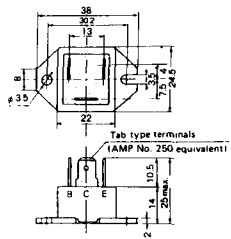


BBT-IV

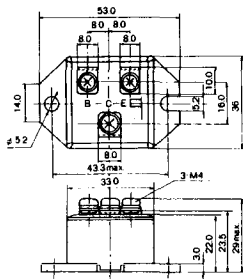
BBTIV
1D500A-030



M-101



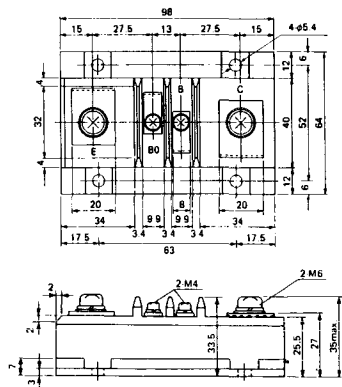
M-102



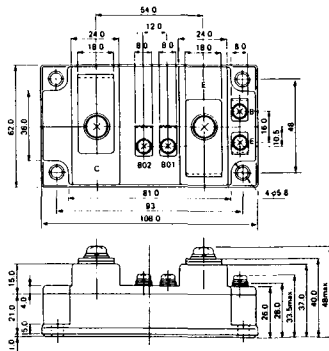
M-103



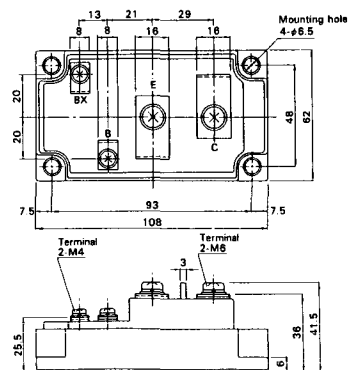
M-104



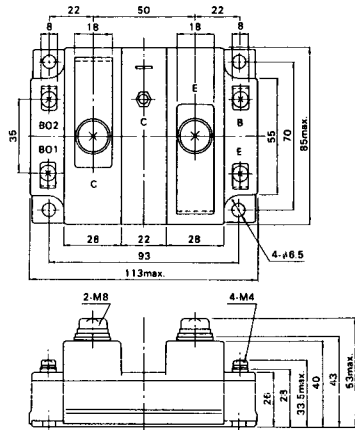
M-105



M-106



M-107



M-116



M-201



M-202



M-203



M-204



M-205



M-206



M-207



M-208



M-209



M-210



M-211



M-212



M-213



M-214

M-215



M-216



M-217



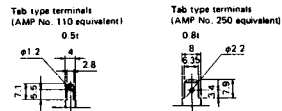
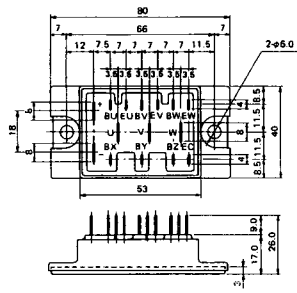
M-218



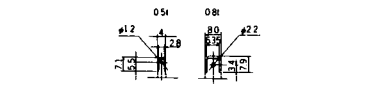
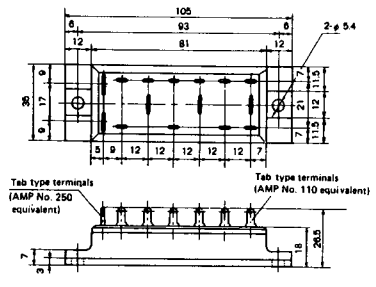
M-219



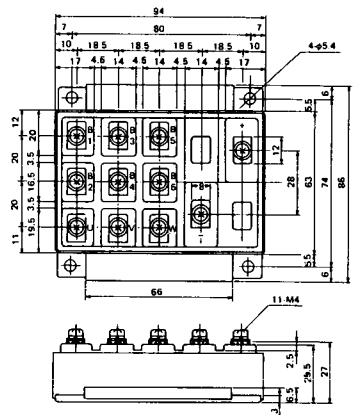
M-601



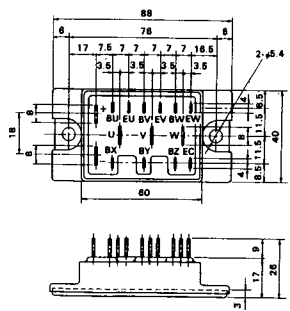
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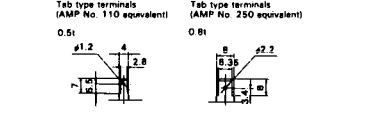
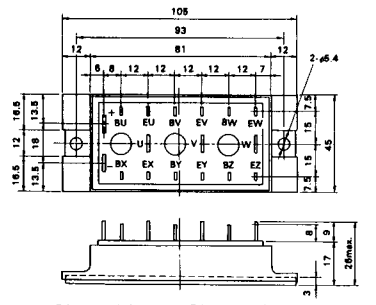
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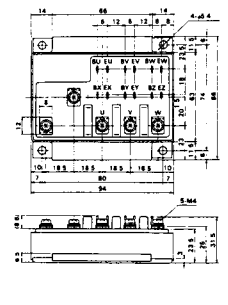
M-604



M-605



M-606



M-607



M-608



M-609



M-610



M-616



M-1A1A



M-2A1A



M-2B1A



M-2B2A



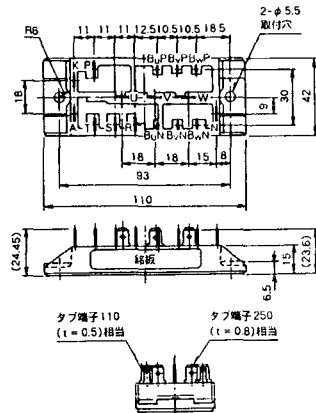
M-2C2A



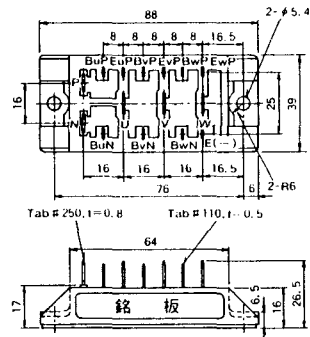
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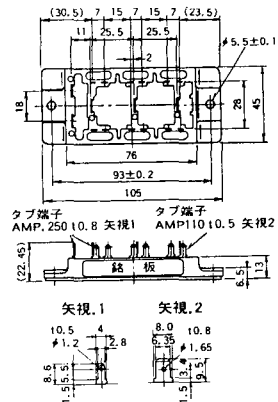
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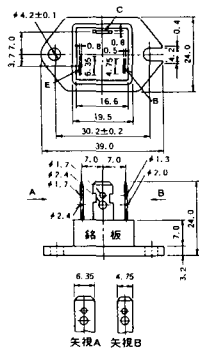
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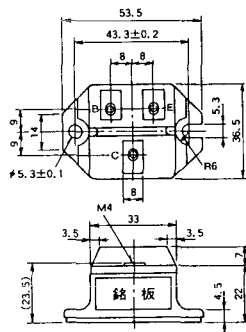
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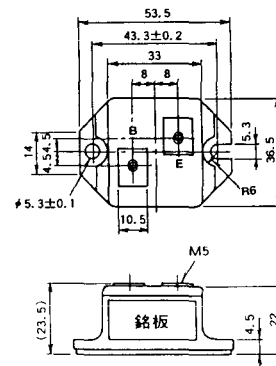
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M-3B1A



M-3B1B



M-3C1A



M-3D6A



M-3E6A



M-4A1A



M-4A2A



M-4A1B



M-4A2B



M-4B2A



M-5A1A



M-5A1B



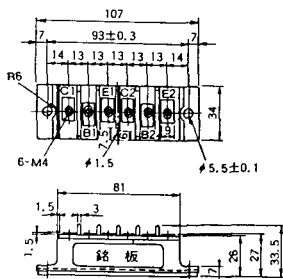
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M-5B2A



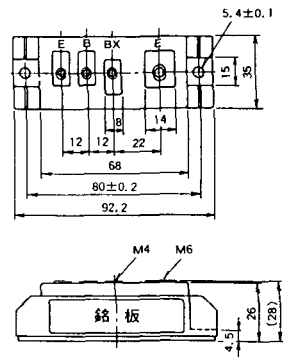
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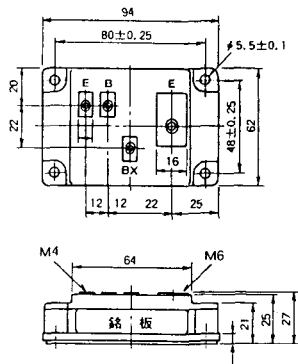
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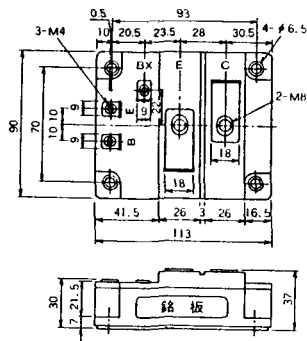
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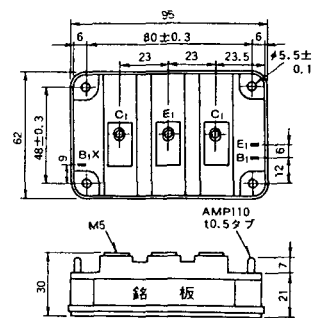
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M-7B1A



M-8A1A



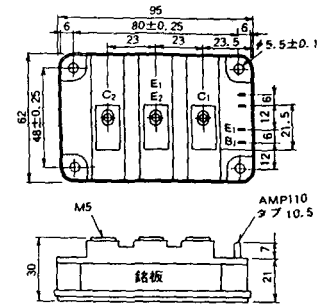
M-8A1B



M-8A2A



M-8A2B



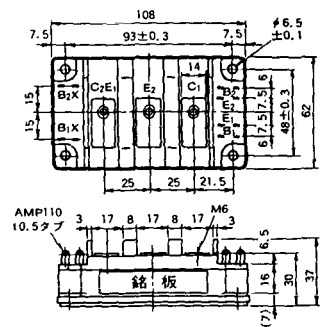
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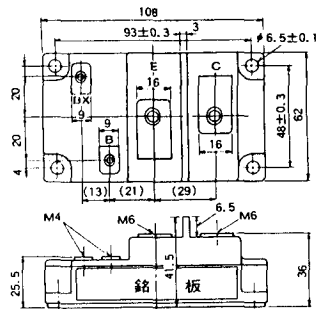
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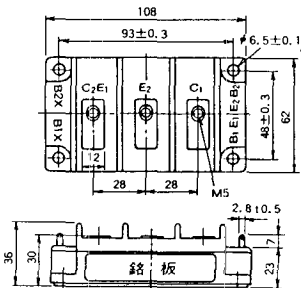
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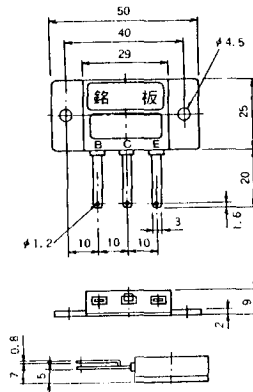
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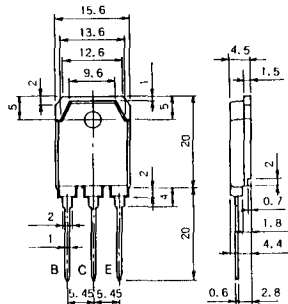
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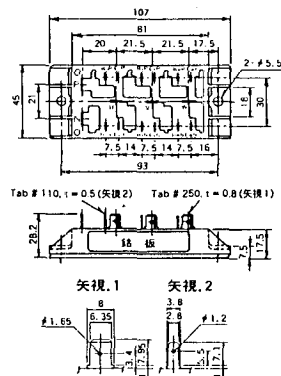
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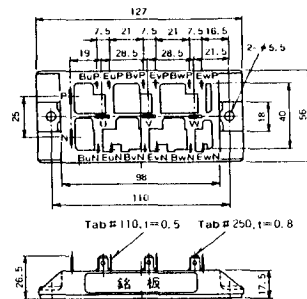
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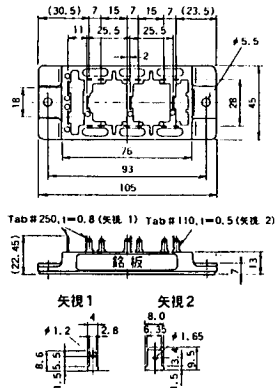
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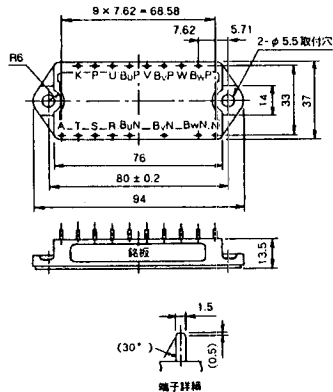
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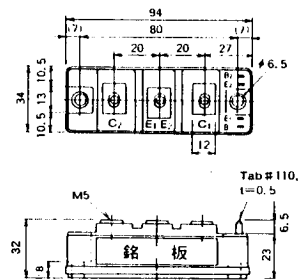
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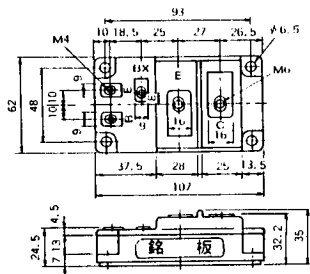
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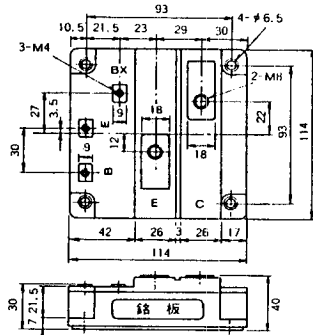
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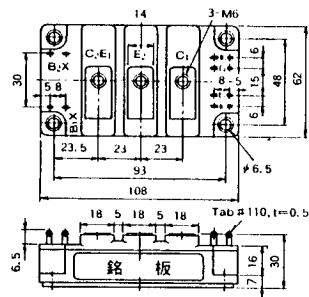
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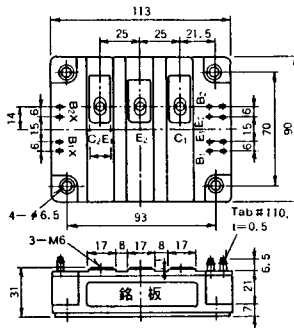
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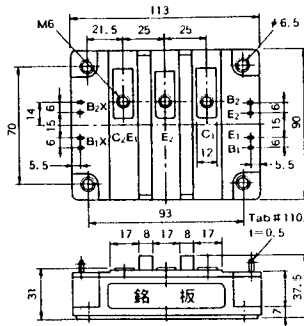
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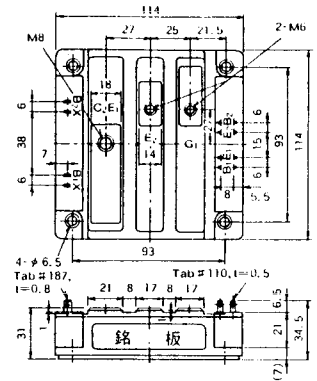
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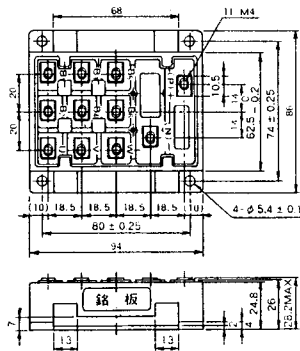
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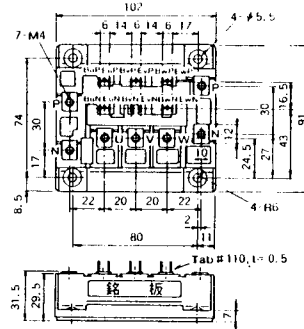
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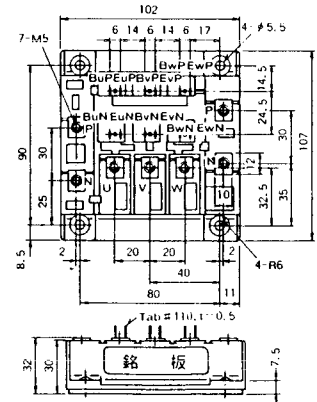
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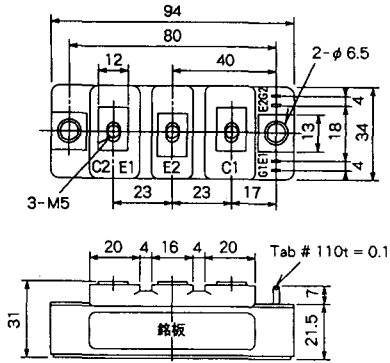
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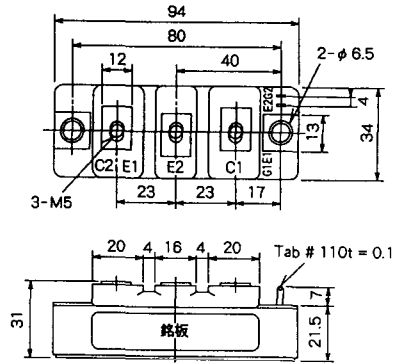
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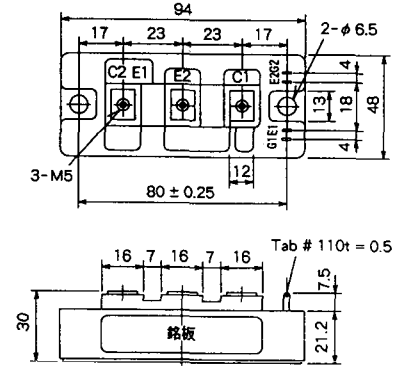
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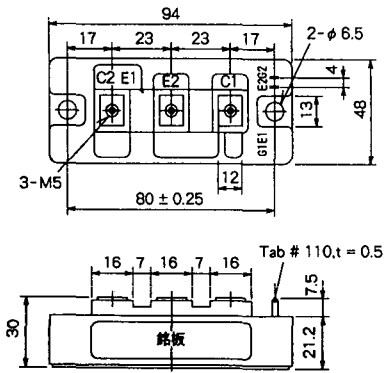
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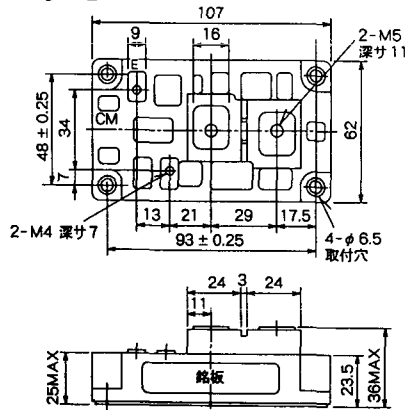
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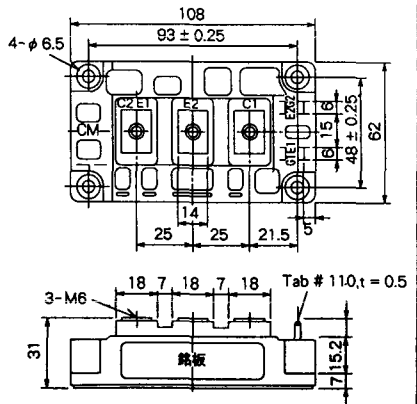
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M-9B1C



M-9D2A



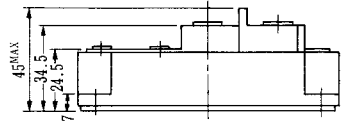
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M-10A2C



H-101



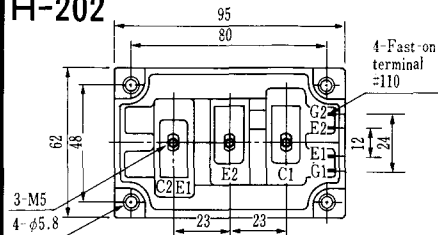
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H-201



Weight: 200g

H-202



Weight: 360g

LF-J



LF-K

