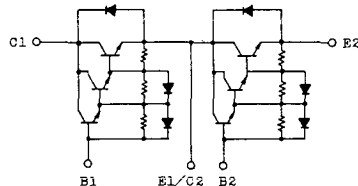


トランジスタ・モジュール (NPN, ダーリントン接続, 2個直列接続)

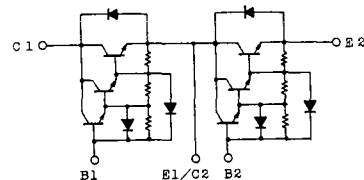
- ダーリントン・トランジスタを2個直列接続
- フリーホイール・ダイオード付
- 電極と金属ケース部が絶縁されている
- 直流電流増幅率は80以上(定格電流にて)

■等価回路

CK-1

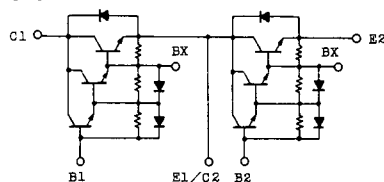


CK-2

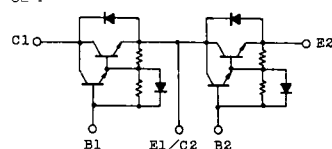
注1.  $T_c = 25^\circ\text{C}$ . 注2. AC, 1分間。

| 型 名 | 最 大 定 格<br>( $T_a=25^{\circ}\text{C}$ ) |                |                |                |                   |                |                |                   |                |                        |                        |                        | 電 氣 的 特 性       |                       |                             |                      |                            |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |
|-----|-----------------------------------------|----------------|----------------|----------------|-------------------|----------------|----------------|-------------------|----------------|------------------------|------------------------|------------------------|-----------------|-----------------------|-----------------------------|----------------------|----------------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------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|     | $V_{CE0}$                               | $V_{CEX(SUS)}$ | $V_{EB0}$      | $I_C$          | $I_{CP}$          | $I_B$          | $I_F$          | $I_{FM}$          | $P_C$          | $T_J$                  | $T_{Stg}$              | $V_{iso}$              | $I_{CBO}$       | $I_{EBO}$             | $V_{CE0(SUS)}$              | $h_{FE}$             |                            |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |
|     |                                         |                |                |                | ( $\mu\text{s}$ ) |                |                | ( $\mu\text{s}$ ) | ( $\text{W}$ ) | ( $^{\circ}\text{C}$ ) | ( $^{\circ}\text{C}$ ) | ( $\text{V}$ )         | ( $\text{mA}$ ) | ( $\text{mA}$ )       | ( $\text{V}$ )              |                      | $V_{CE}$                   | $I_C$                |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |
|     | ( $\text{V}$ )                          | ( $\text{V}$ ) | ( $\text{V}$ ) | ( $\text{A}$ ) | ( $\text{A}$ )    | ( $\text{A}$ ) | ( $\text{A}$ ) | ( $\text{A}$ )    | ( $\text{W}$ ) | ( $^{\circ}\text{C}$ ) | ( $^{\circ}\text{C}$ ) | ( $^{\circ}\text{C}$ ) | ( $\text{V}$ )  | 最大<br>( $\text{mA}$ ) | $V_{CB}$<br>( $\text{mA}$ ) | 最大<br>( $\text{V}$ ) | $V_{EB}$<br>( $\text{V}$ ) | 最小<br>( $\text{V}$ ) | 最小<br>( $\text{V}$ ) | 最小<br>( $\text{V}$ ) | 最小<br>( $\text{V}$ ) | 最小<br>( $\text{V}$ ) | 最小<br>( $\text{V}$ ) | 最小<br>( $\text{V}$ ) | 最小<br>( $\text{V}$ ) | 最小<br>( $\text{V}$ ) | 最小<br>( $\text{V}$ ) | 最小<br>( $\text{V}$ ) | 最小<br>( $\text{V}$ ) | 最小<br>( $\text{V}$ ) | 最小<br>( $\text{V}$ ) | 最小<br>( $\text{V}$ ) | 最小<br>( $\text{V}$ ) | 最小<br>( $\text{V}$ ) | 最小<br>( $\text{V}$ ) | 最小<br>( $\text{V}$ ) | 最小<br>( $\text{V}$ ) | 最小<br>( $\text{V}$ ) | 最小<br>( $\text{V}$ ) | 最小<br>( $\text{V}$ ) | 最小<br>( $\text{V}$ ) | 最小<br>( $\text{V}$ ) | 最小<br>( $\text{V}$ ) | 最小<br>( $\text{V}$ ) | 最小<br>( $\text{V}$ ) | 最小<br>( $\text{V}$ ) | 最小<br>( $\text{V}$ ) | 最小<br>( $\text{V}$ ) | 最小<br>( $\text{V}$ ) | 最小<br>( $\text{V}$ ) | 最小<br>( $\text{V}$ ) | 最小<br>( $\text{V}$ ) | 最小<br>( $\text{V}$ ) | 最小<br>( $\text{V}$ ) | 最小<br>( $\text{V}$ ) | 最小<br>( $\text{V}$ ) | 最小<br>( $\text{V}$ ) | 最小<br>( $\text{V}$ ) | 最小<br>( $\text{V}$ ) | 最小<br>( $\text{V}$ ) | 最小<br>( $\text{V}$ ) | 最小<br>( $\text{V}$ ) | 最小<br>( $\text{V}$ ) | 最小<br>( $\text{V}$ ) | 最小<br>( $\text{V}$ ) | 最小<br>( $\text{V}$ ) | 最小<br>( $\text{V}$ ) | 最小<br>( $\text{V}$ ) | 最小<br>( $\text{V}$ ) | 最小<br>( $\text{V}$ ) | 最小<br>( $\text{V}$ ) | 最小<br>( $\text{V}$ ) | 最小<br>( $\text{V}$ ) | 最小<br>( $\text{V}$ ) | 最小<br>( $\text{V}$ ) | 最小<br>( $\text{V}$ ) | 最小<br>( $\text{V}$ ) | 最小<br>( $\text{V}$ ) | 最小<br>( $\text{V}$ ) | 最小<br>( $\text{V}$ ) | 最小<br>( $\text{V}$ ) | 最小<br>( $\text{V}$ ) | 最小<br>( $\text{V}$ ) | 最小<br>( $\text{V}$ ) | 最小<br>( $\text{V}$ ) | 最小<br>( $\text{V}$ ) | 最小<br>( $\text{V}$ 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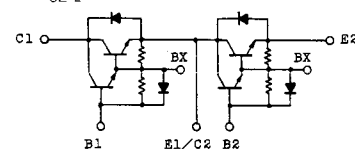
CK-3



CL-1



CL-2



注3. スイッチング時間の \* 印はtyp. 値。

| (T <sub>a</sub> = 25℃) |                 |                       |                       |                 |                  |                |                        |                        |                        |                       | エミッタ・コレクタ間ダイオード       |                       |                         |                       |                        |                 |                            | 熱抵抗    |      | 等 価 回 路  | 外形図 | 記 事        | 型 名 |
|------------------------|-----------------|-----------------------|-----------------------|-----------------|------------------|----------------|------------------------|------------------------|------------------------|-----------------------|-----------------------|-----------------------|-------------------------|-----------------------|------------------------|-----------------|----------------------------|--------|------|----------|-----|------------|-----|
| 飽和電圧 (V)               |                 | I <sub>C</sub><br>(A) | I <sub>B</sub><br>(A) | スイッチング時間 (μs)   |                  |                | I <sub>B1</sub><br>(A) | I <sub>B2</sub><br>(A) | V <sub>CC</sub><br>(V) | R <sub>L</sub><br>(Ω) | V <sub>F</sub><br>(V) | I <sub>F</sub><br>(A) | t <sub>rr</sub><br>(μs) | I <sub>F</sub><br>(A) | V <sub>RE</sub><br>(V) | di/dt<br>(A/μs) | R <sub>th(j-c)</sub> (℃/W) |        |      |          |     |            |     |
| V <sub>CE</sub>        | V <sub>BE</sub> |                       |                       | t <sub>on</sub> | t <sub>off</sub> | t <sub>r</sub> |                        |                        |                        |                       |                       |                       |                         |                       |                        |                 | トランジスタ部                    | ダイオード部 |      |          |     |            |     |
| 最大                     | 最大              | (A)                   | (A)                   | 最大              | 最大               | 最大             | (A)                    | (A)                    | (V)                    | (Ω)                   | 最大                    | (A)                   | 最大                      | (A)                   | (V)                    | (A/μs)          | 最大                         | 最大     |      |          |     |            |     |
| 2.5                    | 3.5             | 15                    | 0.3                   | 2               | 11               | 6              | 0.3                    | -0.9                   | 600                    | 40                    | 1.5                   | 15                    | 1.0                     | 15                    | -3                     | 60              | 0.83                       | 1.3    | CK-2 | 2-68B2A  |     | MG15N2CK1  |     |
| 2.5                    | 3.5             | 15                    | 0.3                   | 2               | 11               | 6              | 0.3                    | -0.9                   | 600                    | 40                    | 1.5                   | 15                    | 1.0                     | 15                    | -3                     | 60              | 0.83                       | 1.3    | YK-1 | 2-94C3A  |     | MG15N2YK1  |     |
| 2.5                    | 3.5             | 25                    | 0.5                   | 2               | 15               | 5              | 0.5                    | -0.5                   | 600                    | 24                    | 1.7                   | 25                    | 1.0                     | 25                    | -3                     | 100             | 0.41                       | 1.3    | CK-2 | 2-68B2A  |     | MG25N2CK2  |     |
| 2.5                    | 3.5             | 25                    | 0.5                   | 2               | 15               | 5              | 0.5                    | -0.5                   | 600                    | 24                    | 1.7                   | 25                    | 1.0                     | 25                    | -3                     | 100             | 0.41                       | 1.3    | YK-1 | 2-94C3A  |     | MG25N2YK1  |     |
| 2.5                    | 3.5             | 25                    | 0.5                   | 2               | 15               | 5              | 0.5                    | -0.5                   | 600                    | 24                    | 1.7                   | 25                    | 1.0                     | 25                    | -3                     | 100             | 0.41                       | 1.3    | YK-1 | 2-94D1A  |     | MG25N2YK9  |     |
| 2.5                    | 3.5             | 25                    | 0.5                   | 2               | 14               | 6              | 0.5                    | -1.5                   | 600                    | 24                    | 1.7                   | 25                    | 1.0                     | 25                    | -3                     | 100             | 0.41                       | 1.3    | CK-2 | 2-68B2A  |     | MG25N2CK1  |     |
| 2.5                    | 3.5             | 25                    | 0.5                   | 2               | 14               | 6              | 0.5                    | -1.5                   | 600                    | 24                    | 1.7                   | 25                    | 1.0                     | 25                    | -3                     | 100             | 0.41                       | 1.3    | YK-1 | 2-94C3A  |     | MG25N2YK1  |     |
| 2.0                    | 2.5             | 30                    | 0.6                   | 1               | 12               | 2              | 0.6                    | -0.6                   | 300                    | 10                    | 1.5                   | 30                    | 1.0                     | 30                    | -3                     | 100             | 0.5                        | 1.8    | CL-1 | 2-68A2A  |     | MG30G2CL3  |     |
| 2.0                    | 2.5             | 30                    | 1.0                   | 1               | 12               | 3              | 0.6                    | -0.6                   | 300                    | 10                    | 1.6                   | 30                    | 1.0                     | 30                    | -2                     | 60              | 0.625                      | 1.8    | YL-1 | 2-94C3A  |     | MG30G2YL1  |     |
| 2.5                    | 3.5             | 40                    | 0.8                   | 2               | 17               | 3              | 0.8                    | -2.4                   | 600                    | 15                    | 1.8                   | 40                    | 1.2                     | 40                    | -3                     | 100             | 0.31                       | 1.3    | YK-1 | 2-108A2A |     | MG40S2YK1  |     |
| 2.0                    | 2.5             | 50                    | 1.0                   | 1               | 12               | 2              | 1.0                    | -1.0                   | 300                    | 6                     | 1.5                   | 50                    | 1.0                     | 50                    | -3                     | 100             | 0.41                       | 1.3    | CL-1 | 2-68A2A  |     | MG50G2CL3  |     |
| 2.0                    | 2.5             | 50                    | 1.0                   | 1               | 12               | 2              | 1.0                    | -1.0                   | 300                    | 6                     | 1.7                   | 50                    | 1.0                     | 50                    | -3                     | 100             | 0.41                       | 1.3    | YL-1 | 2-94C3A  |     | MG50G2YL1A |     |
| 2.5                    | 3.5             | 50                    | 1.0                   | 2               | 15               | 5              | 1.0                    | -1.0                   | 600                    | 12                    | 1.7                   | 50                    | 1.0                     | 50                    | -3                     | 100             | 0.36                       | 1.3    | CK-2 | 2-68B2A  |     | MG50M2CK2  |     |
| 2.5                    | 3.5             | 50                    | 1.0                   | 2               | 15               | 5              | 1.0                    | -1.0                   | 600                    | 12                    | 1.7                   | 50                    | 1.0                     | 50                    | -3                     | 100             | 0.36                       | 1.3    | YK-1 | 2-94C3A  |     | MG50M2YK1  |     |
| 2.5                    | 3.5             | 50                    | 1.0                   | 2               | 15               | 5              | 1.0                    | -1.0                   | 600                    | 12                    | 1.7                   | 50                    | 1.0                     | 50                    | -3                     | 100             | 0.36                       | 1.3    | YK-1 | 2-94D1A  |     | MG50M2YK9  |     |
| 2.5                    | 3.5             | 50                    | 1.0                   | 2               | 15               | 5              | 1.0                    | -3.0                   | 600                    | 12                    | 1.8                   | 50                    | 2.0                     | 50                    | -3                     | 100             | 0.35                       | 1.3    | CK-2 | 2-68B2A  |     | MG50N2CK1  |     |
| 2.5                    | 3.2             | 50                    | 1.0                   | 2               | 13               | 4              | 1.0                    | -3.0                   | 600                    | 12                    | 1.8                   | 50                    | 1.0                     | 50                    | -3                     | 100             | 0.35                       | 1.3    | YK-1 | 2-94C3A  |     | MG50N2YK1  |     |
| 2.0                    | 2.5             | 75                    | 1.5                   | 2               | 12               | 2              | 1.5                    | -1.5                   | 300                    | 4                     | 1.5                   | 75                    | 2.0                     | 75                    | -3                     | 100             | 0.35                       | 1.3    | CL-1 | 2-68A2A  |     | MG75G2CL1  |     |
| 2.0                    | 2.5             | 75                    | 1.5                   | 2               | 12               | 2              | 1.5                    | -1.5                   | 300                    | 4                     | 1.7                   | 75                    | 1.0                     | 75                    | -3                     | 100             | 0.36                       | 1.3    | YL-1 | 2-94C3A  |     | MG75G2YL1A |     |
| 2.0                    | 2.5             | 75                    | 2.0                   | 2               | 12               | 4              | 2.0                    | -2.0                   | 300                    | 4                     | 1.5                   | 75                    | 2.0                     | 75                    | -3                     | 100             | 0.35                       | 1.3    | CL-1 | 2-68A2A  |     | MG75H2CL1  |     |
| 2.0                    | 2.5             | 75                    | 2.0                   | 2               | 12               | 4              | 2.0                    | -2.0                   | 300                    | 4                     | 1.7                   | 75                    | 1.0                     | 75                    | -3                     | 100             | 0.35                       | 1.3    | YL-1 | 2-94C3A  |     | MG75H2YL1A |     |

FD-1



FD-2



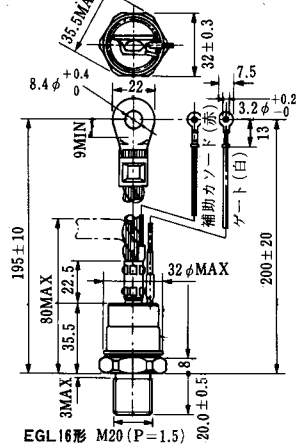
FD-3



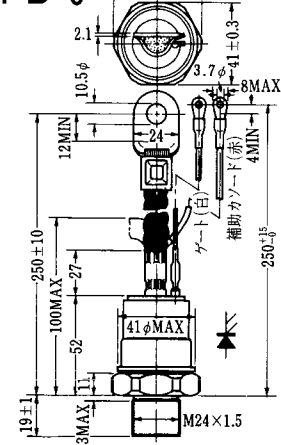
FD-4



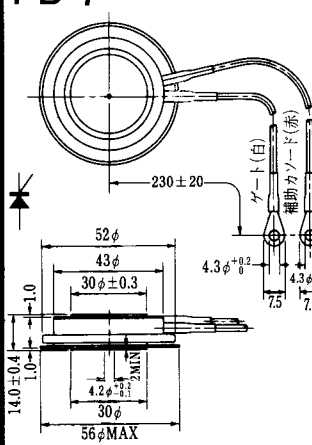
FD-5



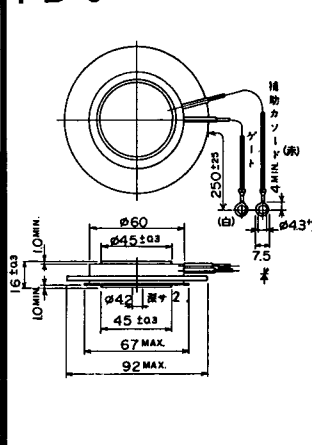
FD-6



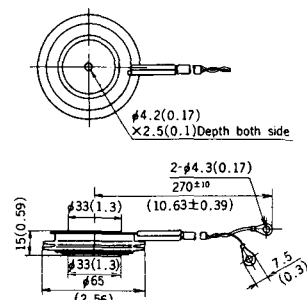
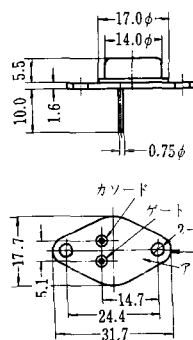
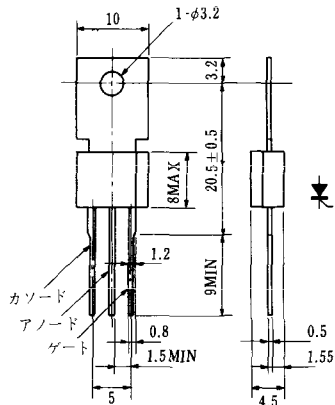
FD-7



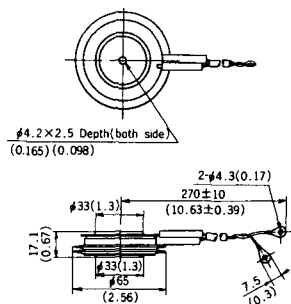
FD-8



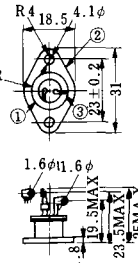
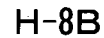
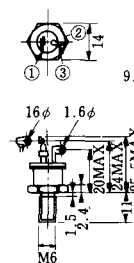
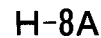
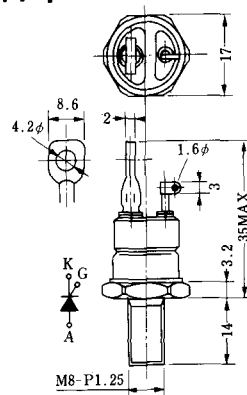
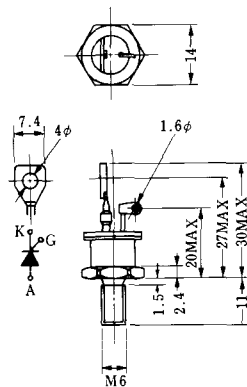




Unit in mm (inch)



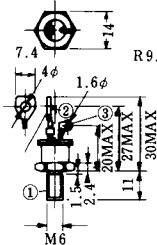
Unit in mm(inch)



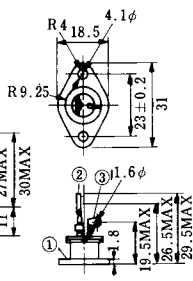
K<sub>C</sub>

- ①アノード  
②カソード  
③ゲート

**H-9A**



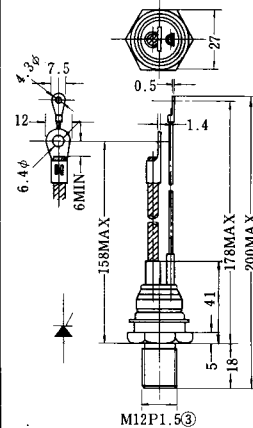
**H-9B**



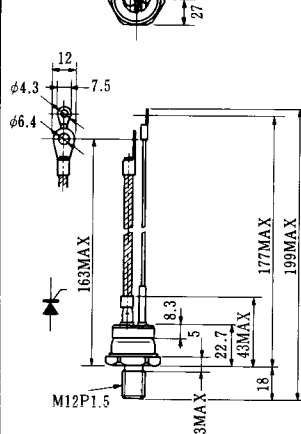
- ①アノード  
②カソード  
③ゲート



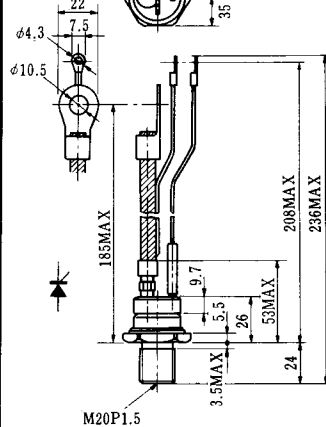
## H-10



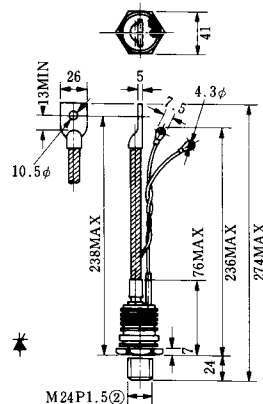
## H-11



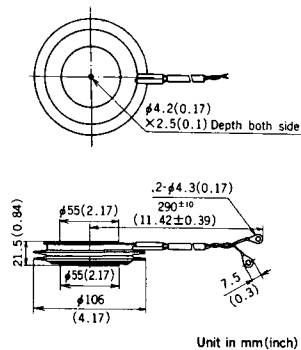
**H-12**



**H-13**

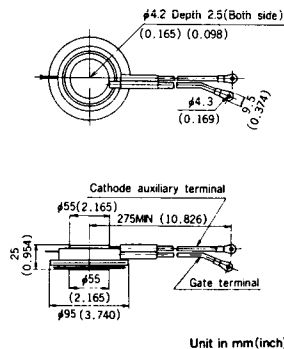


## H-14



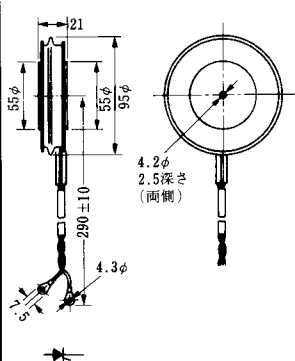
Unit in mm (inch)

## H-15

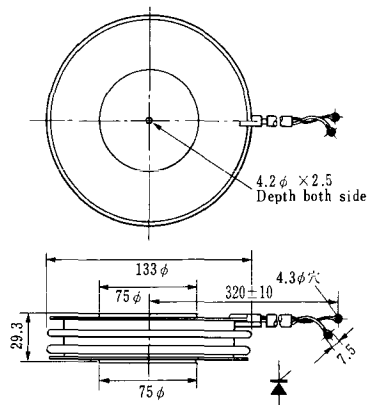


Unit in mm (inch)

**H-16**



# H-17



# H-18



# H-19



# H-20



# H-21



# H-22



# H-23



# H-24



# H-25



# H-26



| Type | Direction of polarity |
|------|-----------------------|
| CA12 |                       |

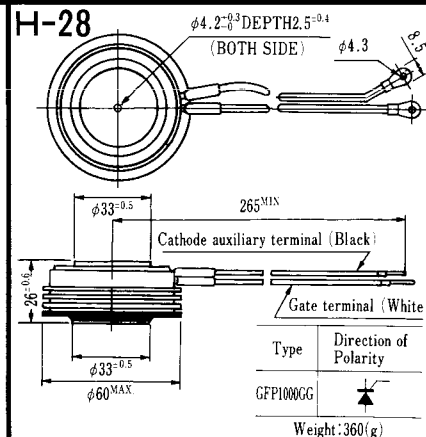
# H-27



| Type  | Direction of polarity |
|-------|-----------------------|
| CF11V |                       |

(注) CC11V: 400  $\pm$  10  
CF11V: 250  $\pm$  10

# H-28



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

H-29



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

H-30



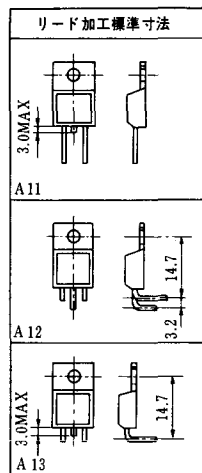
Note : The thickness is a dimension in press at the rated mounting force.

# HT-1

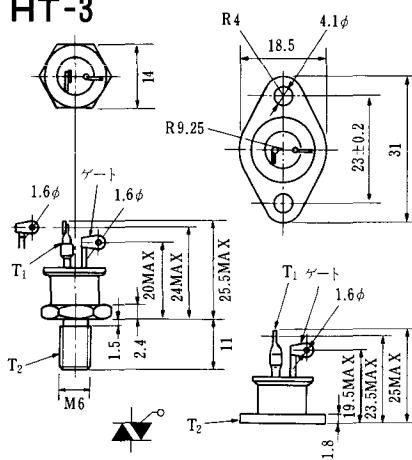


Unit in mm (inch)

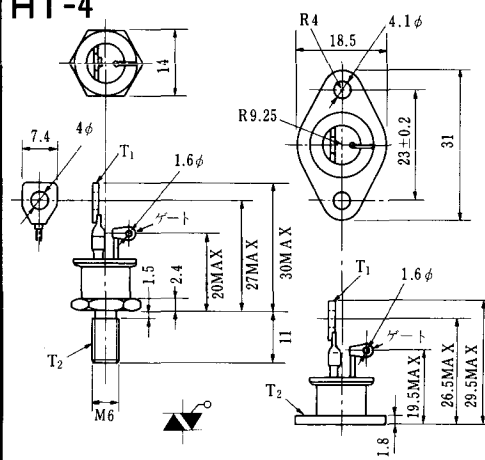
# HT-2



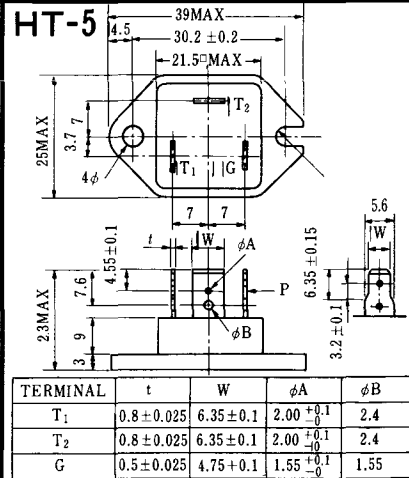
# HT-3



# HT-4



# HT-5



《寸法図単位：mm》

M-1



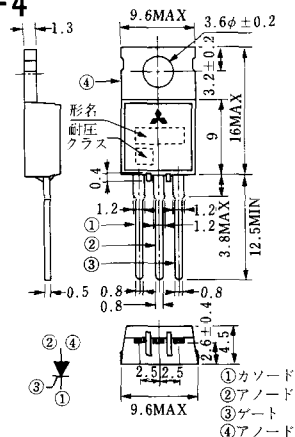
M-2



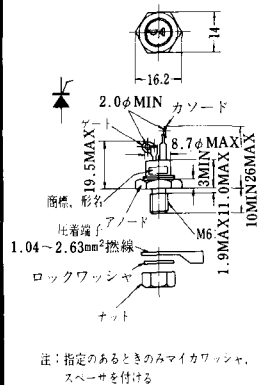
M-3



M-4



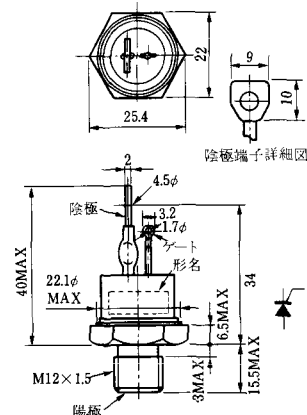
M-5



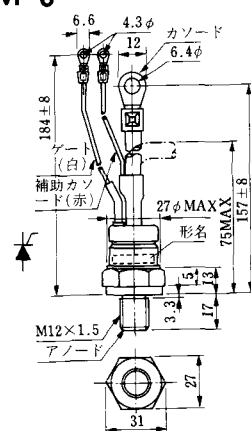
M-6



M-7



M-8



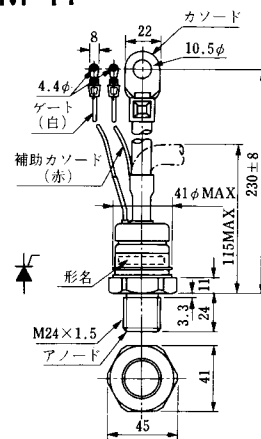
M-9



M-10



M-11



M-12



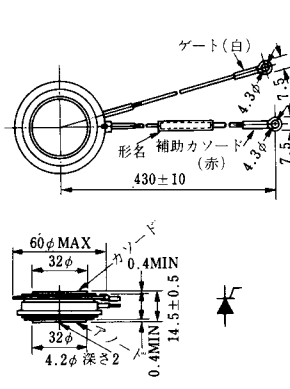
M-13



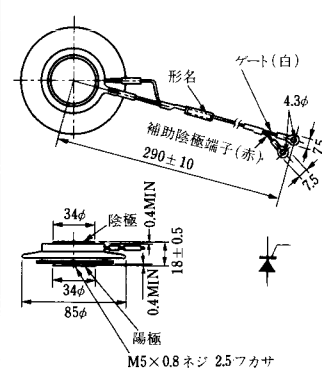
M-14



M-15



M-16



M-17



M-18



M-19



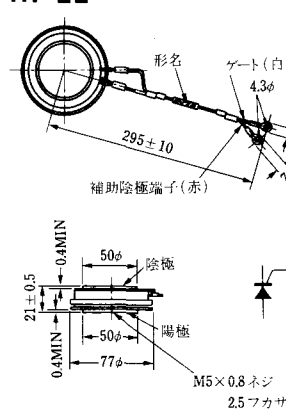
M-20



M-21



M-22



M-23



M-24



M-25



M-26



M-27



M-28



M-29



M-30



M-31



M-32



M-33



M-34



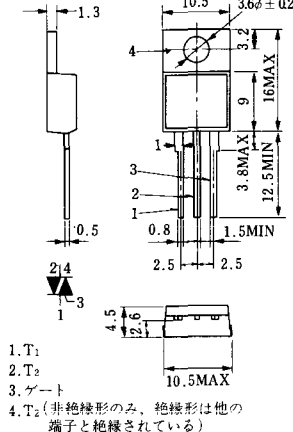
# MT-1



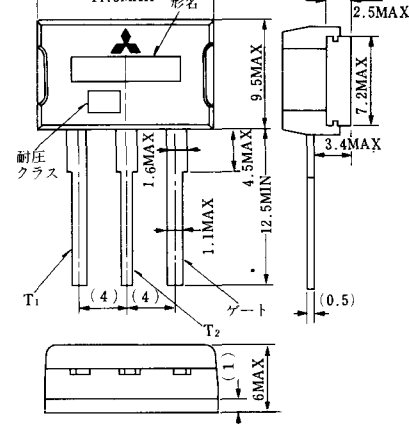
# MT-2



# MT-3



# MT-4



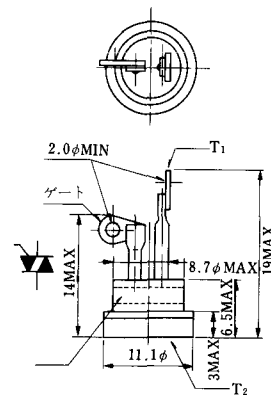
# MT-5



# MT-6



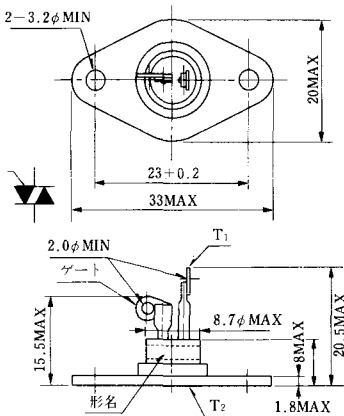
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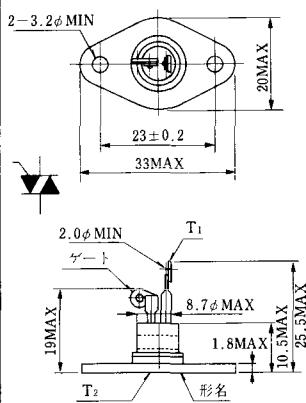
MT-8



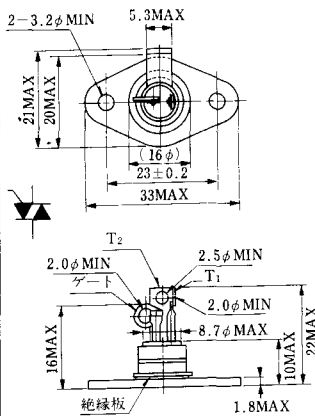
MT-9



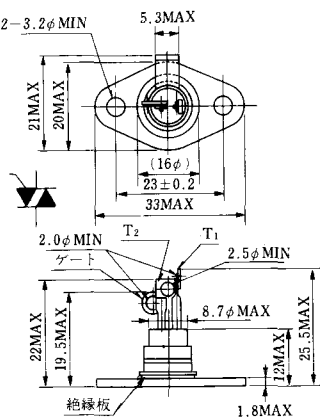
MT-10



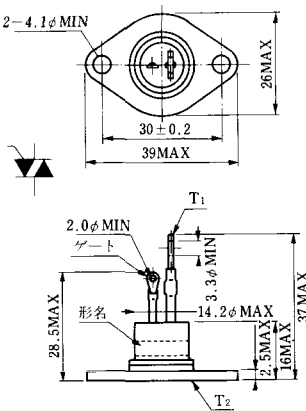
MT-11



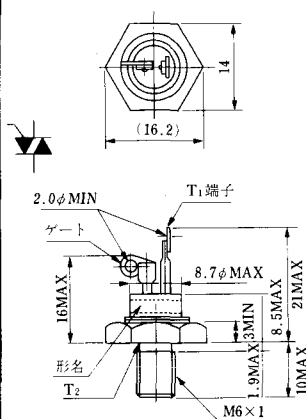
MT-12



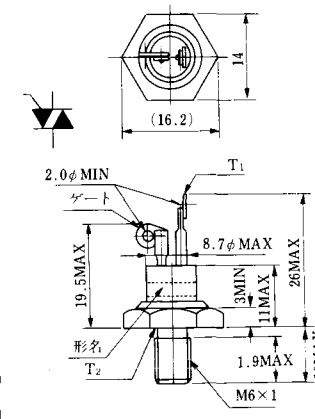
MT-13



MT-14



MT-15



MT-16



MT-17



MT-18



MT-19



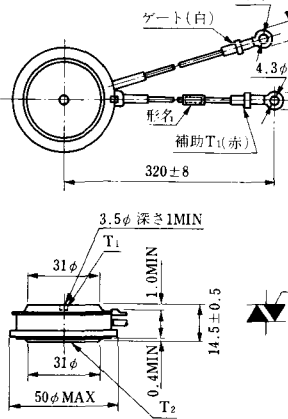
MT-20



MT-21



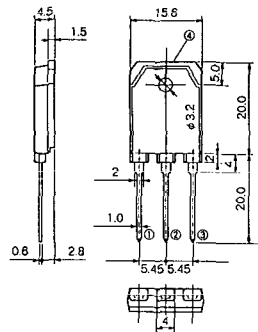
MT-22



MT-23



# MT-24



TO - 3P

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

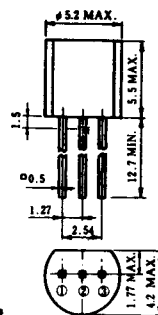
N-1



電極接続

- ① カソード
- ② ゲート
- ③ アノード

N-2



電極接続

- ① ヤート
- ② アノード
- ③ カソード

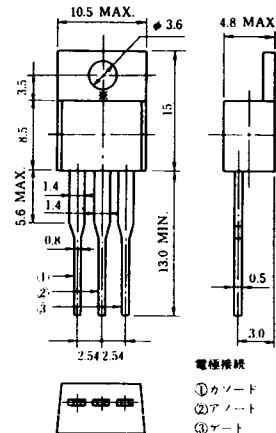
N-3



電極接続

- ① カソード
- ② アノード
- ③ ゲート

N-4



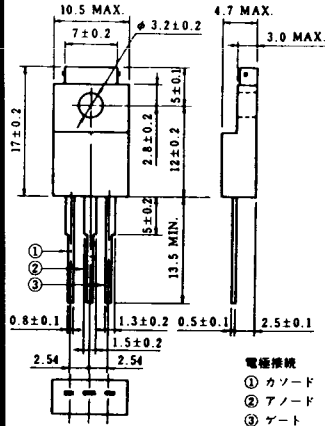
電極接続

- ① カソード
- ② アノード
- ③ ゲート

N-5



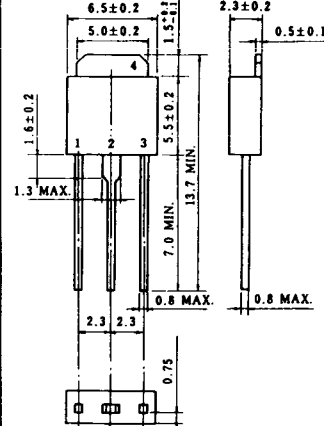
N-6



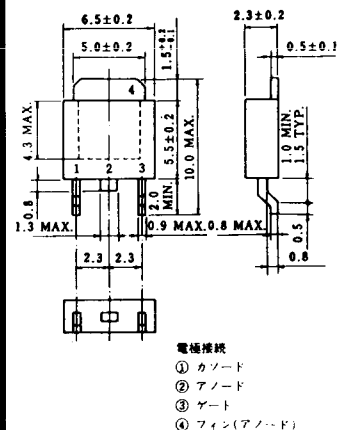
電極接続

- ① カソード
- ② アノード
- ③ ゲート

N-7



N-8



電極接続

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

N-9



電極接続

K : カソード

A : アノード

G : ゲート

# NA-1



電極接続

1. ゲート
2. アノード
3. カソード

JEDEC: TO-92

# NA-2



電極接続

1. カソード
2. アノード
3. ゲート

JEDEC: TO-202AA





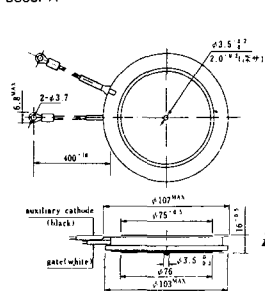
# NI-16

503PLF  
503PLH



# NI-17

3003PA



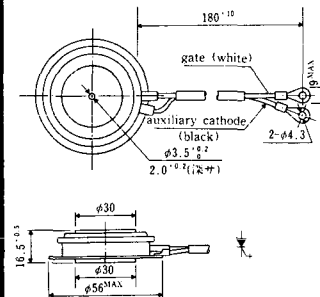
# NI-18

353PGA「E



# NI-19

603PGA, 603PGA「A, 803PGA



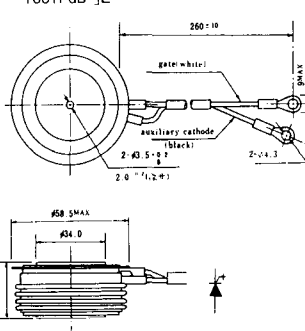
# NI-20

603PGA「E



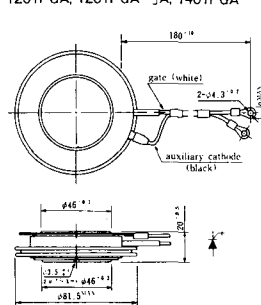
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1001PGB「E



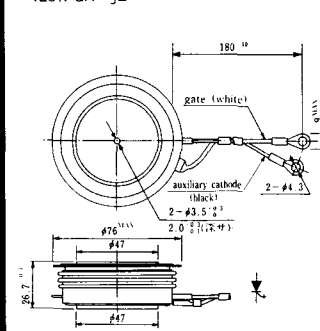
# NI-22

1201PGA, 1201PGA「A, 1401PGA



# NI-23

1201PGA「E



NI-24

2001PGB<sup>r</sup> JE



NI-25

NI-26

# NT-1



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

# NT-2



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

# NT-3



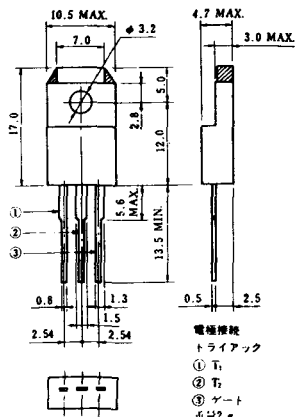
電極接続  
①T<sub>1</sub>  
②T<sub>2</sub>  
③ゲート

# NT-4



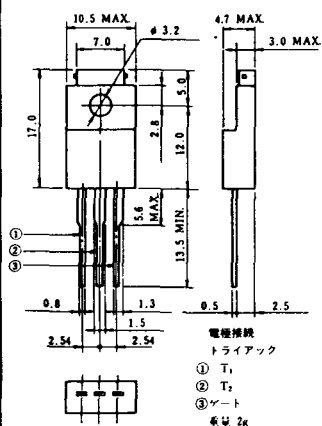
電極接続  
①T<sub>1</sub>  
②T<sub>2</sub>  
③G

# NT-5



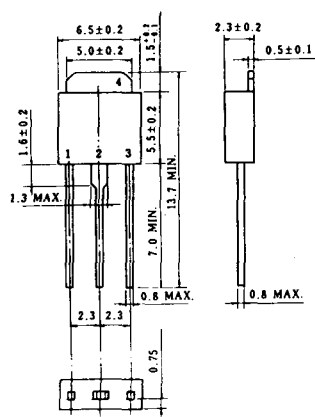
電極接続  
トリアック  
①T<sub>1</sub>  
②T<sub>2</sub>  
③ゲート  
④2g

# NT-6

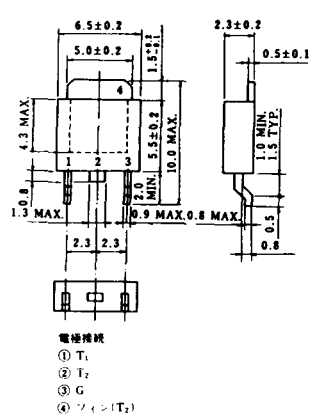


電極接続  
トリアック  
①T<sub>1</sub>  
②T<sub>2</sub>  
③ゲート  
④2k

# NT-7



# NT-8



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

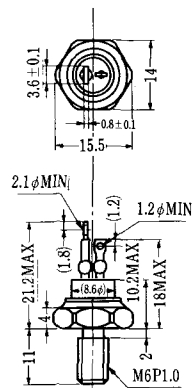
S-1



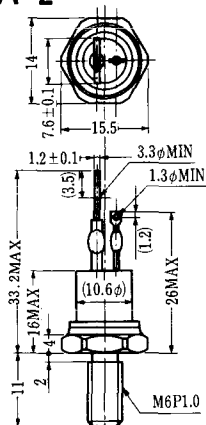
ST-1



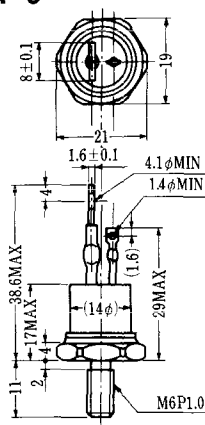
SA-1



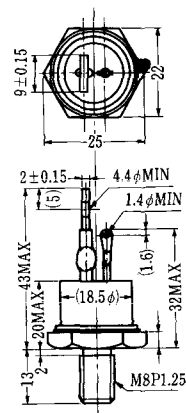
SA-2



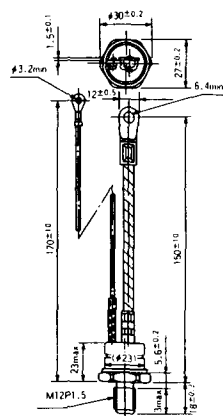
SA-3



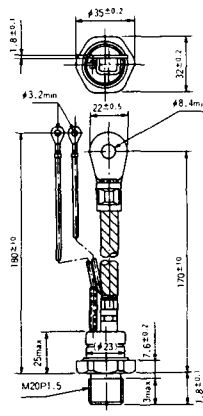
SA-4



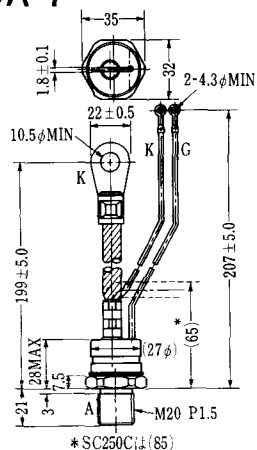
SA-5



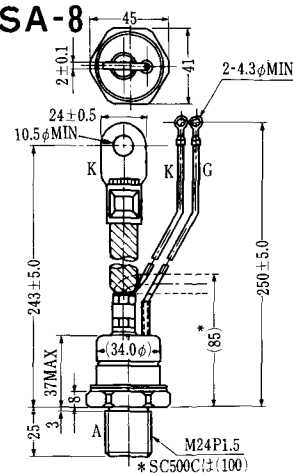
SA-6



SA-7

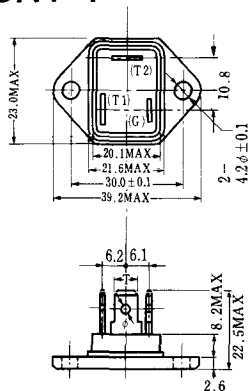


SA-8





# SAT-1

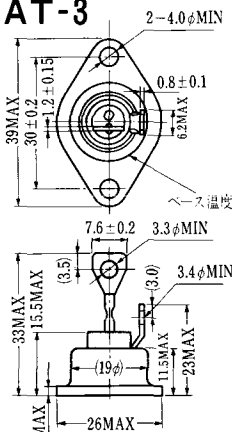


T1端子:ファストン250( $T=6.35$ ,  $t=0.8$ ,  $\phi=1.65$ )  
T2端子:ファストン250( $T=6.35$ ,  $t=0.8$ ,  $\phi=1.65$ )  
G端子:ファストン187( $T=4.75$ ,  $t=0.5$ ,  $\phi=1.3$ )

**SAT-2**



**SAT-3**



**SAT-4**



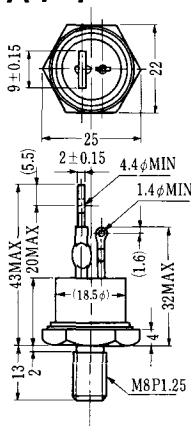
**SAT-5**



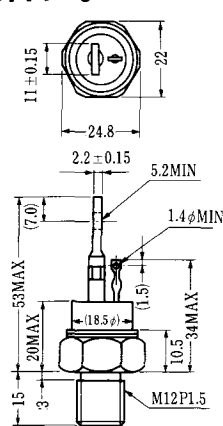
SAT-6



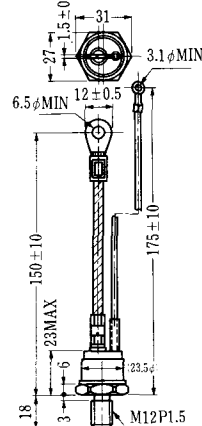
SAT-7



SAT-8



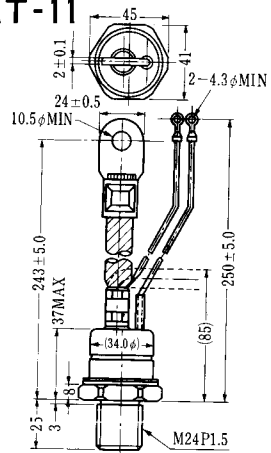
SAT-9.



**SAT-10**



**SAT-11**



**SY-1**(1096A)



**SY-2**(1151)



**SY-3**(1104)



**SY-4**(1150)



1097A



G: Gate

1102



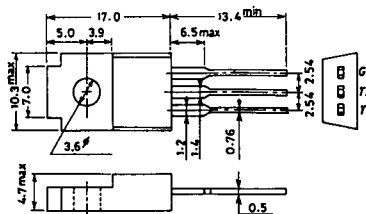
1141



1142



1144



1155

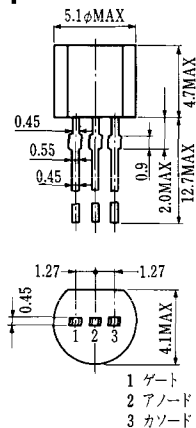


1192A

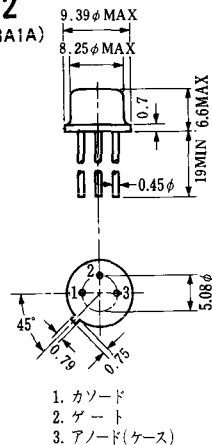


G: Gate

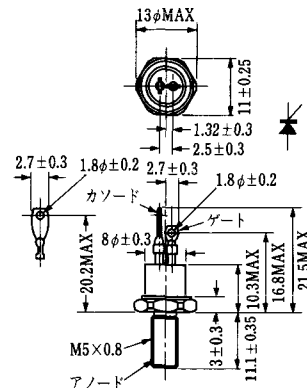
**T-1 (13-5A1A)**



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



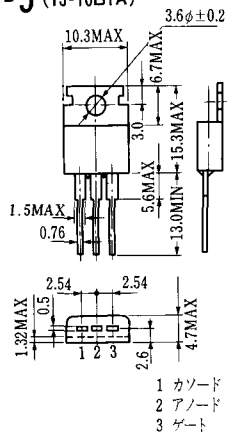
**T-3 (13-8C1A)**



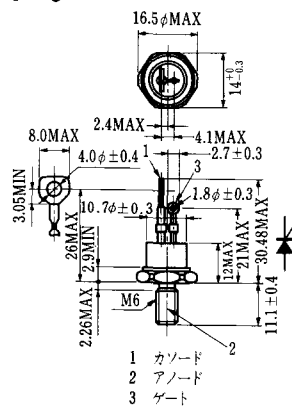
**T-4 (13-10A1A)**



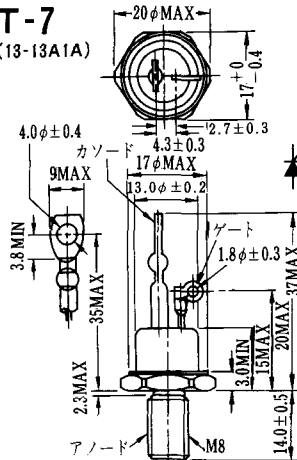
**T-5 (13-10B1A)**



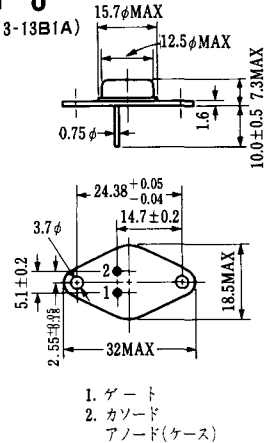
**T-6 (13-11D1A)**



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



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

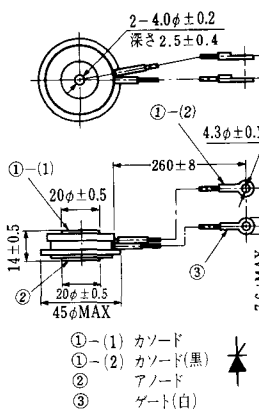




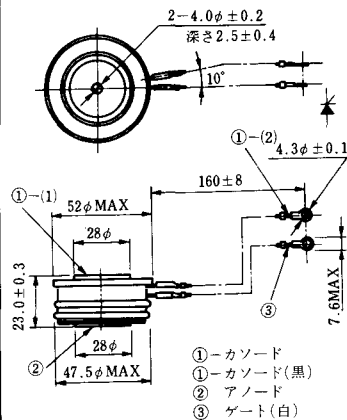
**T-17 (13-42A1A)**



**T-18 (13-45D1A)**



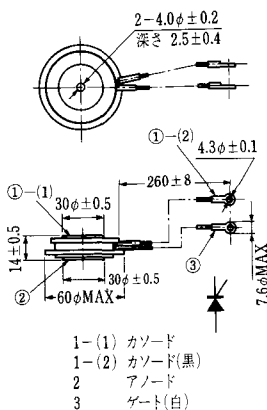
**T-19 (13-52B1A)**



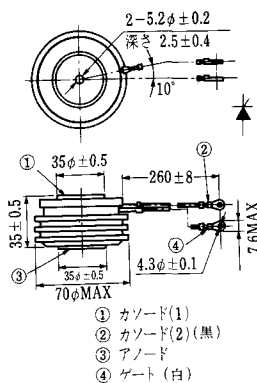
**T-20 (13-52C1A)**



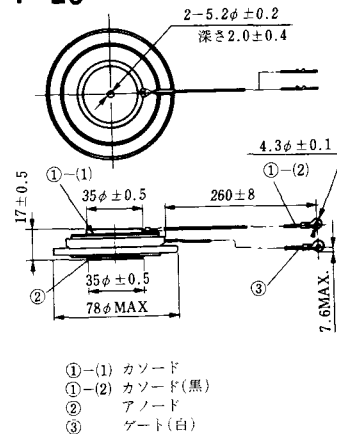
**T-21 (13-60A1A)**



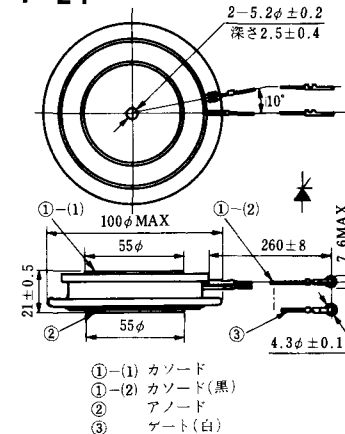
**T-22 (13-70C1A)**



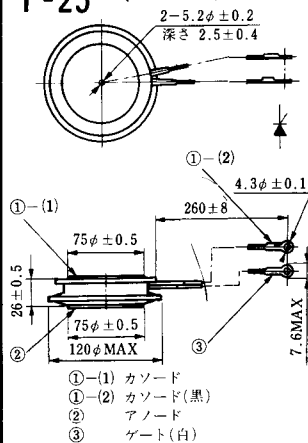
**T-23 (13-78A1A)**



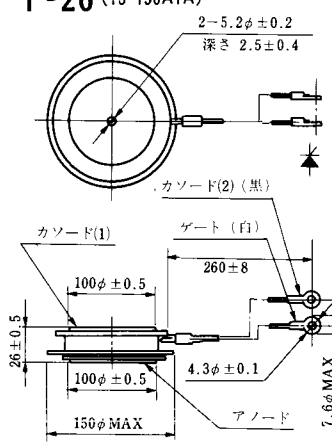
**T-24 (13-100C1A)**



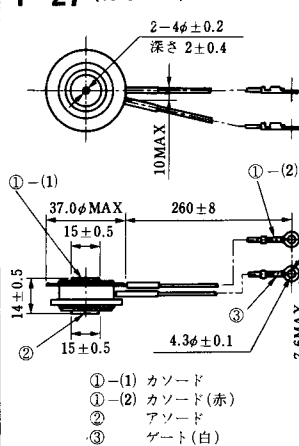
**T-25** (13-120A2A)



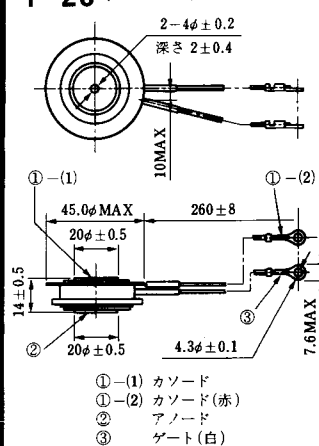
**T-26** (13-150A1A)



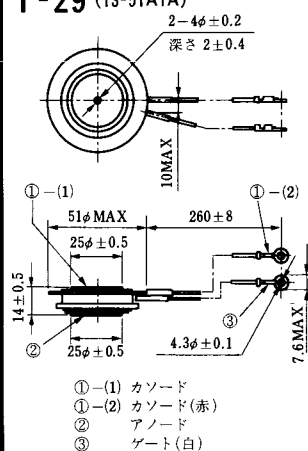
**T-27** (13-37A1A)



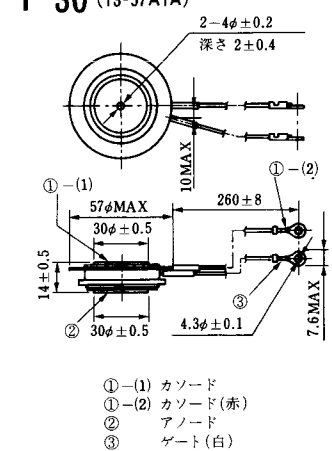
**T-28** (13-45E1A)



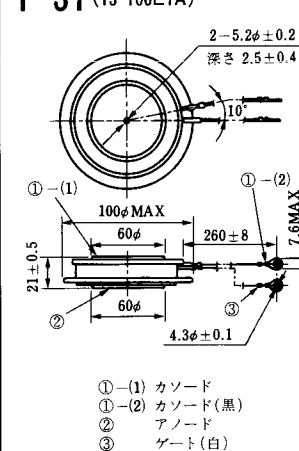
**T-29** (13-51A1A)



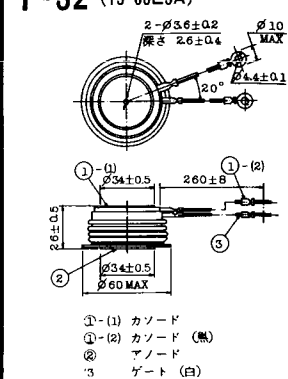
**T-30** (13-57A1A)



**T-31** (13-100E1A)

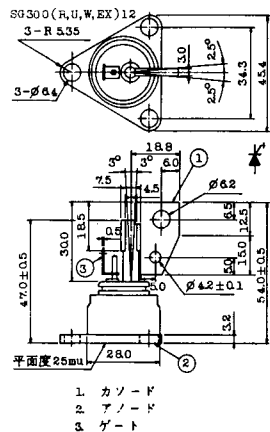


**T-32** (13-60E3A)





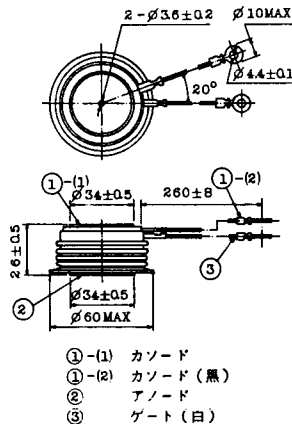
# T-41 (13-28A2A)



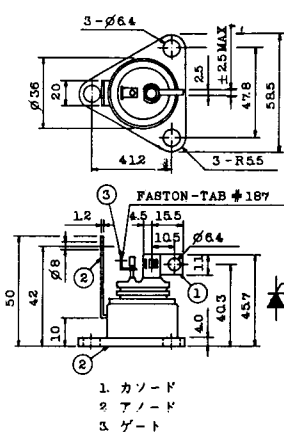
# T-42 (13-45F1A)



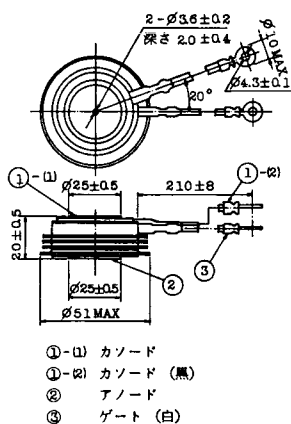
# T-43 (13-60E2A)



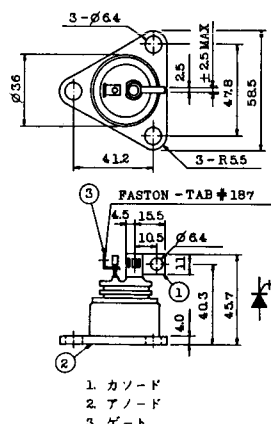
# T-44 (13-36A1A)



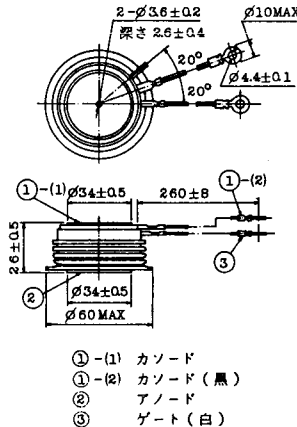
# T-45 (13-51B1A)



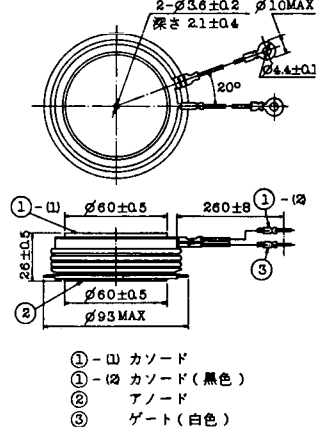
# T-46 (13-36B1A)



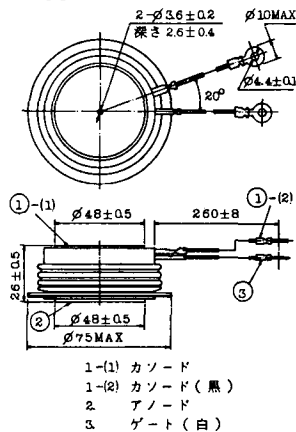
# T-47 (13-60E1A)



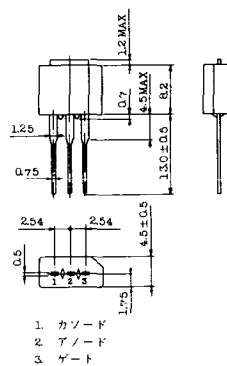
# T-48 (13-93C1A)



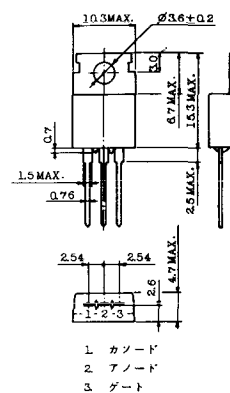
**T-49** (13-75A1A)



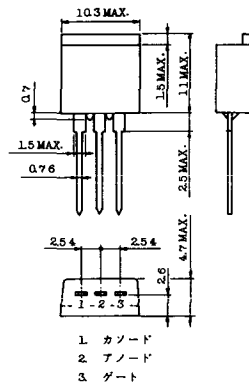
**T-50** (13-10A3A)



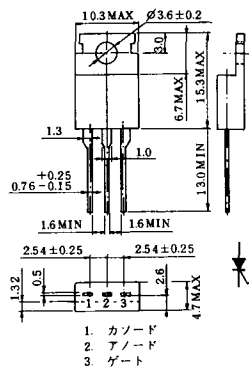
**T-51** (13-10D1A)



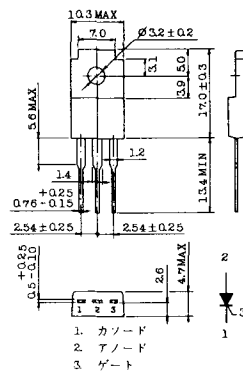
**T-52** (13-10D2A)



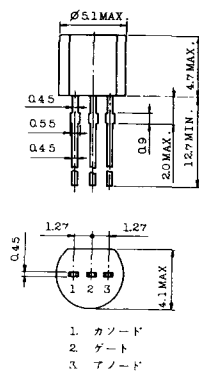
**T-53** (13-10E1B)



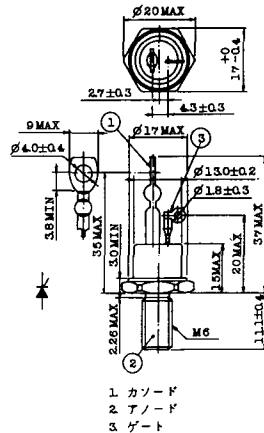
**T-54** (13-10F1B)



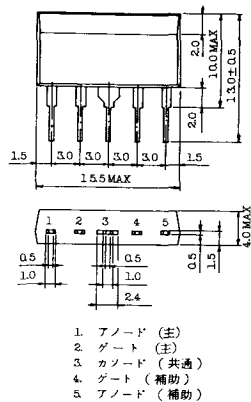
**T-55** (13-5A1D)



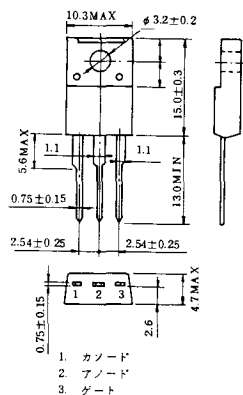
**T-56** (13-13C1A)



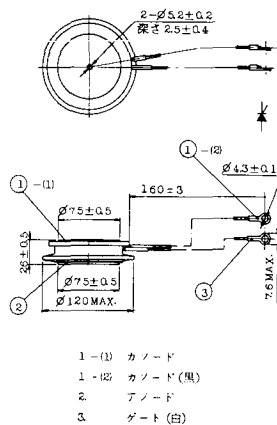
T-57 (12-16C1A)



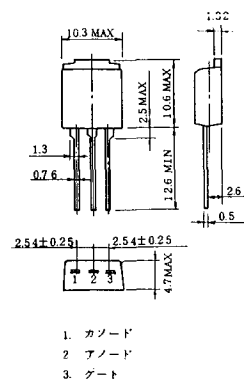
T-58 (13-10H1B)



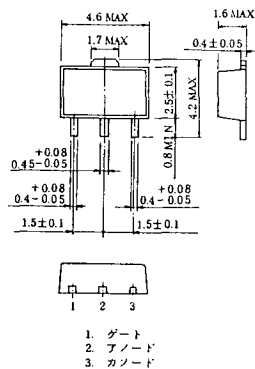
T-59 (13-120A1A)



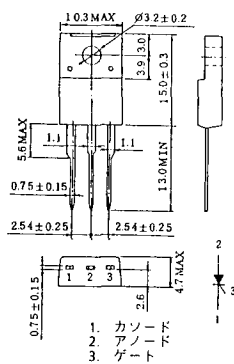
T-60



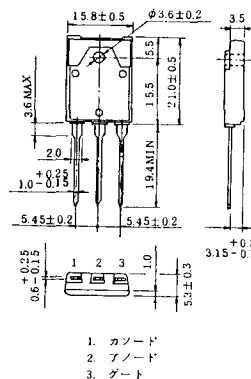
T-61 (13-5B1A)



T-62 (13-10H1A)



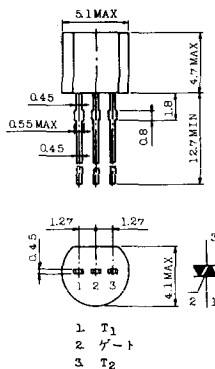
T-63 (13-16A1B)



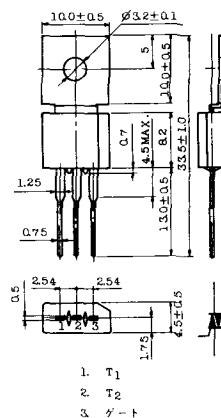
TT-1



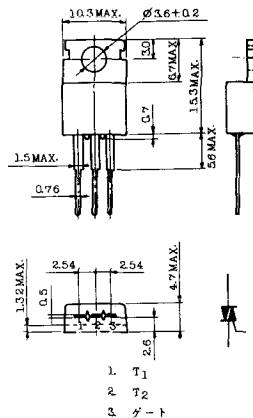
TT-2



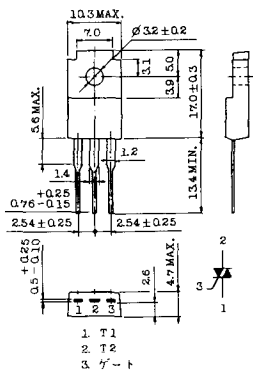
TT-3



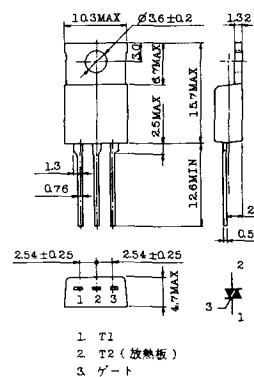
TT-4



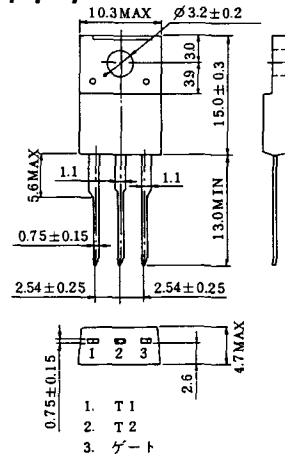
TT-5



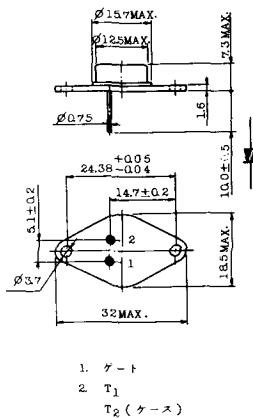
TT-6



TT-7



TT-8

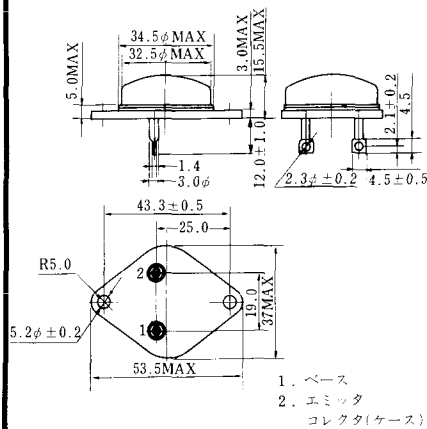




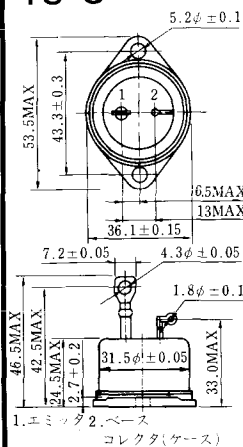
TS-1



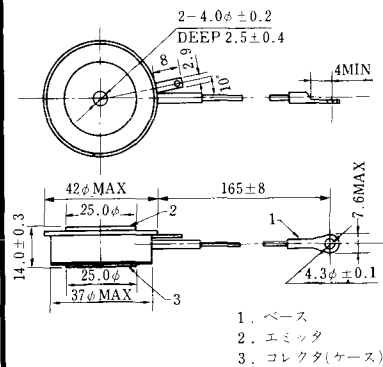
TS-2



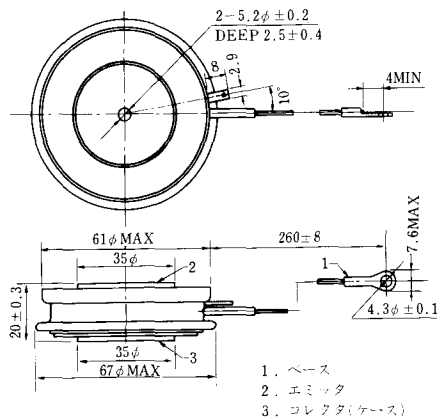
TS-3



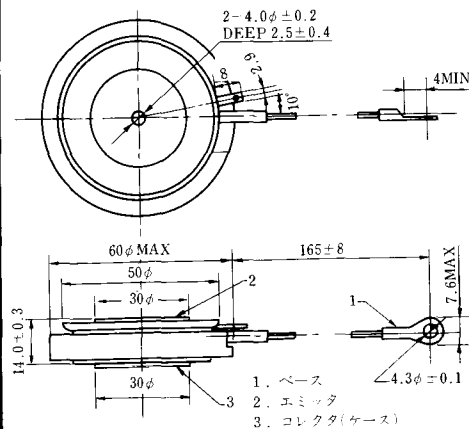
TS-4



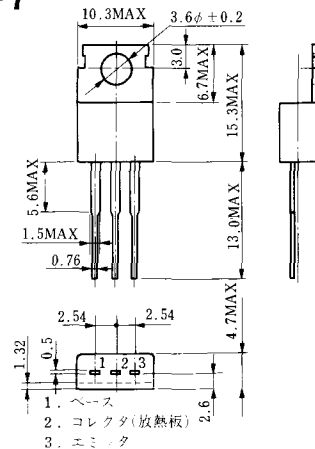
TS-5



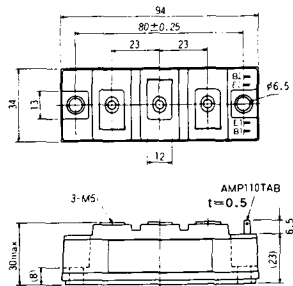
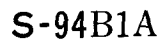
TS-6



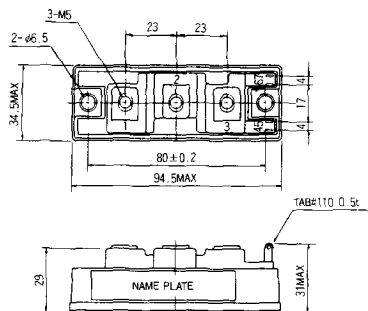
TS-7



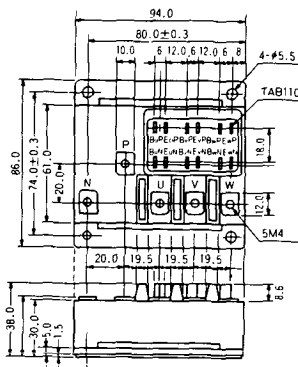




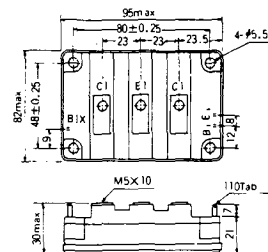
S-94B2A



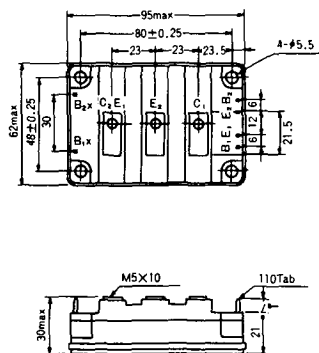
S-94D1A



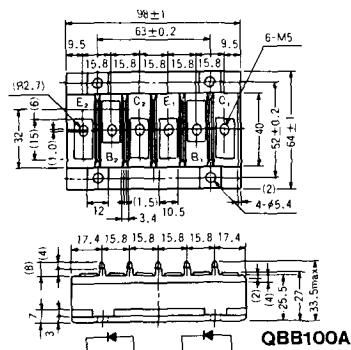
S-95A1A



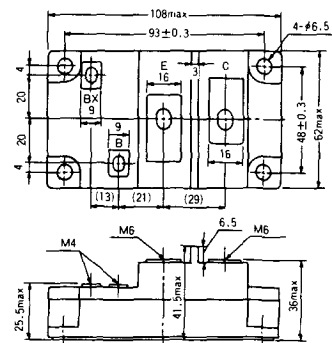
S-95B1A



S-98B1B



S-108A2A



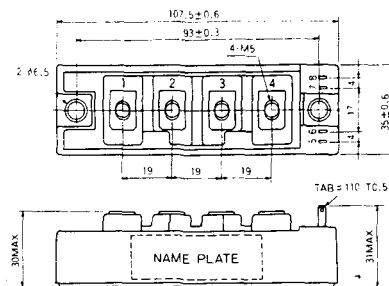
S-108B1A



S-108B1B



S-108B1C



S-108B2A



S-108B2B



2-22B1A



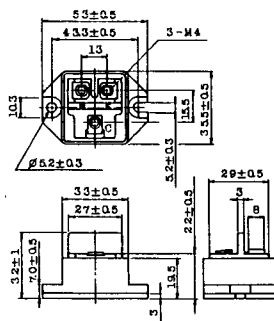
2-27A4A



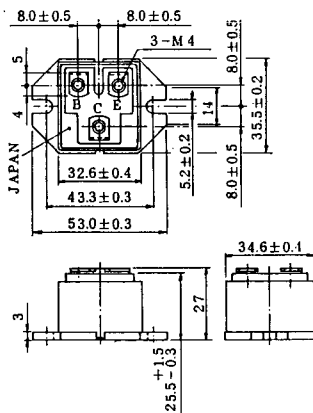
2-33C1A



2-33D1A



2-33F1A



2-37A1A



2-48A3A



2-48A3B



2-48A4A



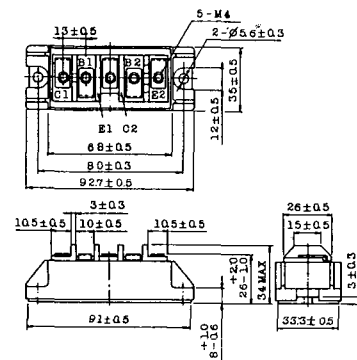
2-64A2A



2-64A2B

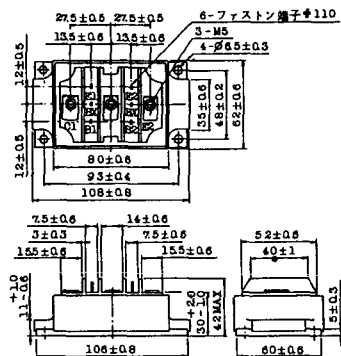


2-68A2A

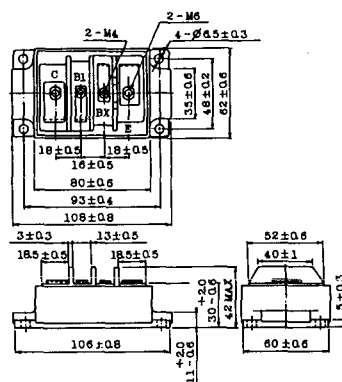




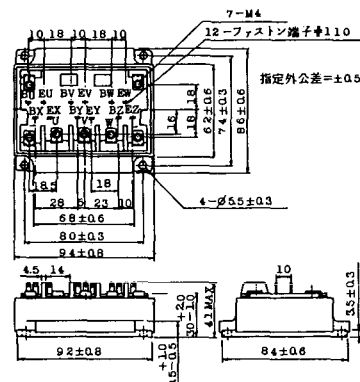
**2-80C1A**



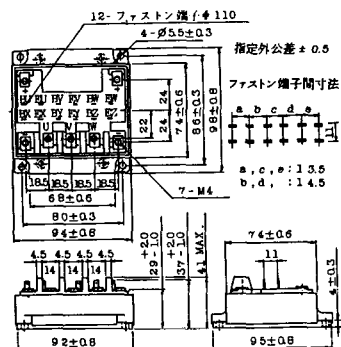
**2-80D2A**



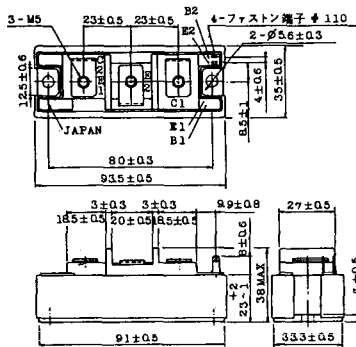
2-94A2A



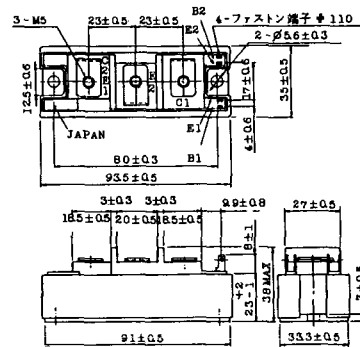
2-94B1A



**2-94C2A**



2-94C3A

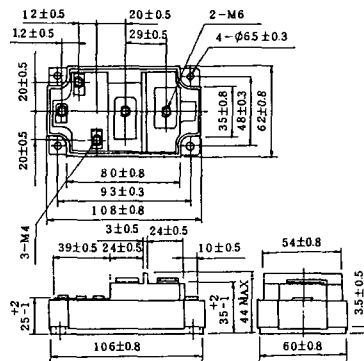




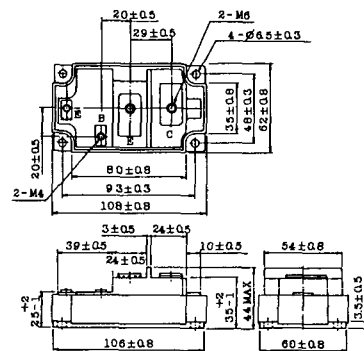
## 2-108B1A



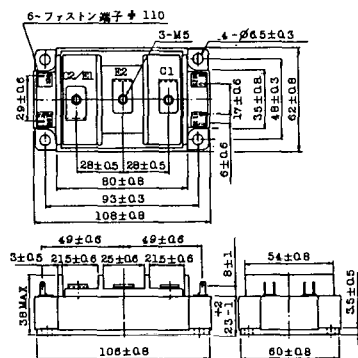
## 2-109A3A



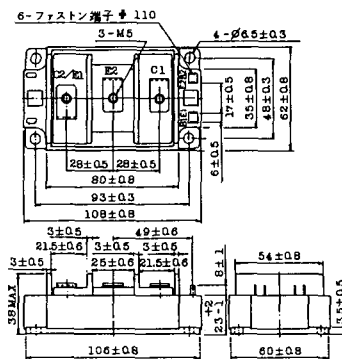
## 2-109A4A



## 2-109B3A



## 2-109B4A



# BBT-II

BBTII  
1D200A-020



# BBT-III

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



# BBT-III

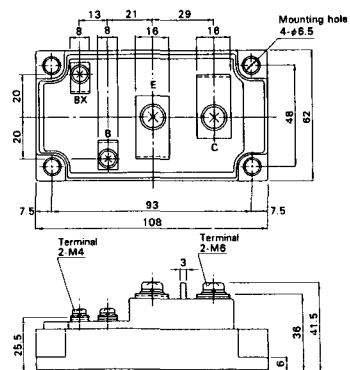
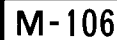
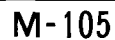
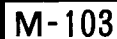
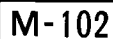
BBTIII  
ETN01-055  
ET1257



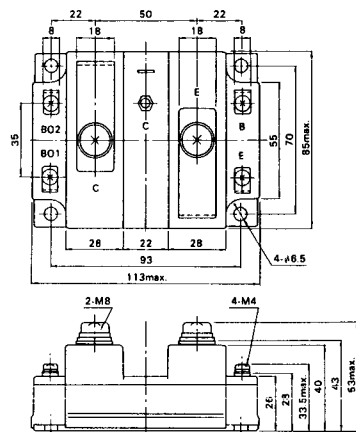
# BBT-IV

BBTIV  
1D500A-030





# M-107



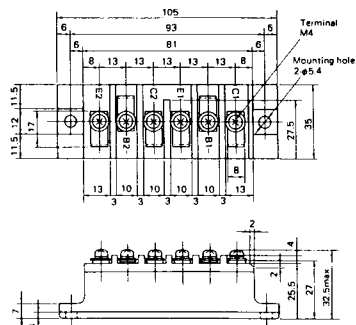
# M-116



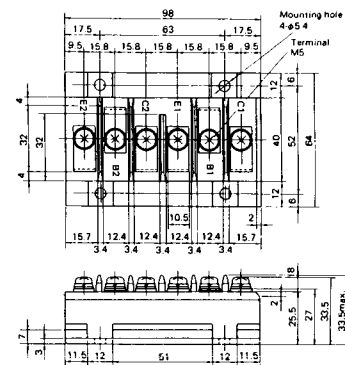
M-201



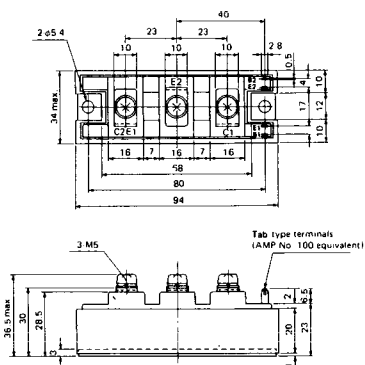
M-202



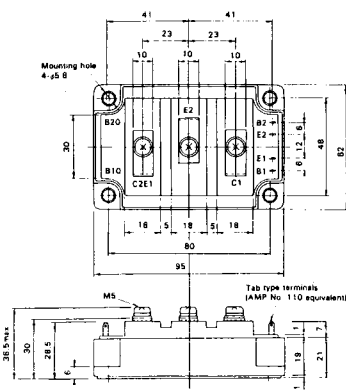
M-203



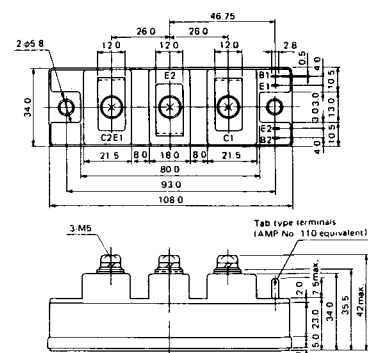
M-204



M-205



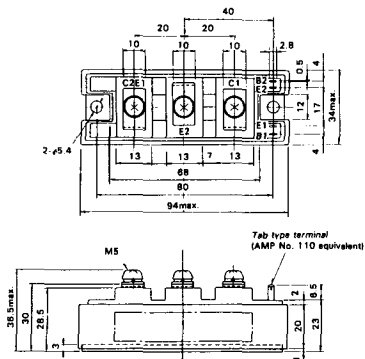
M-206



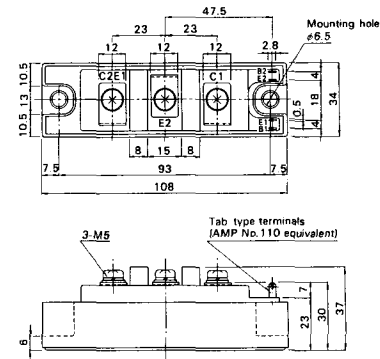
M-207



M-208



M-209



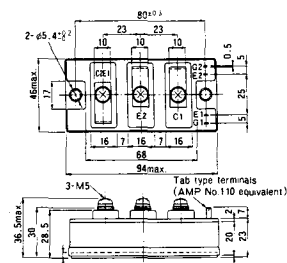
M-210



M-211



M-212



M-213



M-214

M-215



M-216



M-217



M-218





M-601



M-602



M-603



M-604



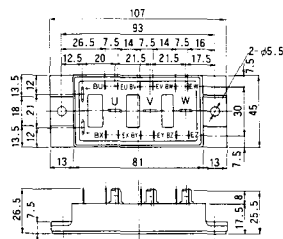
M-605



M-606



M-607



M-608



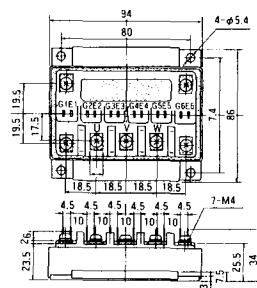
M-609



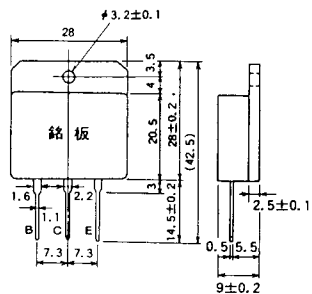
M-610



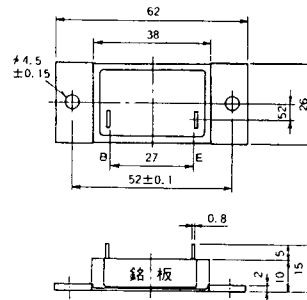
M-616



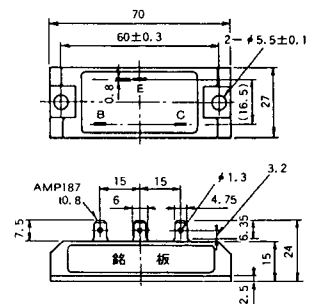
M-1A1A



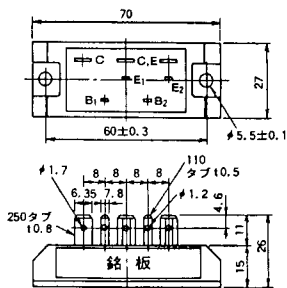
M-2A1A



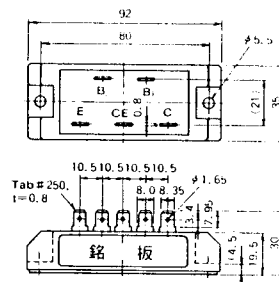
M-2B1A



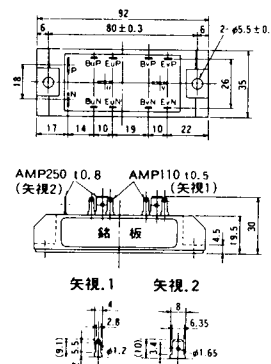
M-2B2A



M-2C2A



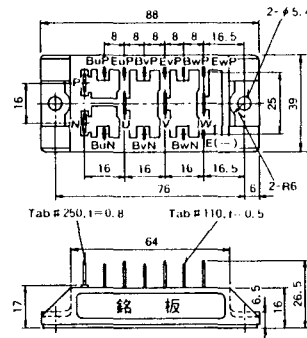
M-2D4A



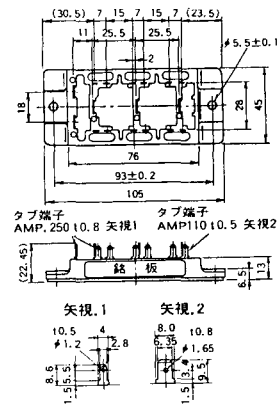
# M-2E6A



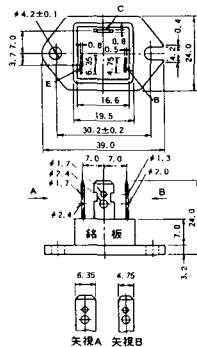
# M-2F6A



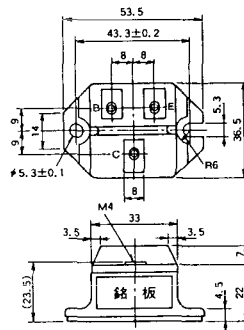
# M-2G6A



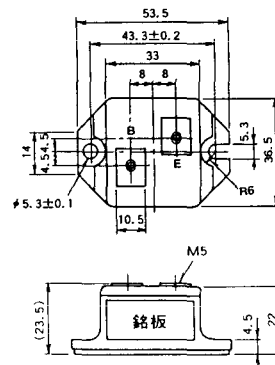
# M-3A1A



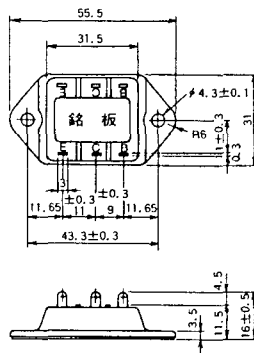
# M-3B1A



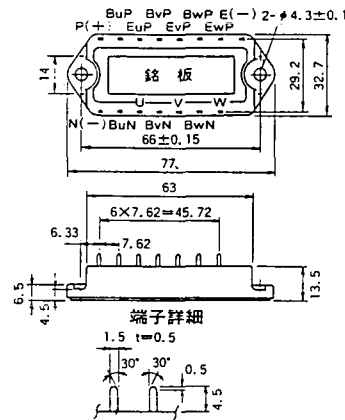
# M-3B1B



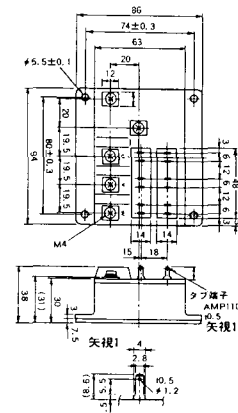
M-3C1A



M-3D6A



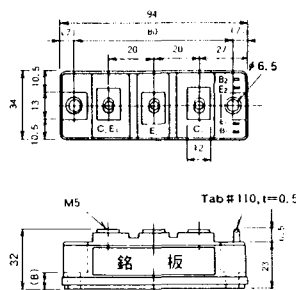
M-3E6A



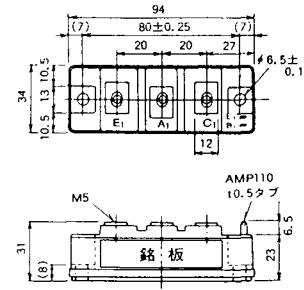
M-4A1A



M-4A2A



M-4A1B



M-4A2B



M-4B2A



M-5A1A



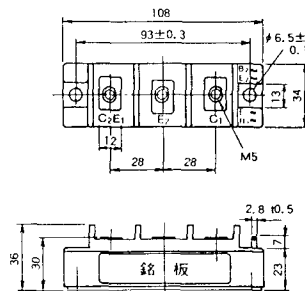
M-5A1B



M-5A2A



M-5B2A



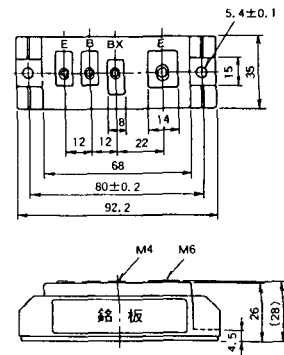
M-5C2A



M-5D2A



M-6A1A



M-7A1A



M-7B1A



M-8A1A



M-8A1B



M-8A2A



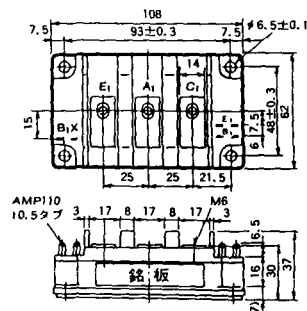
M-8A2B



M-8B2A



M-9A1A



M-9A2A



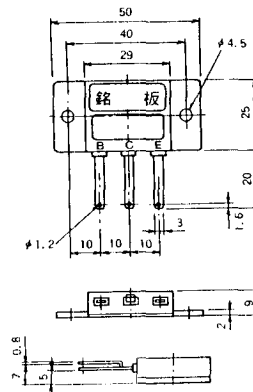
M-9B1A



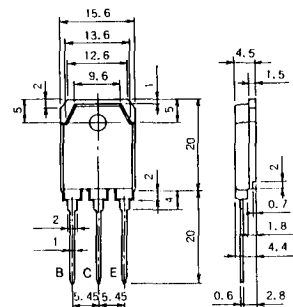
M-9C2A



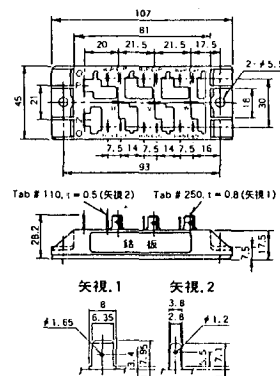
M-1A1B



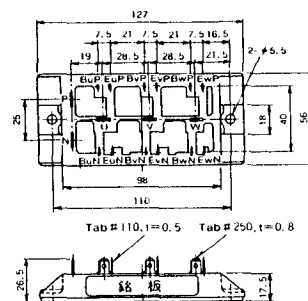
M-1A1C



M-2E6B



M-2E6C







M-4A2D



M-4A2E



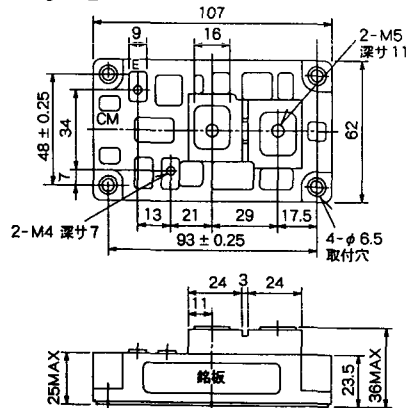
M-4C2A



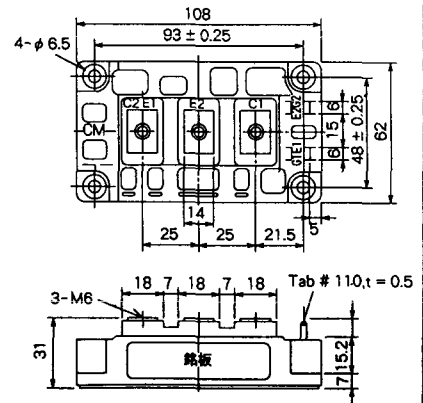
M-4C2B



M-9B1C



M-9D2A



M-9D2B



M-10A2C



H-101



Weight :480g

TERMINALS

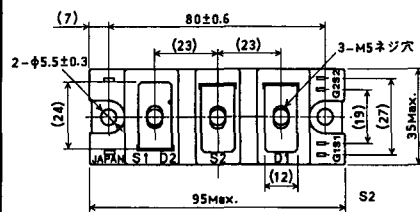
# H-201



# H-202



# LF-J



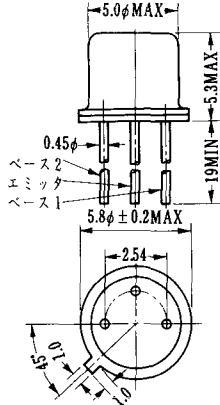
# LF-K



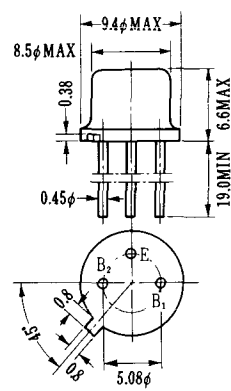
U-1



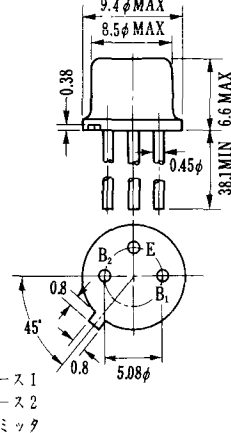
U-2



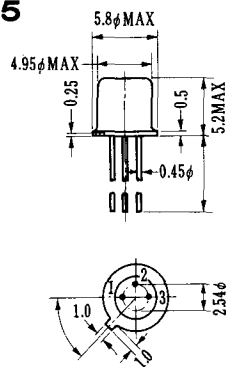
U-3



U-4

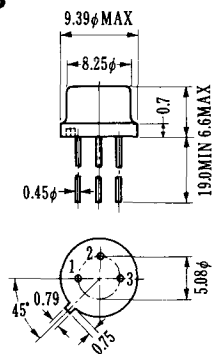


U-5



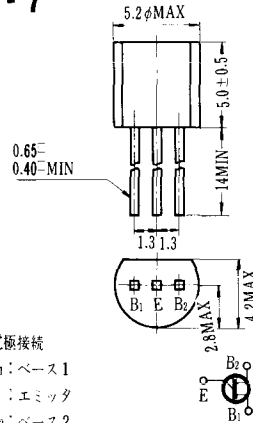
1. BASE1  
2. EMITTER  
3. BASE2 (CASE)

U-6



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

U-7



U-8

