

# S1732

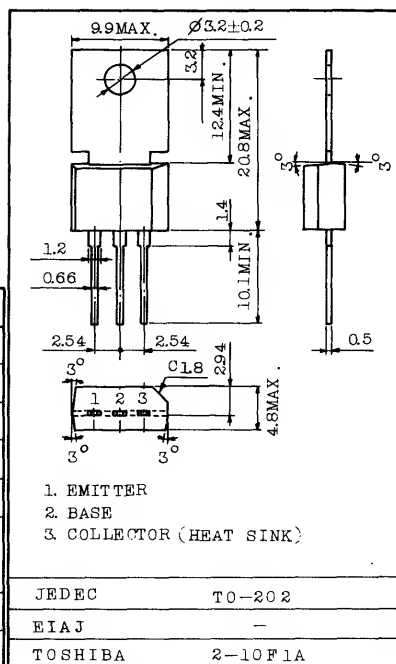
SILICON NPN EPITAXIAL TYPE (PCT PROCESS)

MEDIUM POWER AMPLIFIER APPLICATIONS.  
TV HORIZONTAL DRIVER APPLICATIONS.

Unit in mm

## MAXIMUM RATINGS (Ta=25°C)

| CHARACTERISTIC              | SYMBOL    | RATING                           | UNIT |
|-----------------------------|-----------|----------------------------------|------|
| Collector-Base Voltage      | $V_{CB0}$ | 200                              | V    |
| Collector-Emitter Voltage   | $V_{CE0}$ | 120                              | V    |
| Emitter-Base Voltage        | $V_{EB0}$ | 6                                | V    |
| Collector Current           | $I_C$     | 800                              | mA   |
| Base Current                | $I_B$     | 500                              | mA   |
| Collector Power Dissipation | $P_C$     | $T_a=25^{\circ}\text{C}$<br>1.5  | W    |
|                             |           | $T_c=25^{\circ}\text{C}$<br>6.25 |      |
| Junction Temperature        | $T_j$     | 150                              | °C   |
| Storage Temperature Range   | $T_{stg}$ | -55 ~ 150                        | °C   |



Weight : 1.4g

## ELECTRICAL CHARACTERISTICS (Ta=25°C)

| CHARACTERISTIC                       | SYMBOL        | TEST CONDITION                            | MIN. | TYP. | MAX. | UNIT          |
|--------------------------------------|---------------|-------------------------------------------|------|------|------|---------------|
| Collector Cut-off Current            | $I_{CB0}$     | $V_{CB}=200\text{V}, I_E=0$               | -    | -    | 10   | $\mu\text{A}$ |
| Emitter Cut-off Current              | $I_{EB0}$     | $V_{EB}=6\text{V}, I_C=0$                 | -    | -    | 1    | $\mu\text{A}$ |
| Collector-Emitter Breakdown Voltage  | $V_{(BR)CE0}$ | $I_C=10\text{mA}, I_B=0$                  | 120  | -    | -    | V             |
| DC Current Gain                      | $h_{FE(1)}$   | $V_{CE}=5\text{V}, I_C=100\text{mA}$      | 60   | -    | 250  |               |
|                                      | $h_{FE(2)}$   | $V_{CE}=5\text{V}, I_C=400\text{mA}$      | 40   | -    | -    |               |
| Collector-Emitter Saturation Voltage | $V_{CE(sat)}$ | $I_C=500\text{mA}, I_B=50\text{mA}$       | -    | -    | 1    | V             |
| Base-Emitter Saturation Voltage      | $V_{BE(sat)}$ | $I_C=500\text{mA}, I_B=50\text{mA}$       | -    | -    | 1.5  | V             |
| Transition Frequency                 | $f_T$         | $V_{CE}=5\text{V}, I_E=100\text{mA}$      | 30   | 50   | -    | MHz           |
| Collector Output Capacitance         | $C_{ob}$      | $V_{CB}=10\text{V}, I_E=0, f=1\text{MHz}$ | -    | -    | 30   | pF            |

