

isc Silicon PNP Power Transistors

TIP36C*2

DESCRIPTION

- High Current Capability
- Collector-Emitter Sustaining Voltage-
: $V_{CEO(SUS)} = -100V(\text{Min})$
- Good Linearity of h_{FE}
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

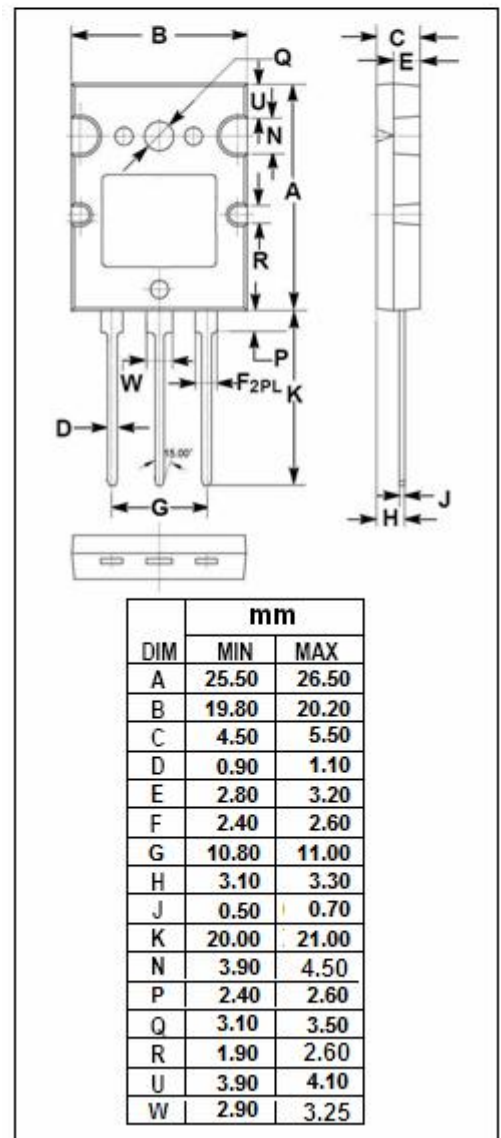
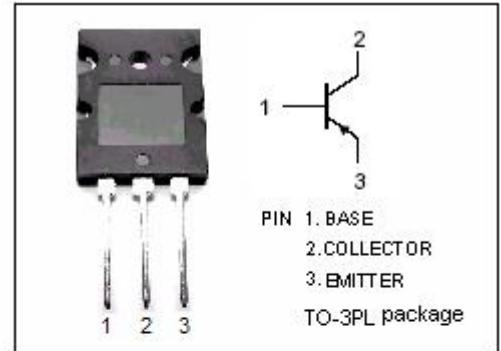
- Designed for use in general purpose power amplifier and switching applications.

ABSOLUTE MAXIMUM RATINGS($T_a=25^\circ\text{C}$)

| SYMBOL | PARAMETER | VALUE | UNIT |
|-----------|---|---------|------------------|
| V_{CBO} | Collector-Base Voltage | -100 | V |
| V_{CEO} | Collector-Emitter Voltage | -100 | V |
| V_{EBO} | Emitter-Base Voltage | -5 | V |
| I_C | Collector Current-Continuous | -40 | A |
| I_{CM} | Collector Current-peak | -50 | A |
| I_B | Base Current | -5 | A |
| P_C | Collector Power Dissipation@ $T_c=25^\circ\text{C}$ | 200 | W |
| T_j | Junction Temperature | 150 | $^\circ\text{C}$ |
| T_{stg} | Storage Temperature Range | -65~150 | $^\circ\text{C}$ |

THERMAL CHARACTERISTICS

| SYMBOL | PARAMETER | MAX | UNIT |
|---------------|--------------------------------------|-----|--------------------|
| $R_{th\ j-c}$ | Thermal Resistance, Junction to Case | 1.0 | $^\circ\text{C/W}$ |



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ELECTRICAL CHARACTERISTICS

 $T_C=25^{\circ}\text{C}$ unless otherwise specified

| SYMBOL | PARAMETER | CONDITIONS | MIN | MAX | UNIT |
|-----------------|--------------------------------------|--|------|------|------|
| $V_{CE(SUS)}$ | Collector-Emitter Sustaining Voltage | $I_C = -30\text{mA}$; $I_B = 0$ | -100 | | V |
| $V_{CE(sat)-1}$ | Collector-Emitter Saturation Voltage | $I_C = -15\text{A}$; $I_B = -1.5\text{A}$ | | -1.0 | V |
| $V_{CE(sat)-2}$ | Collector-Emitter Saturation Voltage | $I_C = -25\text{A}$; $I_B = -5\text{A}$ | | -2.0 | V |
| $V_{BE(on)-1}$ | Base-Emitter On Voltage | $I_C = -15\text{A}$; $V_{CE} = -4\text{V}$ | | -1.5 | V |
| $V_{BE(on)-2}$ | Base-Emitter On Voltage | $I_C = -25\text{A}$; $V_{CE} = -4\text{V}$ | | -2.0 | V |
| I_{CEO} | Collector Cutoff Current | $V_{CE} = -100\text{V}$; $I_B = 0$ | | -0.1 | mA |
| I_{CBO} | Collector Cutoff Current | $V_{CB} = -100\text{V}$; $I_E = 0$ | | -0.1 | mA |
| I_{EBO} | Emitter Cutoff Current | $V_{EB} = -5\text{V}$; $I_C = 0$ | | -0.1 | mA |
| h_{FE-1} | DC Current Gain | $I_C = -1.5\text{A}$; $V_{CE} = -4\text{V}$ | 60 | 200 | |
| h_{FE-2} | DC Current Gain | $I_C = -15\text{A}$; $V_{CE} = -4\text{V}$ | 30 | | |
| h_{FE-3} | DC Current Gain | $I_C = -25\text{A}$; $V_{CE} = -4\text{V}$ | 15 | | |
| f_T | Current-Gain—Bandwidth Product | $I_C = -0.5\text{A}$; $V_{CE} = -10\text{V}$; $f_{test} = 1.0\text{MHz}$ | 10 | | MHz |

NOTICE:

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