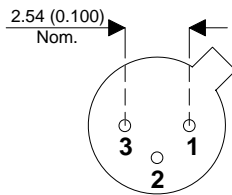
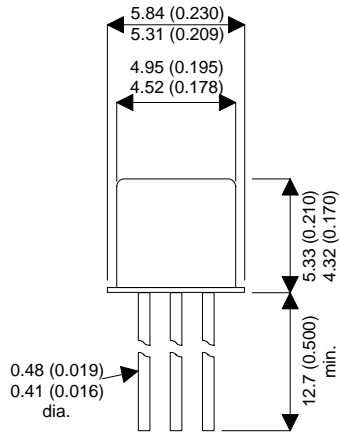


MECHANICAL DATA

Dimensions in mm (inches)



TO-18 METAL PACKAGE

Underside View

PIN 1 – Emitter PIN 2 – Base PIN 3 – Collector

ABSOLUTE MAXIMUM RATINGS ($T_{case} = 25^{\circ}C$ unless otherwise stated)

| | | |
|-----------------|--|--------------|
| V_{CBO} | Collector – Base Voltage | -150V |
| V_{CEO} | Collector – Emitter Voltage ($I_B = 0$) | -150V |
| V_{EBO} | Emitter – Base Voltage ($I_B = 0$) | -6V |
| I_C | Collector Current | 0.1A |
| P_D | Total Device Dissipation $T_A = 25^{\circ}C$ | 0.4W |
| P_D | Total Device Dissipation $T_C = 25^{\circ}C$ | 1.4W |
| T_{stg} | Storage Temperature | -55 to 200°C |
| T_J | Max Operating Junction Temperature | 200°C |
| $R_{\theta JA}$ | Thermal Resistance Junction to Ambient | 438°C/W |
| $R_{\theta JC}$ | Thermal Resistance Junction to Case | 125°C/W |

PNP SILICON TRANSISTOR

FEATURES

- PNP High Voltage Planar Transistor
- Hermetic TO18 Package
- Full Screening Options Available

Semelab Plc reserves the right to change test conditions, parameter limits and package dimensions without notice. Information furnished by Semelab is believed to be both accurate and reliable at the time of going to press. However Semelab assumes no responsibility for any errors or omissions discovered in its use. Semelab encourages customers to verify that datasheets are current before placing orders.

ELECTRICAL CHARACTERISTICS Continued ($T_A = 25^\circ\text{C}$ unless otherwise stated)

| Parameter | Test Conditions | Min. | Typ. | Max. | Unit. |
|--|---|------|-------|------|---------------|
| $V_{(BR)CBO}$ Collector - Base Breakdown Voltage (1) | $I_C = -10\mu\text{A}$, $I_E = 0$ | -150 | | | V |
| $V_{(BR)CEO}$ Collector - Emitter Breakdown Voltage (1) | $I_C = -2\text{mA}$, $I_B = 0$ | -150 | | | V |
| I_{CBO} Collector Cut Off Current | $V_{CB} = -100\text{V}$, $I_E = 0$ | | -0.2 | -10 | nA |
| | $V_{CB} = -100\text{V}$, $I_E = 0$ $T_A = 125^\circ\text{C}$ | | -0.03 | -10 | μA |
| $V_{(BR)EBO}$ Emitter - Base Breakdown Voltage (1) | $I_E = -10\mu\text{A}$, $I_C = 0$ | -6 | | | V |
| $V_{CE(sat)}$ Collector - Emitter Saturation Voltage (1) | $I_C = -10\text{mA}$, $I_B = -1\text{mA}$ | | -0.1 | -0.5 | V |
| $V_{BE(sat)}$ Base - Emitter Saturation Voltage (1) | $I_C = -10\text{mA}$, $I_B = -1\text{mA}$ | | -0.74 | -0.9 | V |
| h_{FE} DC Current Gain (1) | $I_C = -1\text{mA}$, $V_{CE} = -10\text{V}$ | 40 | 85 | | |
| | $I_C = -10\text{mA}$, $V_{CE} = -10\text{V}$ | 40 | 100 | | |
| | $I_C = -10\mu\text{A}$, $V_{CE} = -10\text{V}$ $T_A = -55^\circ\text{C}$ | | 30 | | |
| f_T Current Gain - Bandwidth Product | $I_C = -1\text{mA}$, $V_{CE} = -10\text{V}$, $f = 20\text{MHz}$ | | 50 | | MHz |
| | $I_C = -10\text{mA}$ | 60 | | | |
| C_{EBO} Emitter- Base Capacitance | $V_{EB} = -0.5\text{V}$, $I_E = 0$, $f = 1\text{MHz}$ | | 20 | 25 | pF |
| C_{CBO} Collector- Base Capacitance | $V_{CB} = -5\text{V}$, $I_E = 0$, $f = 1\text{MHz}$ | | 5 | 7 | pF |

(1) Pulse test : Pulse Width < 300 μs ,Duty Cycle < 2%