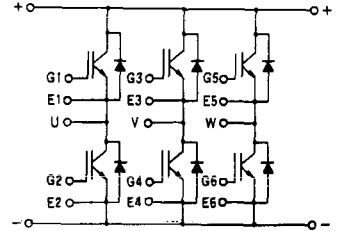
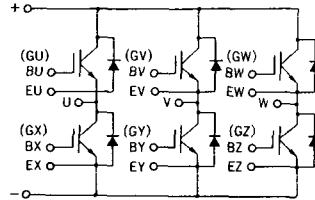
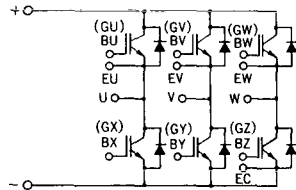


トランジスタ・モジュール [シリコンNチャネル・IGBT, 三相ブリッジ]

- MOSゲート構造
 - フリーホイール・ダイオード付
 - 絶縁形
 - UL認定品あり
- E 8 2 9 8 8 (M)

■等価回路



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

| 型名 | 最大定格 | | | | | | | | | | 電気的特性 | | | | | | | | | | | | |
|--------------|-----------|-----------|-------|----------|-------|----------|-------|----------------------|----------------------|-----------|-----------|----------|-----------|------|-----------|----|---------------|-----|---------------|-----|-----|----|-----|
| | V_{CES} | V_{DES} | I_c | I_{CP} | I_F | I_{FM} | P_c | T_c | T_{VJc} | V_{iso} | I_{CES} | | I_{CES} | | V_{CES} | | $V_{GE(OFF)}$ | | $V_{CE(SAT)}$ | | | | |
| | (V) | (V) | (A) | (Ams) | (A) | (A) | (W) | ($^\circ\text{C}$) | ($^\circ\text{C}$) | (V) | 最大 | 最小 | 最大 | 最小 | (V) | 最小 | 最大 | (V) | (mA) | (A) | | | |
| 6MB18F-120 | 1200 | ± 20 | 8 | 16 | 8 | 16 | 60 | 150 | -40~125 | 2500 | ± 100 | ± 20 | 1.0 | 1200 | | | 3 | 6 | 20 | 8 | 2.5 | 15 | 8 |
| 6MB18L-120 | 1200 | ± 20 | 8 | 16 | 8 | 16 | 60 | 150 | -40~125 | 2500 | ± 100 | ± 20 | 1.0 | 1200 | | | 3 | 6 | 20 | 8 | 3.5 | 15 | 8 |
| 6MB110F-060 | 600 | ± 20 | 10 | 20 | 10 | 20 | 40 | 150 | -40~125 | 2500 | ± 100 | ± 20 | 1.0 | 600 | | | 3 | 6 | 20 | 10 | 2.5 | 15 | 10 |
| 6MB110L-060 | 600 | ± 20 | 10 | 20 | 10 | 20 | 40 | 150 | -40~125 | 2500 | ± 100 | ± 20 | 1.0 | 600 | | | 3 | 6 | 20 | 10 | 3.5 | 15 | 10 |
| 6MB115F-060 | 600 | ± 20 | 15 | 30 | 15 | 30 | 60 | 150 | -40~125 | 2500 | ± 100 | ± 20 | 1.0 | 600 | | | 3 | 6 | 20 | 15 | 2.5 | 15 | 15 |
| 6MB115L-060 | 600 | ± 20 | 15 | 30 | 15 | 30 | 60 | 150 | -40~125 | 2500 | ± 100 | ± 20 | 1.0 | 600 | | | 3 | 6 | 20 | 15 | 3.5 | 15 | 15 |
| 6MB115L-120 | 1200 | ± 20 | 15 | 30 | 15 | 30 | 120 | 150 | -40~125 | 2500 | ± 100 | ± 20 | 1.0 | 1200 | | | 3 | 6 | 20 | 15 | 2.5 | 15 | 15 |
| 6MB120F-060 | 600 | ± 20 | 20 | 40 | 20 | 40 | 80 | 150 | -40~125 | 2500 | ± 100 | ± 20 | 1.0 | 600 | | | 3 | 6 | 20 | 20 | 2.5 | 15 | 20 |
| 6MB120L-060 | 600 | ± 20 | 20 | 40 | 20 | 40 | 80 | 150 | -40~125 | 2500 | ± 100 | ± 20 | 1.0 | 600 | | | 3 | 6 | 20 | 20 | 3.5 | 15 | 20 |
| 6MB125F-120 | 1200 | ± 20 | 25 | 50 | 25 | 50 | 220 | 150 | -40~125 | 2500 | ± 100 | ± 20 | 1.0 | 1200 | | | 3 | 6 | 20 | 25 | 2.5 | 15 | 25 |
| 6MB125L-120 | 1200 | ± 20 | 25 | 50 | 25 | 50 | 250 | 150 | -40~125 | 2500 | ± 100 | ± 20 | 1.0 | 1200 | | | 3 | 6 | 20 | 25 | 3.5 | 15 | 25 |
| 6MB130F-060 | 600 | ± 20 | 30 | 60 | 30 | 60 | 120 | 150 | -40~125 | 2500 | ± 100 | ± 20 | 1.0 | 600 | | | 3 | 6 | 20 | 30 | 2.5 | 15 | 30 |
| 6MB130L-060 | 600 | ± 20 | 30 | 60 | 30 | 60 | 120 | 150 | -40~125 | 2500 | ± 100 | ± 20 | 1.0 | 600 | | | 3 | 6 | 20 | 30 | 3.5 | 15 | 30 |
| 6MB150F-060 | 600 | ± 20 | 50 | 100 | 50 | 100 | 220 | 150 | -40~125 | 2500 | ± 100 | ± 20 | 1.0 | 600 | | | 3 | 6 | 20 | 50 | 2.5 | 15 | 50 |
| 6MB150L-060 | 600 | ± 20 | 50 | 100 | 50 | 100 | 250 | 150 | -40~125 | 2500 | ± 100 | ± 20 | 1.0 | 600 | | | 3 | 6 | 20 | 50 | 3.5 | 15 | 50 |
| 6MB150F-120 | 1200 | ± 20 | 50 | 100 | 50 | 100 | 360 | 150 | -40~125 | 2500 | ± 100 | ± 20 | 1.0 | 1200 | | | 3 | 6 | 20 | 50 | 2.5 | 15 | 50 |
| 6MB150L-120 | 1200 | ± 20 | 50 | 100 | 50 | 100 | 400 | 150 | -40~125 | 2500 | ± 100 | ± 20 | 1.0 | 1200 | | | 3 | 6 | 20 | 50 | 3.5 | 15 | 50 |
| 6MB175F-060 | 600 | ± 20 | 75 | 150 | 75 | 150 | 290 | 150 | -40~125 | 2500 | ± 100 | ± 20 | 1.0 | 600 | | | 3 | 6 | 20 | 75 | 2.5 | 15 | 75 |
| 6MB175L-060 | 600 | ± 20 | 75 | 150 | 75 | 150 | 325 | 150 | -40~125 | 2500 | ± 100 | ± 20 | 1.0 | 600 | | | 3 | 6 | 20 | 75 | 3.5 | 15 | 75 |
| 6MB1100F-060 | 600 | ± 20 | 100 | 200 | 100 | 200 | 360 | 150 | -40~125 | 2500 | ± 100 | ± 20 | 1.0 | 600 | | | 3 | 6 | 20 | 100 | 2.5 | 15 | 100 |
| 6MB1100L-060 | 600 | ± 20 | 100 | 200 | 100 | 200 | 400 | 150 | -40~125 | 2500 | ± 100 | ± 20 | 1.0 | 600 | | | 3 | 6 | 20 | 100 | 3.5 | 15 | 100 |

注3. スイッチング時間の t_r , t_{on} は抵抗負荷, t_f , t_{off} は誘導負荷における値。 注4. FD: フリーホイール・ダイオード。

| C _{i..} (pF) | C _{i..} (f=1 MHz) | | スイッチング時間 (μs) | | | | R _o | | | 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 _{CE} | t _r | t _{on} | t _f | t _{off} | I _c | V _{CE} | V _F | I _F | t _{rr} | I _F | V _{CE} | di/dt | θ _{J-c} (°C/W) | | | | | | |
| | (V) | (V) | 最大 | 最大 | 最大 | 最大 | (Ω) | (A) | (V) | 最大 | (A) | 最大 | (A) | (V) | (A/μs) | トランジスタ部 | | | | | ダイオード部 |
| 1450 | 10 | 0 | 0.6 | 0.8 | 1.0 | 1.5 | 150 | 8 | 600 | 2.5 | 8 | 350 | 8 | -10 | 50 | 2.08 | 3.3 | F 6 1 | M 6 0 4 | UL認定済 | GMB18F-120 |
| 1450 | 10 | 0 | 0.6 | 0.8 | 0.5 | 1.5 | 150 | 8 | 600 | 2.5 | 8 | 350 | 8 | -10 | 50 | 2.08 | 3.3 | F 6 1 | M 6 0 4 | | GMB18L-120 |
| 950 | 10 | 0 | 0.6 | 0.8 | 1.0 | 1.5 | 220 | 10 | 300 | 2.5 | 10 | 300 | 10 | -10 | 50 | 3.13 | 4.15 | F 6 1 | M 6 0 4 | | GMB110F-060 |
| 950 | 10 | 0 | 0.6 | 0.8 | 0.35 | 1.0 | 220 | 10 | 300 | 2.5 | 10 | 300 | 10 | -10 | 50 | 3.13 | 4.15 | F 6 1 | M 6 0 4 | | GMB110L-060 |
| 1400 | 10 | 0 | 0.6 | 0.8 | 1.0 | 1.5 | 150 | 15 | 300 | 2.5 | 15 | 300 | 15 | -10 | 50 | 2.08 | 3.3 | F 6 1 | M 6 0 4 | | GMB115F-060 |
| 1400 | 10 | 0 | 0.6 | 0.8 | 0.35 | 1.0 | 150 | 15 | 300 | 2.5 | 15 | 300 | 15 | -10 | 50 | 2.08 | 3.3 | F 6 1 | M 6 0 4 | | GMB115L-060 |
| 2700 | 10 | 0 | 0.6 | 0.8 | 1.0 | 1.5 | 82 | 15 | 600 | 2.5 | 15 | 350 | 15 | -10 | 50 | 1.04 | 2.01 | F 6 2 | M 6 0 7 | UL認定済 | GMB115F-120 |
| 2700 | 10 | 0 | 0.6 | 0.8 | 0.5 | 1.5 | 82 | 15 | 600 | 2.5 | 15 | 350 | 15 | -10 | 50 | 1.04 | 2.01 | F 6 2 | M 6 0 7 | | GMB115L-120 |
| 1900 | 10 | 0 | 0.6 | 0.8 | 1.0 | 1.5 | 120 | 20 | 300 | 2.5 | 20 | 300 | 20 | -10 | 100 | 1.56 | 3.01 | F 6 1 | M 6 0 4 | | GMB120F-060 |
| 1900 | 10 | 0 | 0.6 | 0.8 | 0.35 | 1.0 | 120 | 20 | 300 | 2.5 | 20 | 300 | 20 | -10 | 100 | 1.56 | 3.01 | F 6 1 | M 6 0 4 | | GMB120L-060 |
| 4500 | 10 | 0 | 0.6 | 0.8 | 1.0 | 1.5 | 50 | 25 | 600 | 2.5 | 25 | 350 | 25 | -10 | 75 | 0.568 | 1.33 | F 6 3 | M 6 1 6 | UL認定済 | GMB125F-120 |
| 4500 | 10 | 0 | 0.6 | 0.8 | 0.5 | 1.5 | 50 | 25 | 600 | 2.5 | 25 | 350 | 25 | -10 | 75 | 0.5 | 1.0 | F 6 3 | M 6 1 6 | | GMB125L-120 |
| 2850 | 10 | 0 | 0.6 | 0.8 | 1.0 | 1.5 | 82 | 30 | 300 | 2.5 | 30 | 300 | 30 | -10 | 100 | 1.04 | 2.01 | F 6 2 | M 6 0 7 | | GMB130F-060 |
| 2850 | 10 | 0 | 0.6 | 0.8 | 0.35 | 1.0 | 82 | 30 | 300 | 2.5 | 30 | 300 | 30 | -10 | 100 | 1.04 | 2.01 | F 6 2 | M 6 0 7 | | GMB130L-060 |
| 4750 | 10 | 0 | 0.6 | 0.8 | 1.0 | 1.5 | 51 | 50 | 300 | 2.5 | 50 | 300 | 50 | -10 | 150 | 0.568 | 1.33 | F 6 3 | M 6 1 6 | | GMB150F-060 |
| 4750 | 10 | 0 | 0.6 | 0.8 | 0.35 | 1.0 | 51 | 50 | 300 | 2.5 | 50 | 300 | 50 | -10 | 150 | 0.5 | 1.0 | F 6 3 | M 6 1 6 | | GMB150L-060 |
| 9000 | 10 | 0 | 0.6 | 0.8 | 1.0 | 1.5 | 25 | 50 | 600 | 2.5 | 50 | 350 | 50 | -10 | 150 | 0.347 | 0.666 | F 6 3 | M 6 1 6 | UL認定済 | GMB150F-120 |
| 9000 | 10 | 0 | 0.6 | 0.8 | 0.5 | 1.5 | 25 | 50 | 600 | 2.5 | 50 | 350 | 50 | -10 | 150 | 0.312 | 0.6 | F 6 3 | M 6 1 6 | | GMB150L-120 |
| 7100 | 10 | 0 | 0.6 | 0.8 | 1.0 | 1.5 | 33 | 75 | 300 | 2.5 | 75 | 300 | 75 | -10 | 225 | 0.431 | 0.888 | F 6 3 | M 6 1 6 | | GMB175F-060 |
| 7100 | 10 | 0 | 0.6 | 0.8 | 0.35 | 1.0 | 33 | 75 | 300 | 2.5 | 75 | 300 | 75 | -10 | 225 | 0.385 | 0.85 | F 6 3 | M 6 1 6 | | GMB175L-060 |
| 8500 | 10 | 0 | 0.6 | 0.8 | 1.0 | 1.5 | 25 | 100 | 300 | 2.5 | 100 | 300 | 100 | -10 | 300 | 0.347 | 0.666 | F 6 3 | M 6 1 6 | | GMB1100F-060 |
| 8500 | 10 | 0 | 0.6 | 0.8 | 0.35 | 1.0 | 25 | 100 | 300 | 2.5 | 100 | 300 | 100 | -10 | 300 | 0.312 | 0.6 | F 6 3 | M 6 1 6 | | GMB1100L-060 |

FD-1



FD-2



FD-3



FD-4



FD-5



FD-6



FD-7



FD-8



FD-9



FD-10

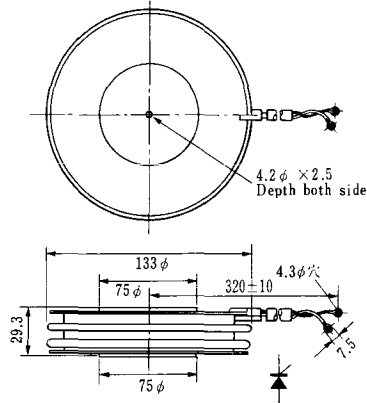


FD-12

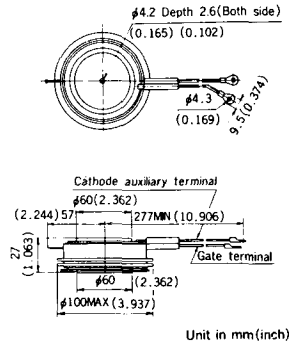




H-17



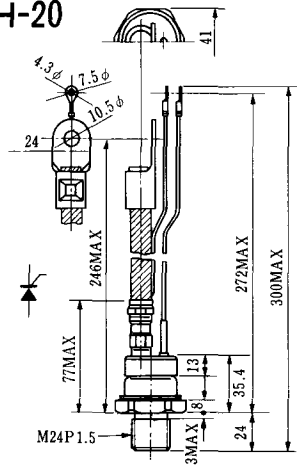
H-18



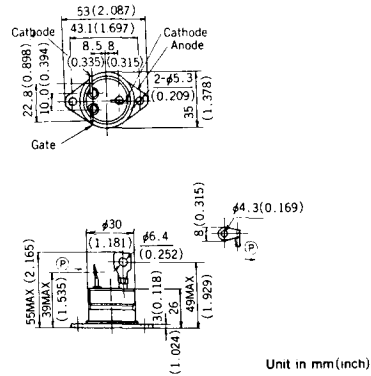
H-19



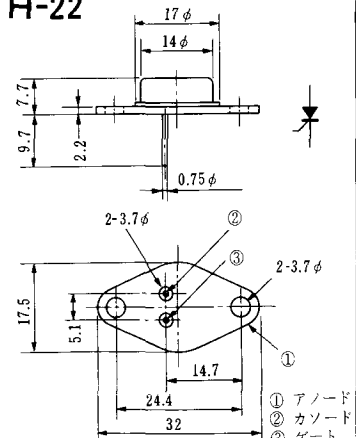
H-20



H-21



H-22



H-23

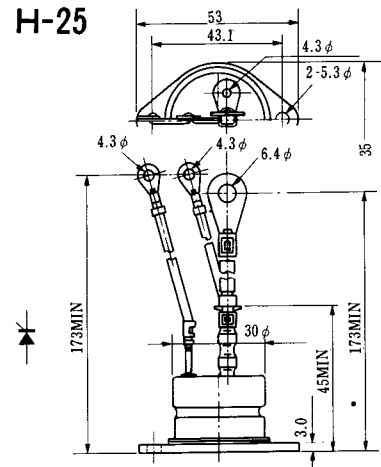


① アノード
② カソード
③ ゲート

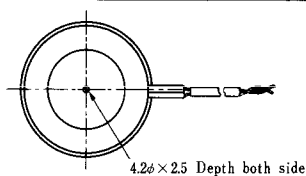
H-24



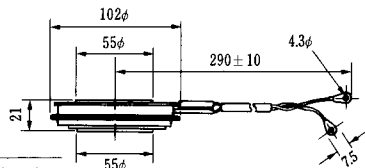
H-25



H-26



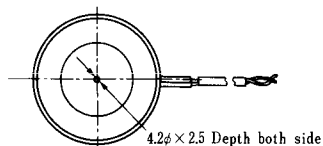
4.2φ × 2.5 Depth both side



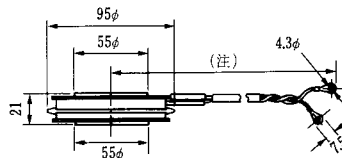
| Type | Direction of polarity |
|------|-----------------------|
|------|-----------------------|

| | |
|------|--|
| CA12 | |
|------|--|

H-27



4.2φ × 2.5 Depth both side

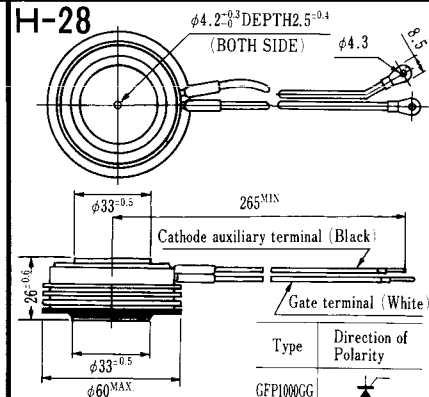


(注) CC11V : 400 ± 10
CF11V : 250 ± 10

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

| | |
|-------|--|
| CF11V | |
|-------|--|

H-28



Cathode auxiliary terminal (Black)

Gate terminal (White)

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

| | |
|----------|--|
| GFP100GG | |
|----------|--|

Weight: 360(g)

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

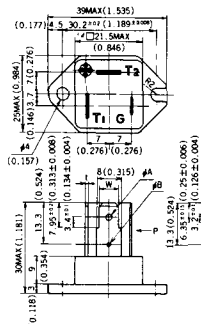


Note : The thickness is a dimension in press at the rated mounting force. Weight: 870(g)



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

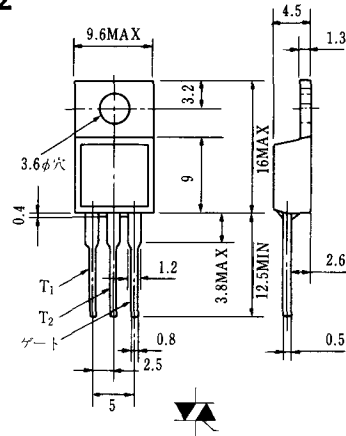
HT-1



| TERMINAL | t | W | φA | φB |
|----------------|----------------------------|---------------------------|--|----------------|
| T ₁ | 0.8±0.025 (0.031±0.001) | 6.35±0.1 (0.250±0.004) | 2.00 ^{+0.1} ₀ (0.079±0.004) | 1.3 (0.051) |
| T ₂ | 0.8±0.025 (0.031±0.001) | 6.35±0.1 (0.250±0.004) | 2.00 ^{+0.1} ₀ (0.079±0.004) | 1.3 (0.051) |
| G | 0.5±0.025 (0.020±0.001) | 4.75±0.1 (0.187±0.004) | 1.55 ^{+0.1} ₀ (0.061±0.004) | 1.3 (0.051) |

Unit in mm (inch)

HT-2



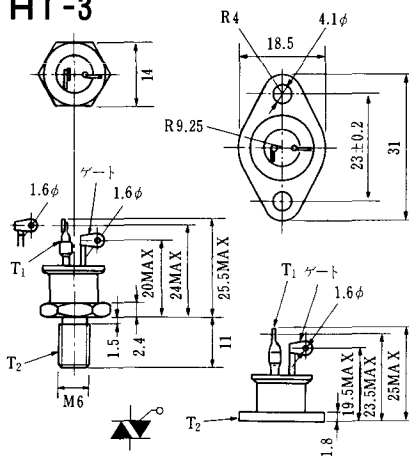
リード加工標準寸法

A11

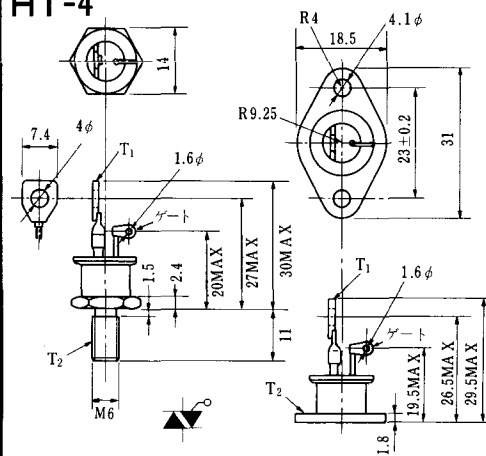
A12

A13

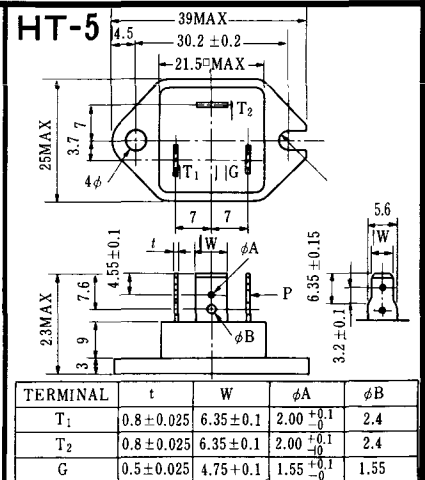
HT-3



HT-4



HT-5



| TERMINAL | t | W | φA | φB |
|----------------|-----------|----------|-----------------------------------|------|
| T ₁ | 0.8±0.025 | 6.35±0.1 | 2.00 ^{+0.1} ₀ | 2.4 |
| T ₂ | 0.8±0.025 | 6.35±0.1 | 2.00 ^{+0.1} ₀ | 2.4 |
| G | 0.5±0.025 | 4.75±0.1 | 1.55 ^{+0.1} ₀ | 1.55 |

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



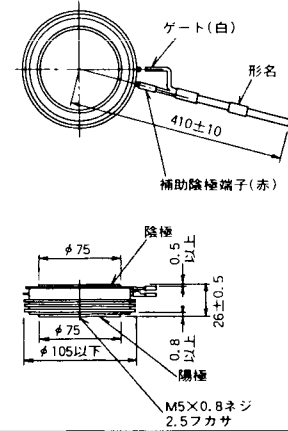
M-28



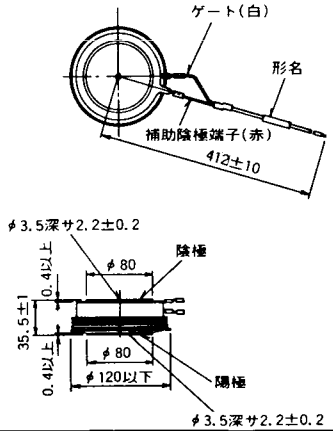
M-29



M-30



M-31



M-32



M-33



M-34



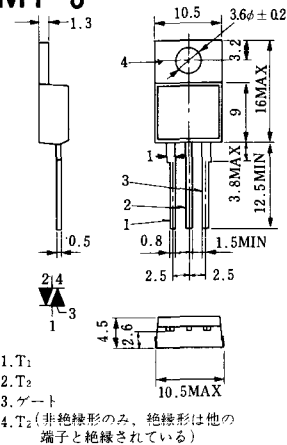
MT-1



MT-2



MT-3



MT-4



MT-5



MT-6



MT-7



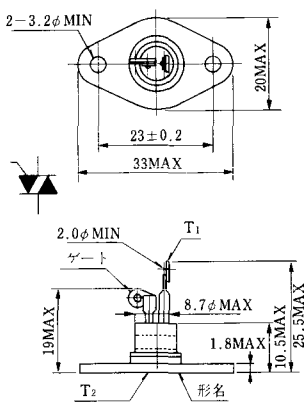
MT-8



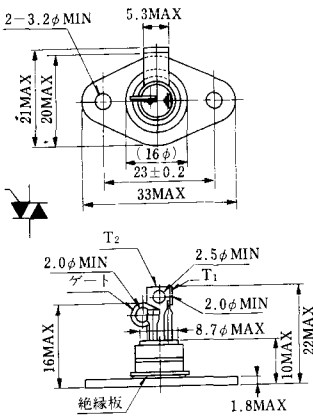
MT-9



MT-10



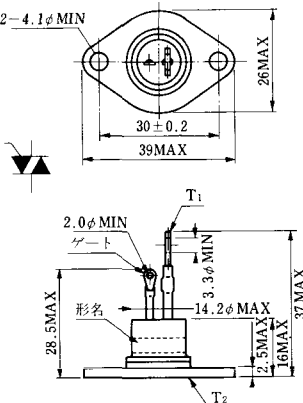
MT-11



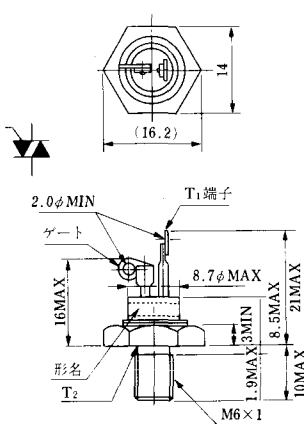
MT-12



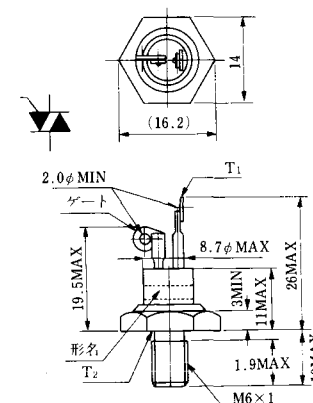
MT-13



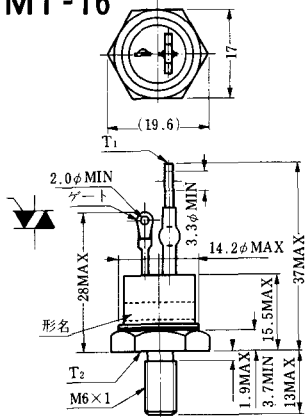
MT-14



MT-15



MT-16

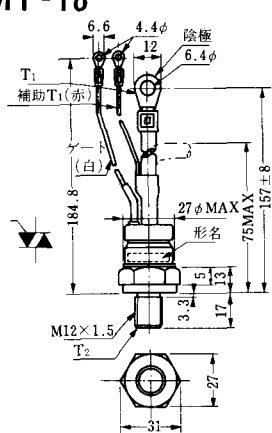


MT-17

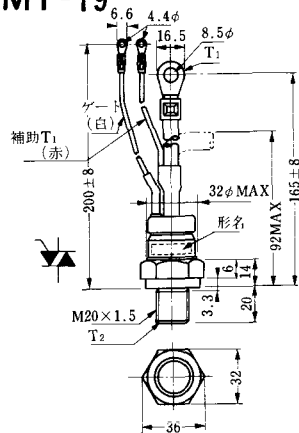


端子詳細図

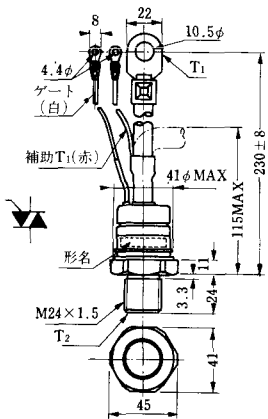
MT-18



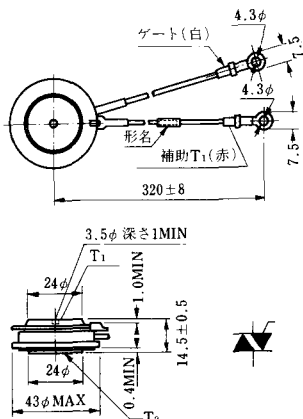
MT-19



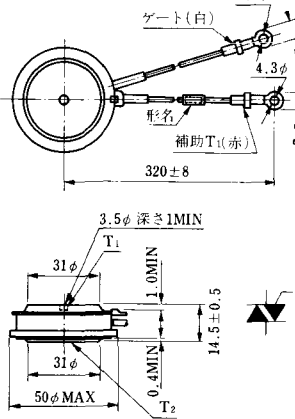
MT-20



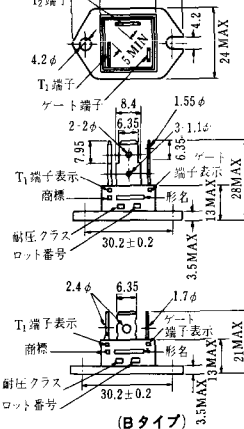
MT-21



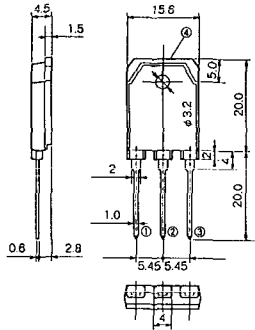
MT-22



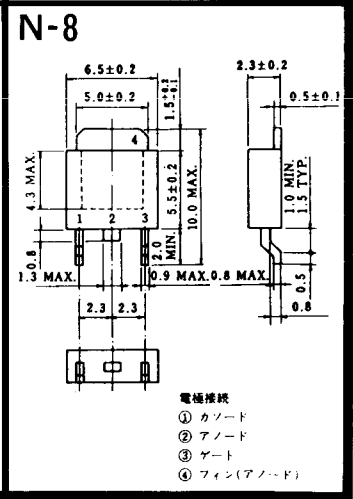
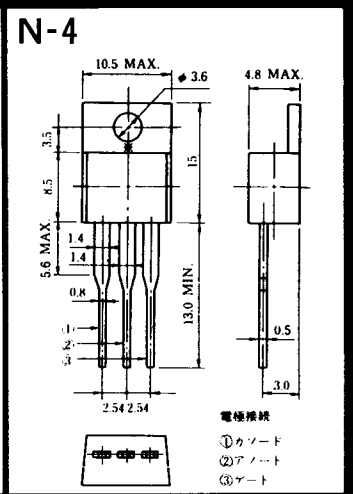
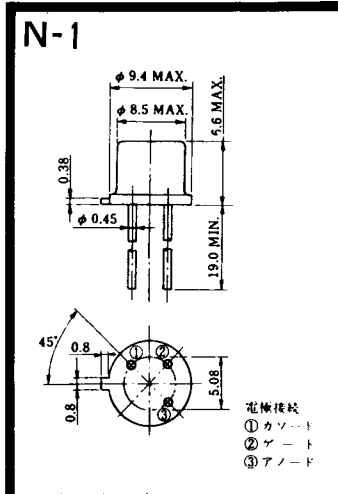
MT-23



MT-24



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



N-9



電極接続

K : カソード

A : アノード

G : ゲート

NA-1

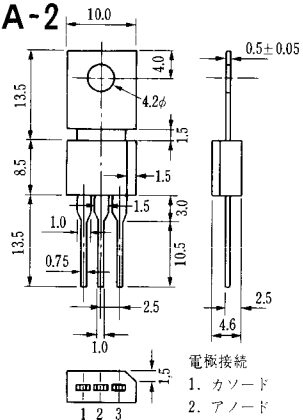


電極接続

1. ゲート
2. アノード
3. カソード

JEDEC: TO-92

NA-2



電極接続

1. カソード
2. アノード
3. ゲート

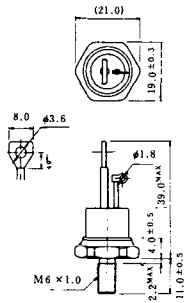
JEDEC: TO-202AA

NI-1



NI-2

29RD



NI-3

39RC
59RC
39RF
59RF



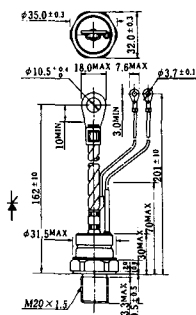
NI-4

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



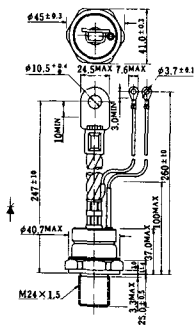
NI-5

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



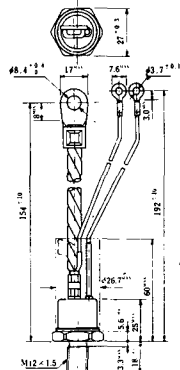
NI-6

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



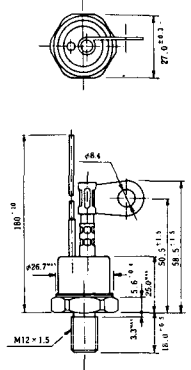
NI-7

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



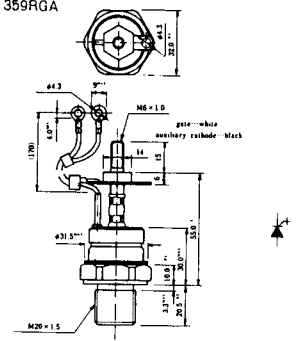
NI-14

358RGA



NI-15

359RGA





NI-24

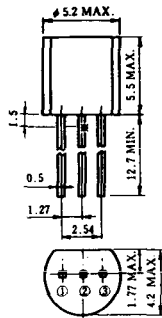
2001PGB^r JE



NI-25

NI-26

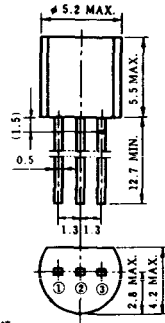
NT-1



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

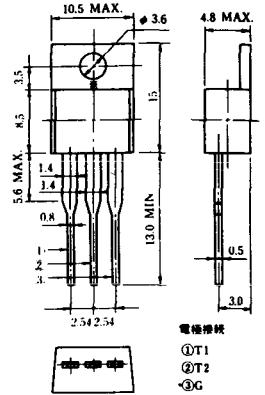
NT-3



電極接続

- ① T₁
- ② T₂
- ③ ゲート

NT-4



電極接続

- ① T₁
- ② T₂
- ③ G

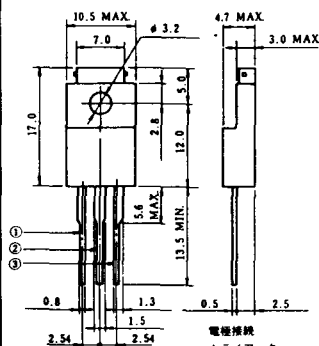
NT-5



電極接続
トライアック

- ① T₁
- ② T₂
- ③ ゲート

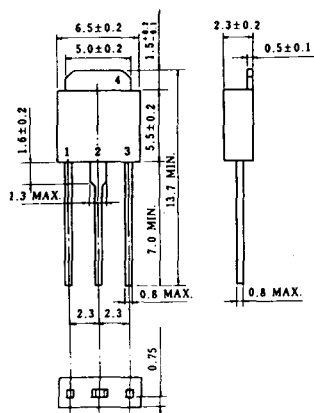
NT-6



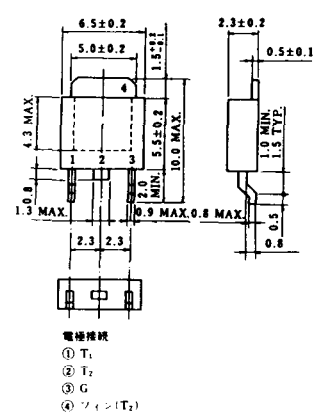
電極接続
トライアック

- 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)

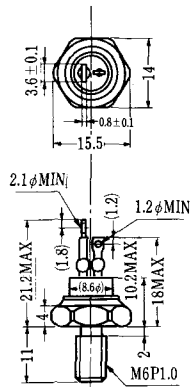
S-1



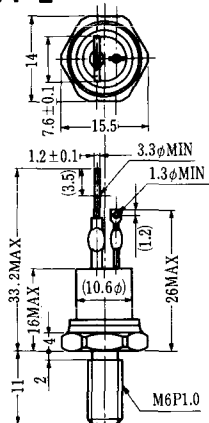
ST-1



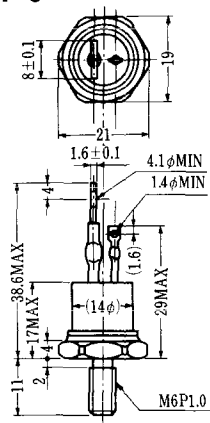
SA-1



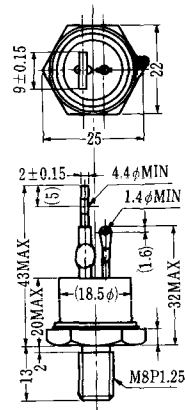
SA-2



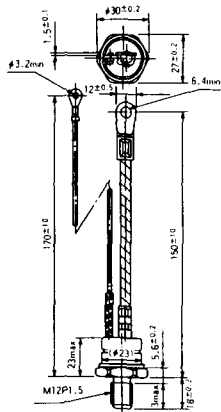
SA-3



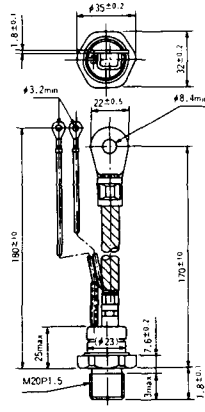
SA-4



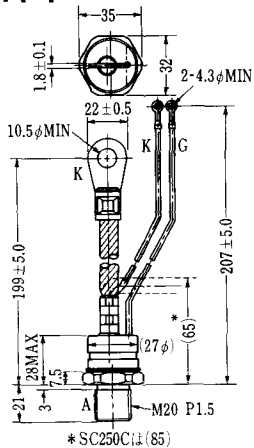
SA-5



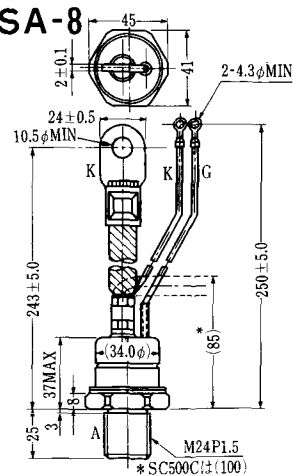
SA-6



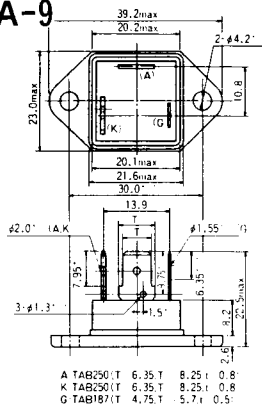
SA-7



SA-8



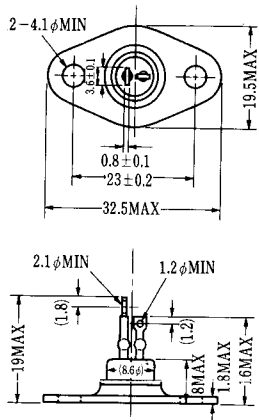
SA-9



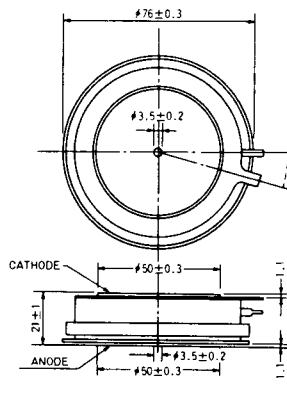
A TAB250(T) 6.35 T 8.25 I 0.8
 K TAB250(T) 6.35 T 8.25 I 0.8
 G TAB187(T) 4.75 T 5.7 I 0.5



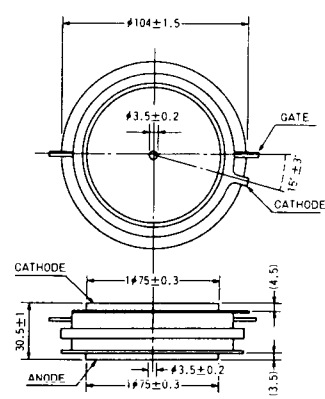
SA-10



SA-11



SA-12



SAT-1



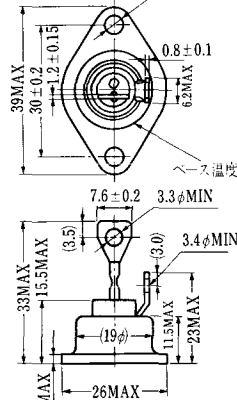
T1 端子: フラスト > 250 (T=6.35, t=0.8, φ=1.65)
 T2 端子: フラスト > 250 (T=6.35, t=0.8, φ=1.65)
 C 端子: フラスト > 187 (T=4.75, t=0.5, φ=1.3)

SAT-2



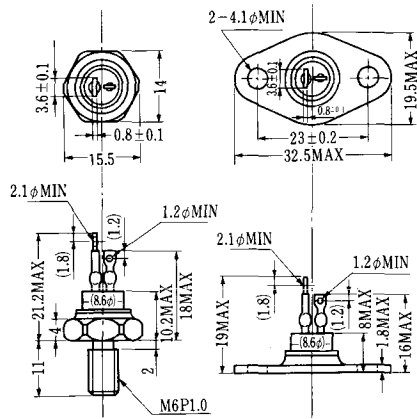
へス温度

SAT-3

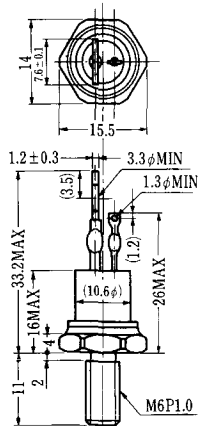


又温度時

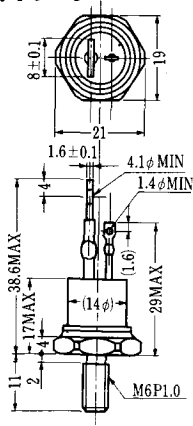
SAT-4



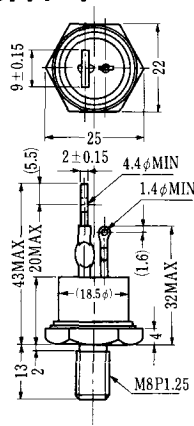
SAT-5



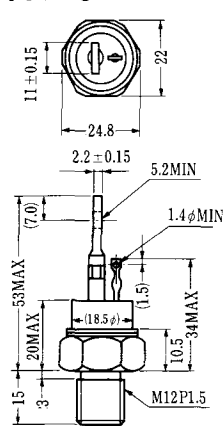
SAT-6



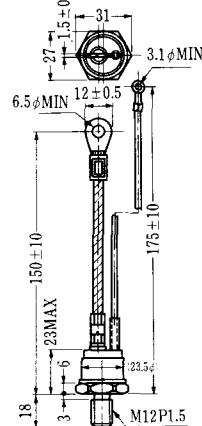
SAT-7



SAT-8



SAT-9



SAT-10



SAT-11

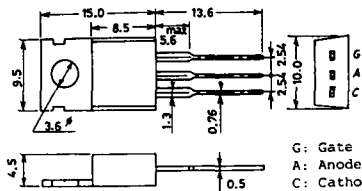


SY-1 (1096A)



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



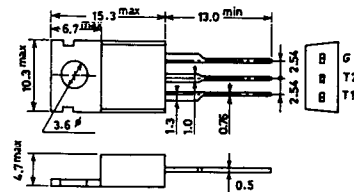
1142



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)



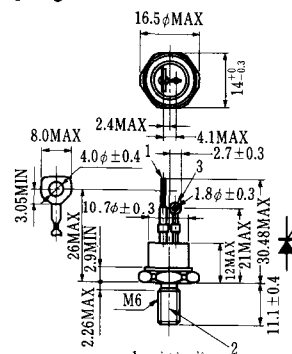
- 1 カソード
- 2 アノード
- 3 ゲート

T-5 (13-10B1A)



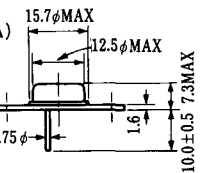
- 1 カソード
- 2 アノード
- 3 ゲート

T-6 (13-11D1A)



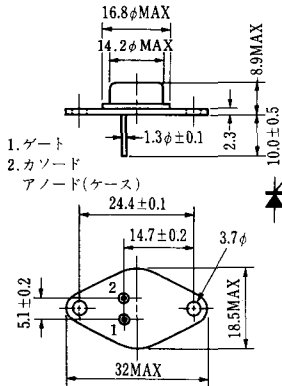
- 1 カソード
- 2 アノード
- 3 ゲート

T-7 (13-13A1A)



1. ゲート
2. カソード
3. アノード(ケース)

T-9 (13-14A1A)



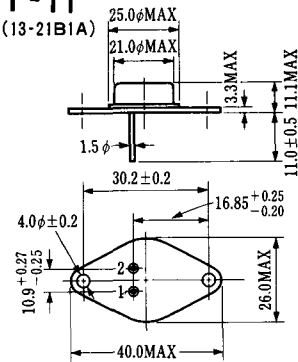
1. ゲート
2. カソード
- アノード(ケース)

T-10 (13-19A1A)



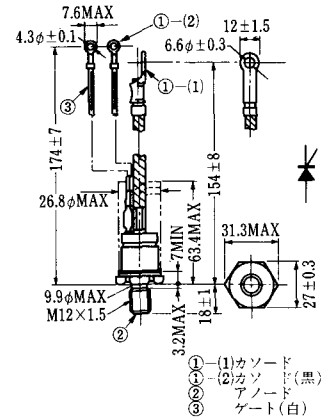
1. カソード
2. アノード
3. ゲート

T-11 (13-21B1A)



1. ゲート
2. カソード
- アノード(ケース)

T-12 (13-27B1B)



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

T-13 (13-27C1A)



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

T-14 (13-32A1A)



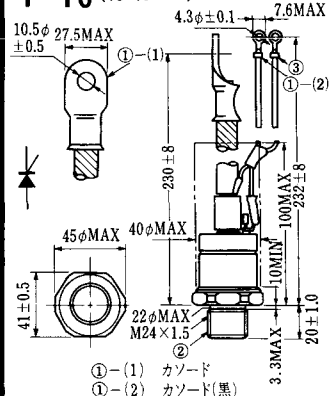
- 1-(1) カソード
- 1-(2) カソード(黒)
- 2 アノード
- 3 ゲート(白)

T-15 (13-35C1B)



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

T-16 (13-40B1A)



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

T-17 (13-42A1A)



T-18 (13-45D1A)



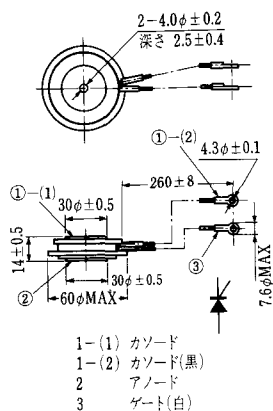
T-19 (13-52B1A)



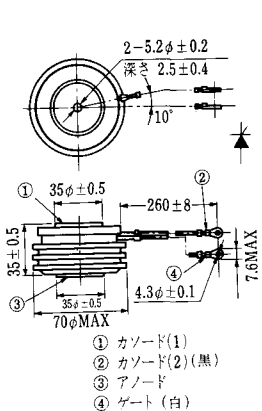
T-20 (13-52C1A)



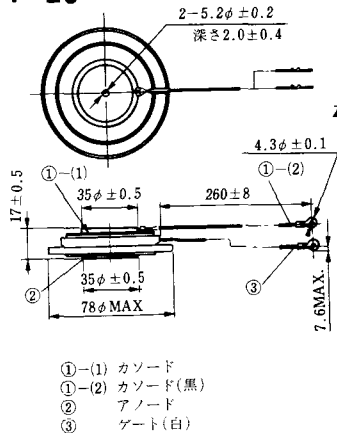
T-21 (13-60A1A)



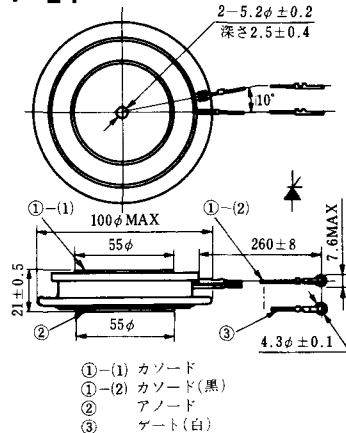
T-22 (13-70C1A)



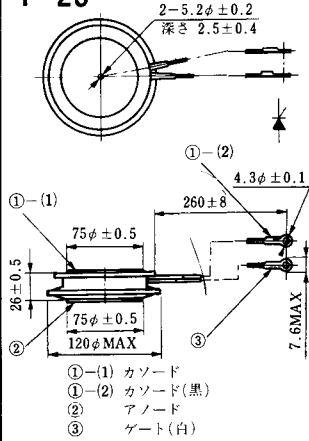
T-23 (13-78A1A)



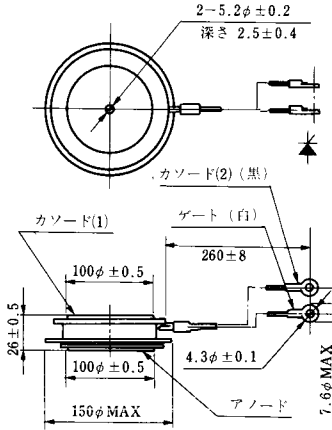
T-24 (13-100C1A)



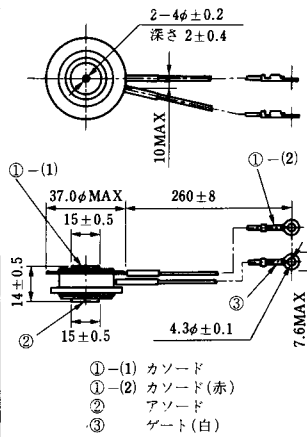
T-25 (13-120A2A)



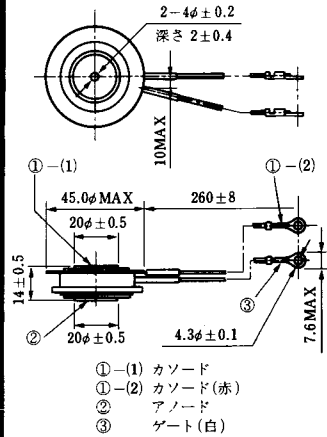
T-26 (13-150A1A)



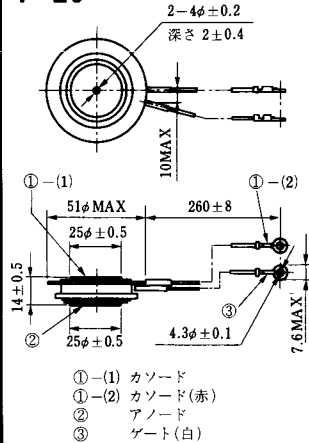
T-27 (13-37A1A)



T-28 (13-45E1A)



T-29 (13-51A1A)



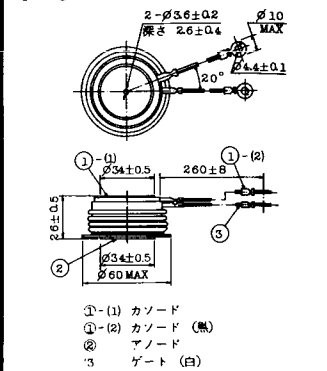
T-30 (13-57A1A)



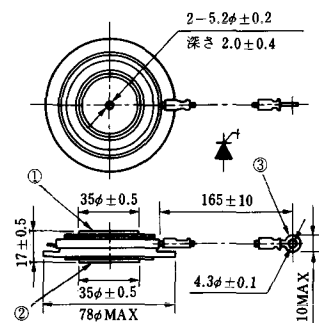
T-31 (13-100E1A)



T-32 (13-60E3A)

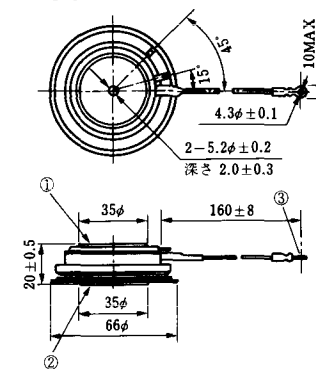


T-33 (13-78B1A)



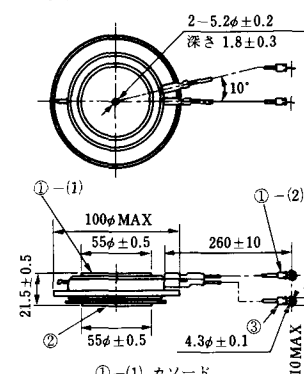
- ① カソード
- ② アノード
- ③ ゲート

T-34 (13-66A1A)



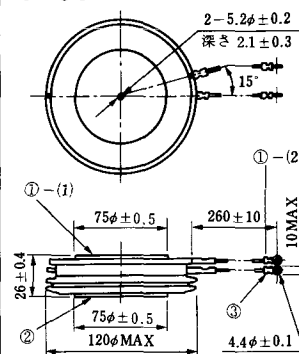
- ① カソード
- ② アノード
- ③ ゲート

T-35 (13-100D1A)



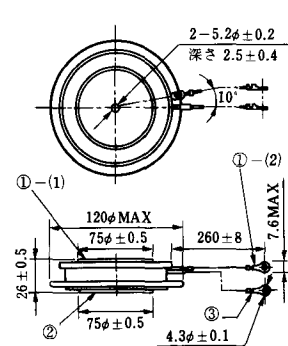
- ①-(1) カソード
- ①-(2) カソード(黒)
- ② アノード
- ③ ゲート(白)

T-36 (13-120E1A)



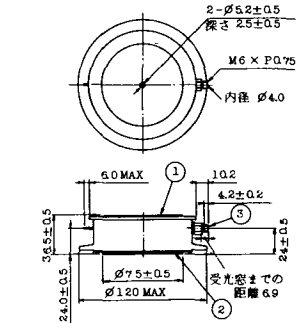
- ①-(1) カソード
- ①-(2) カソード(黒)
- ② アノード
- ③ ゲート(白)

T-37 (13-120A1A)



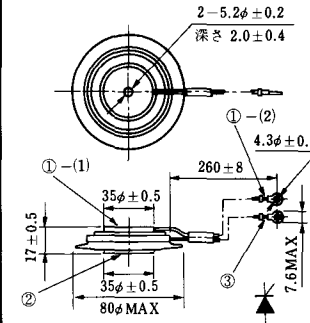
- ①-(1) カソード
- ①-(2) カソード(黒)
- ② アノード
- ③ ゲート(白)

T-38 (13-120C1A)



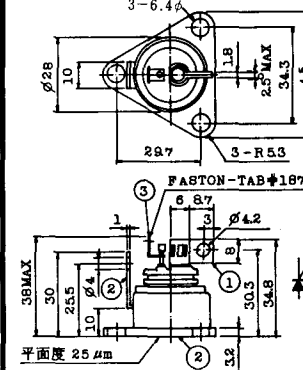
- ① カソード
- ② アノード
- ③ ゲート

T-39 (13-80B1A)



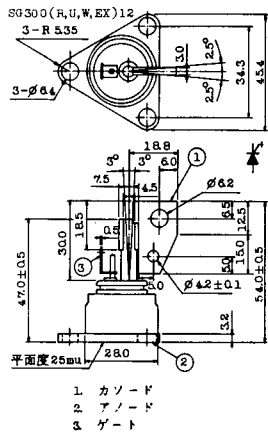
- ①-(1) カソード
- ①-(2) カソード(黒)
- ② アノード
- ③ ゲート(白)

T-40 (13-28A1A)

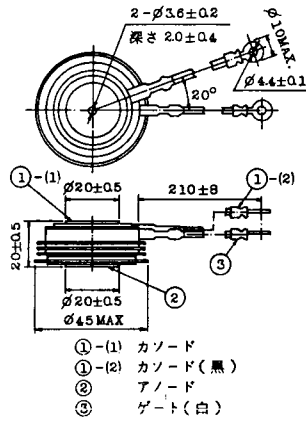


- 1. カソード
- 2. アノード
- 3. ゲート

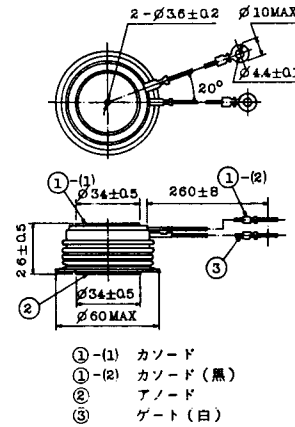
T-41 (13-28A2A)



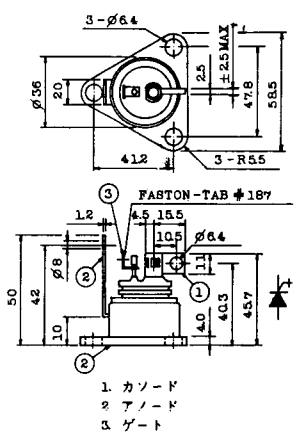
T-42 (13-45F1A)



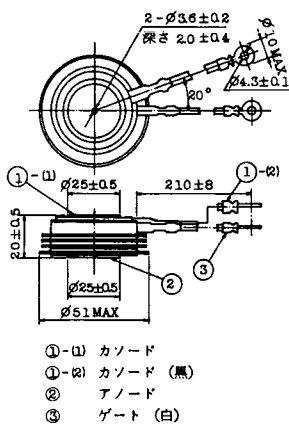
T-43 (13-60E2A)



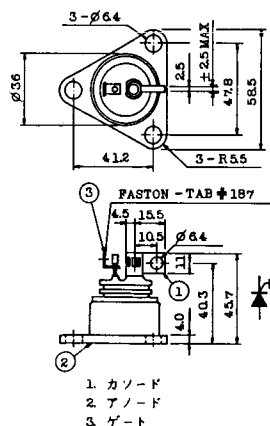
T-44 (13-36A1A)



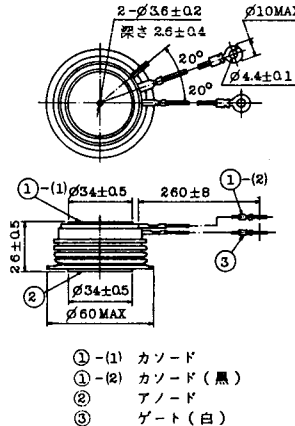
T-45 (13-51B1A)



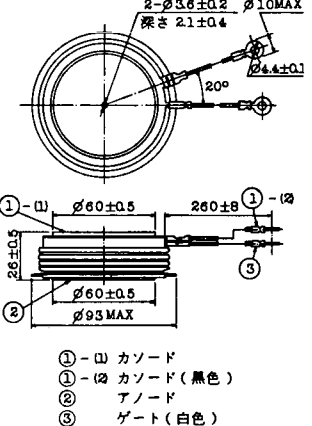
T-46 (13-36B1A)



T-47 (13-60E1A)



T-48 (13-93C1A)



T-49 (13-75A1A)



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

T-50 (13-10A3A)



- 1 カソード
- 2 アノード
- 3 ゲート

T-51 (13-10D1A)



- 1 カソード
- 2 アノード
- 3 ゲート

T-52 (13-10D2A)



- 1 カソード
- 2 アノード
- 3 ゲート

T-53 (13-10E1B)



- 1 カソード
- 2 アノード
- 3 ゲート

T-54 (13-10F1B)



- 1 カソード
- 2 アノード
- 3 ゲート

T-55 (13-5A1D)



- 1 カソード
- 2 アノード
- 3 アノード

T-56 (13-13C1A)



- 1 カソード
- 2 アノード
- 3 ゲート

T-57 (12-16C1A)



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

T-58 (13-10H1B)



- 1. カソード
- 2. アノード
- 3. ゲート

T-59 (13-120A1A)



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

T-60



- 1. カソード
- 2. アノード
- 3. ゲート

T-61 (13-5B1A)



- 1. ゲート
- 2. アノード
- 3. カソード

T-62 (13-10H1A)



- 1. カソード
- 2. アノード
- 3. ゲート

T-63 (13-16A1B)



- 1. カソード
- 2. アノード
- 3. ゲート

TT-1



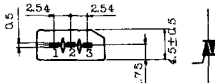
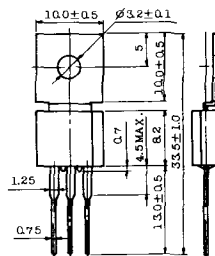
- 1 ゲート
- 2 T₂
- 3 T₁

TT-2



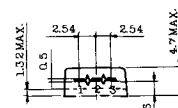
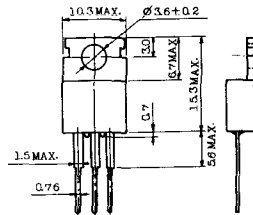
- 1 T₁
- 2 ゲート
- 3 T₂

TT-3



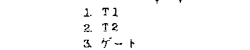
- 1 T₁
- 2 T₂
- 3 ゲート

TT-4



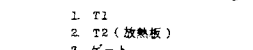
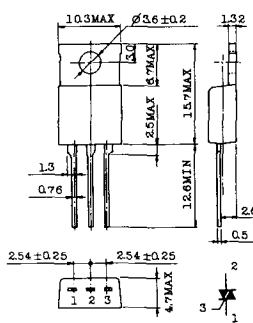
- 1 T₁
- 2 T₂
- 3 ゲート

TT-5



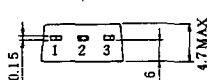
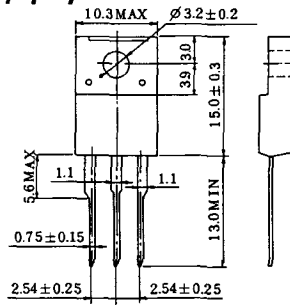
- 1 T₁
- 2 T₂
- 3 ゲート

TT-6



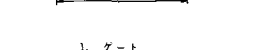
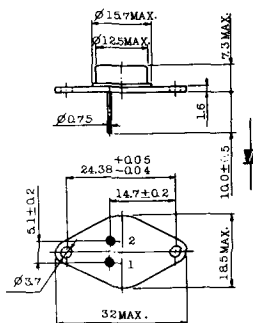
- 1 T₁
- 2 T₂ (放熱板)
- 3 ゲート

TT-7



- 1 T₁
- 2 T₂
- 3 ゲート

TT-8



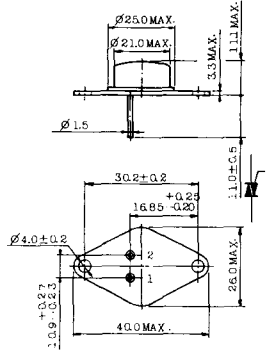
- 1 ゲート
- 2 T₁
- T₂ (ケース)

TT-9



- 1. ゲート
- 2. T₁
- 3. T₂ (ケース)

TT-10



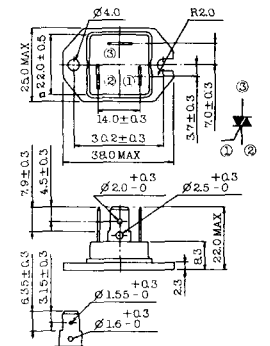
- 1. ゲート
- 2. T₁
- 3. T₂ (ケース)

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



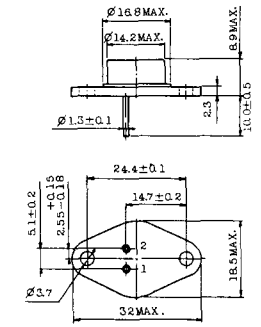
- 1, 2: T₂
- 3: GATE
- 4: T₁

TT-14



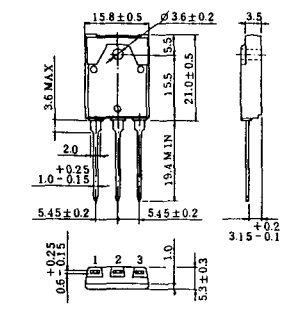
- 1, 2: T₂
- 3: GATE
- 4: T₁

TT-15 (13-14A1B)



- 1. ゲート
- 2. T₁
- T₂ (ケース)

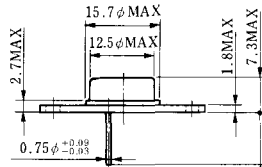
TT-16 (13-16A1A)



- 1. T₁
- 2. T₂
- 3. ゲート

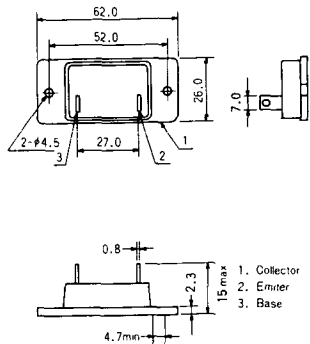


TS-8

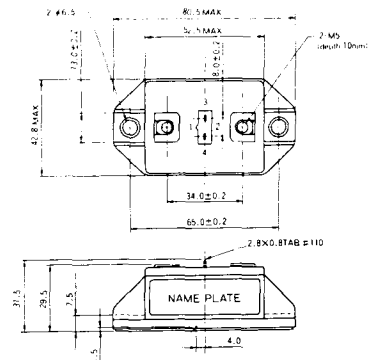


- 1. ベース
- 2. エミッタ
コレクタ
(ケース)

S-62A1A



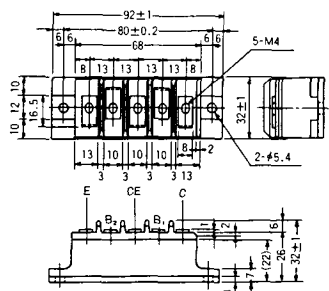
S-80A1A



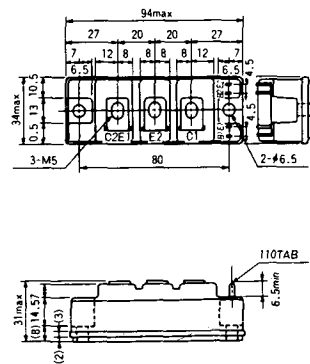
S-88D1A



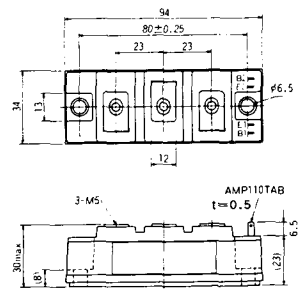
S-92B1A



S-94B1A



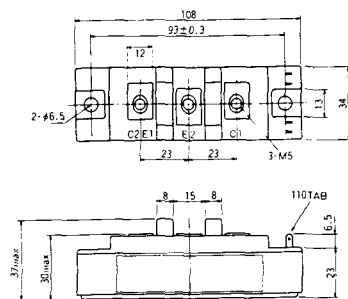
S-94B1B



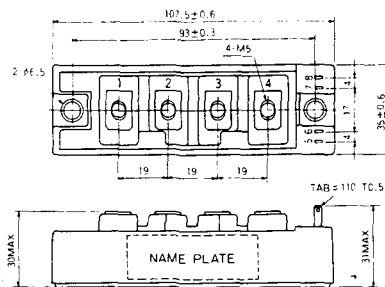
S-108B1A



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



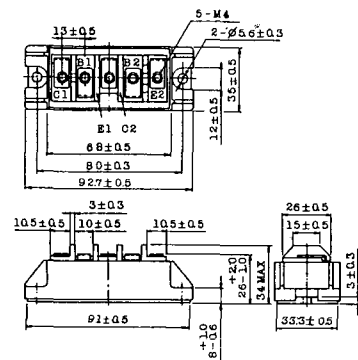
2-64A2A



2-64A2B



2-68A2A



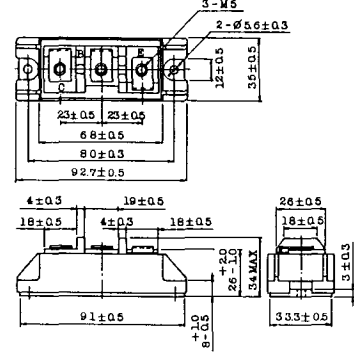
2-68B2A



2-68C1A



2-68D2A



2-72A3A



2-80A1A



2-80B1A



2-94D1A



2-96A3A



2-96A4A



2-98B1A



2-98C2A



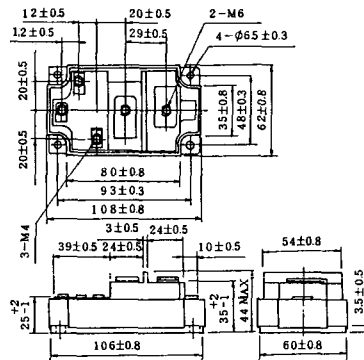
2-108A2A



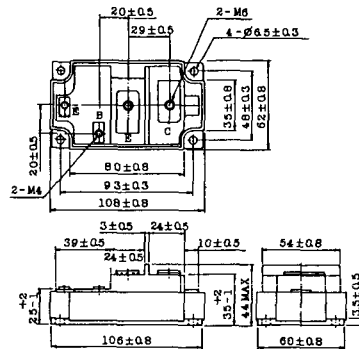
2-108B1A



2-109A3A



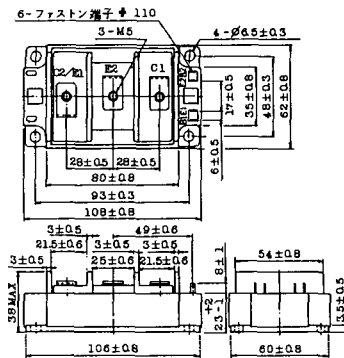
2-109A4A



2-109B3A



2-109B4A



BBT-II

BBTII
1D200A-020



BBT-III

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



BBT-III

BBTIII
ETN01-055
ET1257



BBT-IV

BBTIV
1D500A-030



M-107



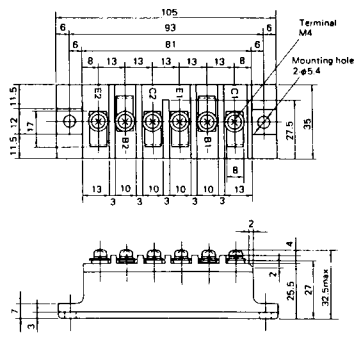
M-116



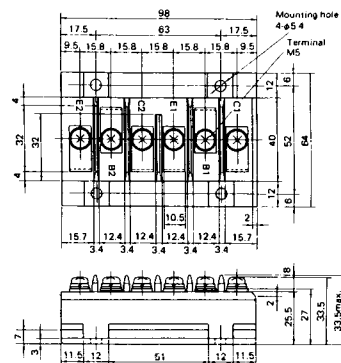
M-201



M-202



M-203



M-204



M-205



M-206



M-207



M-208



M-209



M-210



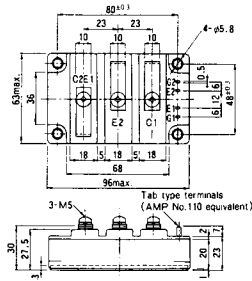
M-211



M-212

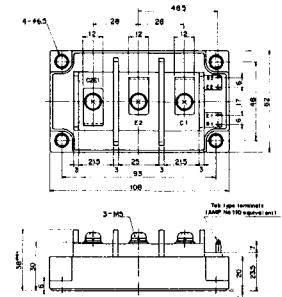


M-213

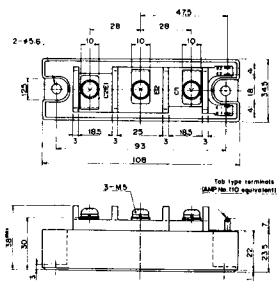


M-214

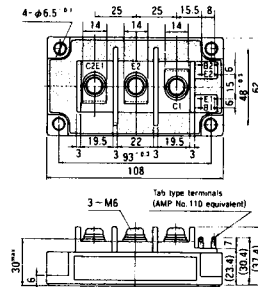
M-215



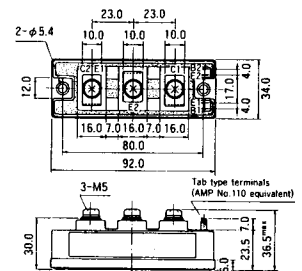
M-216



M-217



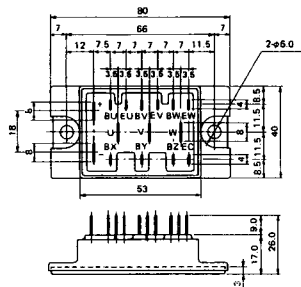
M-218



M-219



M-601



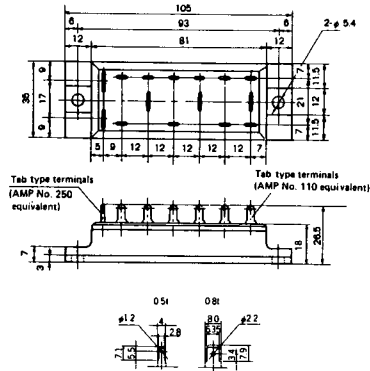
Tab type terminals
(AMP No. 110 equivalent)



Tab type terminals
(AMP No. 250 equivalent)



M-602



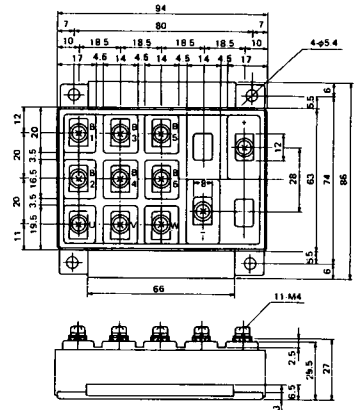
Tab type terminals
(AMP No. 250 equivalent)



Tab type terminals
(AMP No. 110 equivalent)



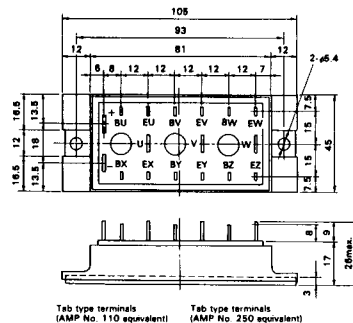
M-603



M-604



M-605



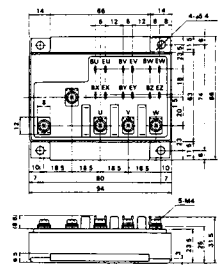
Tab type terminals
(AMP No. 110 equivalent)



Tab type terminals
(AMP No. 250 equivalent)



M-606



M-607



M-608



M-609



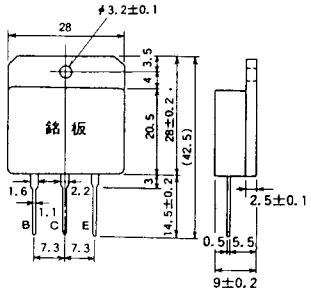
M-610



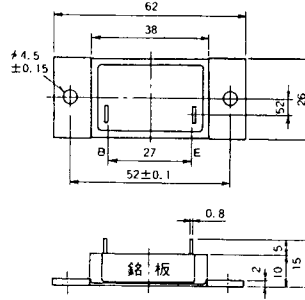
M-616



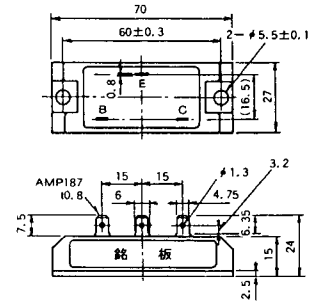
M-1A1A



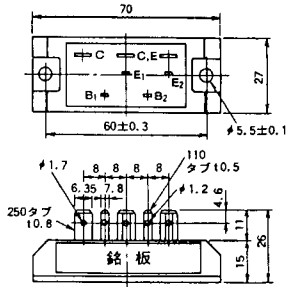
M-2A1A



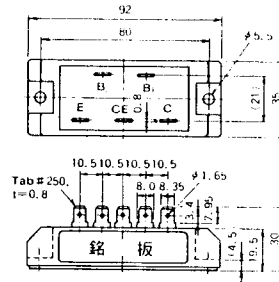
M-2B1A



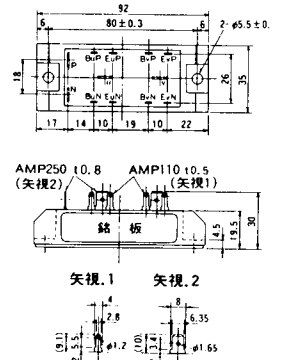
M-2B2A



M-2C2A



M-2D4A



M-3C1A



M-3D6A



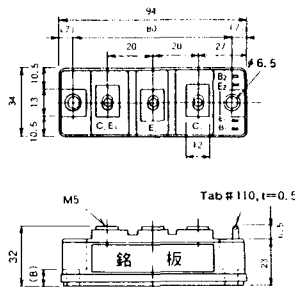
M-3E6A



M-4A1A



M-4A2A



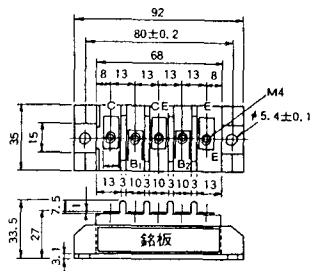
M-4A1B



M-4A2B



M-4B2A



M-5A1A



M-5A1B



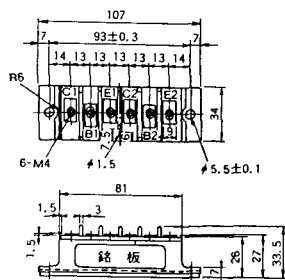
M-5A2A



M-5B2A



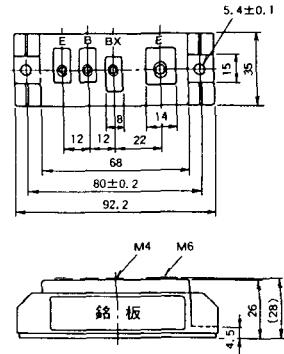
M-5C2A



M-5D2A



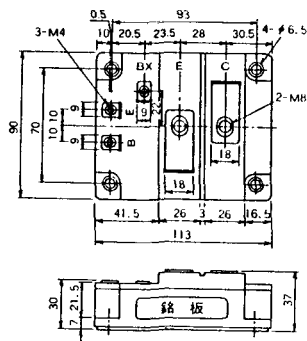
M-6A1A



M-7A1A



M-7B1A



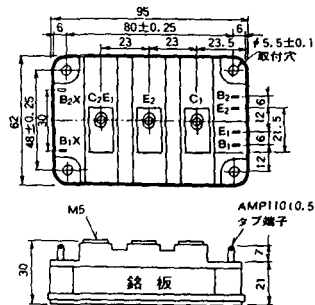
M-8A1A



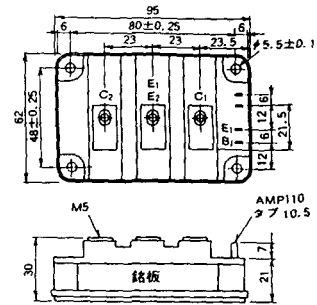
M-8A1B



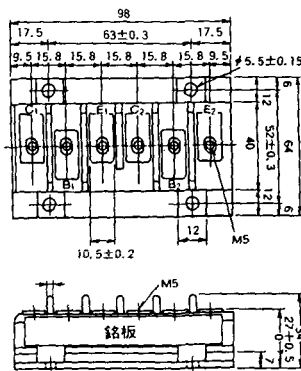
M-8A2A



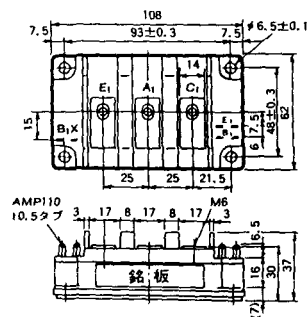
M-8A2B



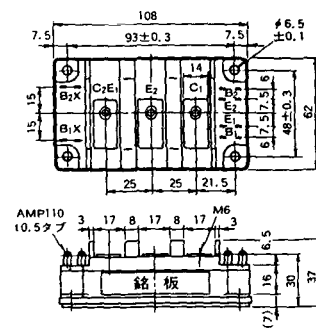
M-8B2A



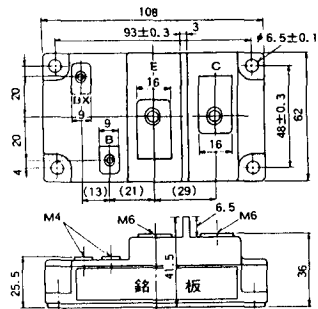
M-9A1A



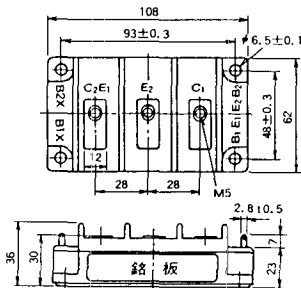
M-9A2A



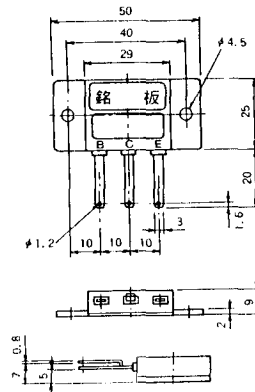
M-9B1A



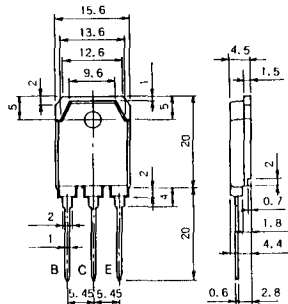
M-9C2A



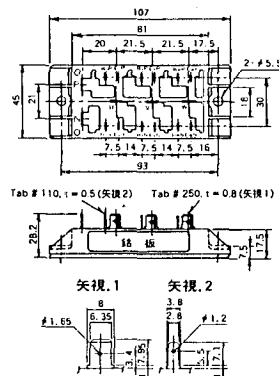
M-1A1B



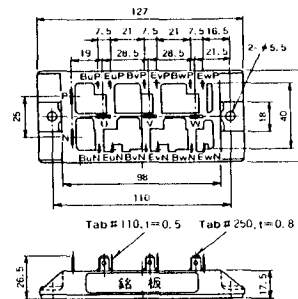
M-1A1C



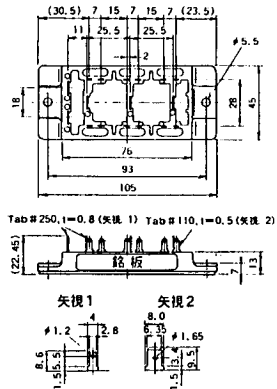
M-2E6B



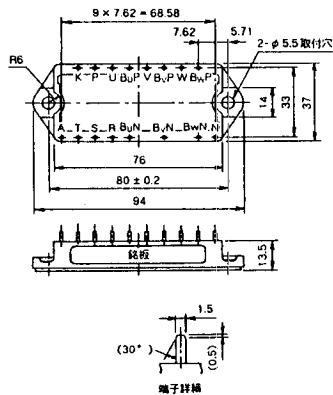
M-2E6C



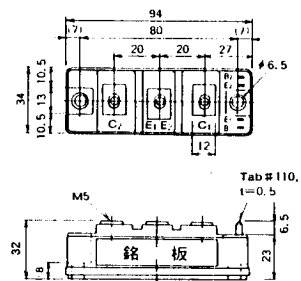
M-2G6B



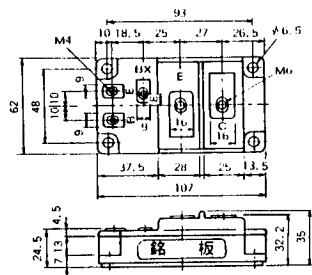
M-3D6B



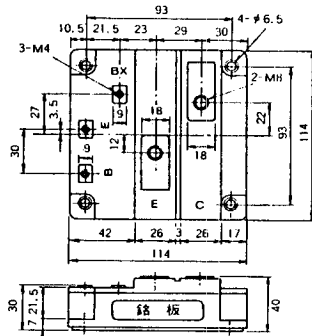
M-4A2C



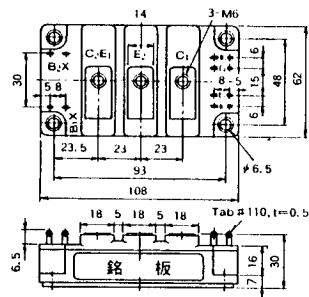
M-7A1B



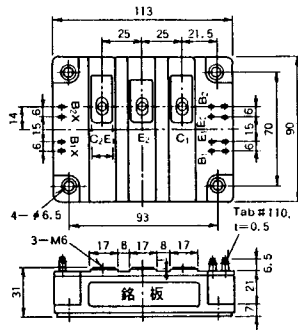
M-7C1A



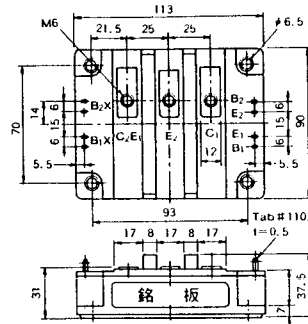
M-8A2C



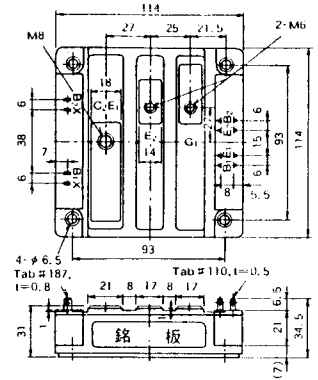
M-10A2A



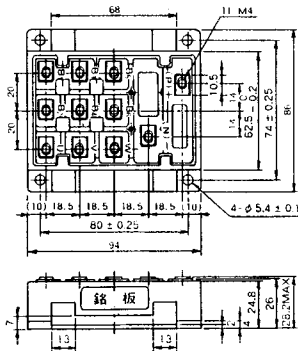
M-10A2B



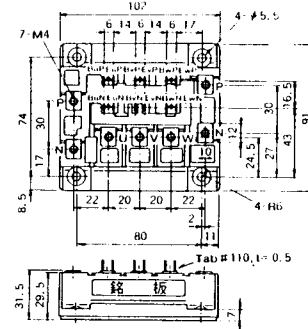
M-11A2A



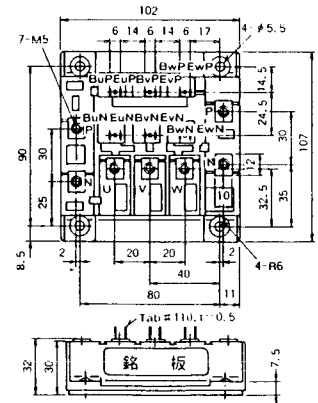
M-12A6A



M-12B6A



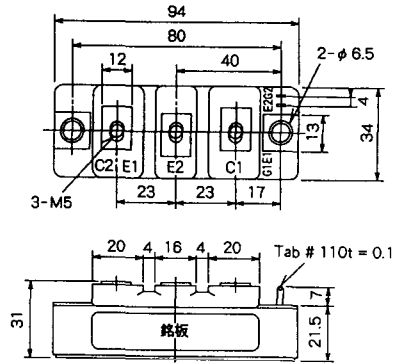
M-12B6B



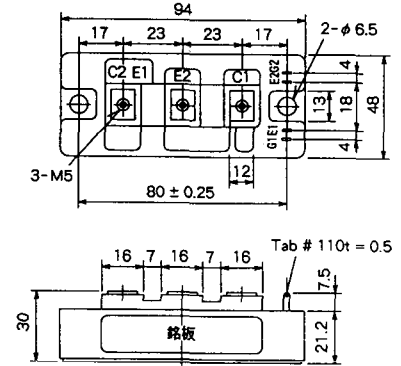
M-4A2D



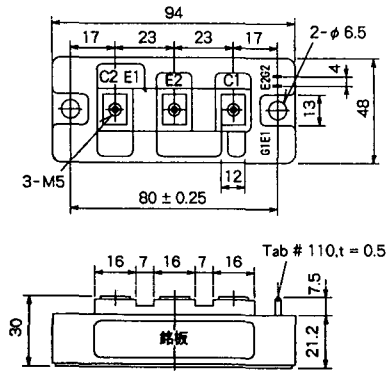
M-4A2E



M-4C2A



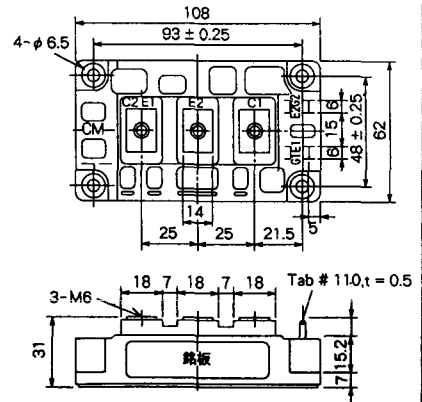
M-4C2B



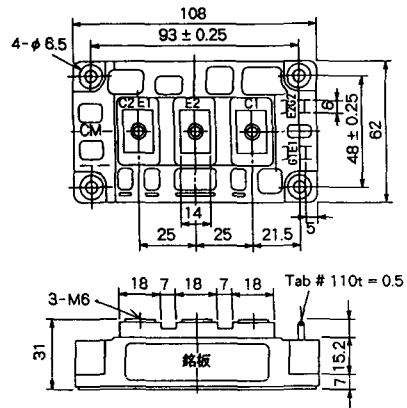
M-9B1C



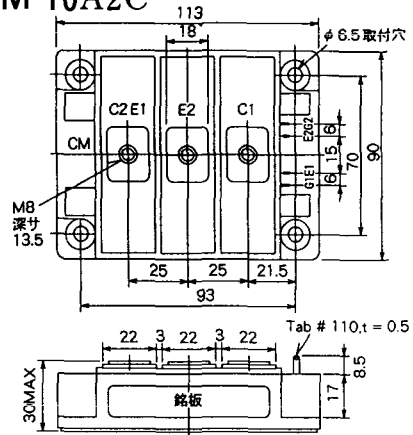
M-9D2A



M-9D2B



M-10A2C



H-101



Weight :480g

H-201



Weight: 200g

H-202



Weight: 360g

LF-J



LF-K



