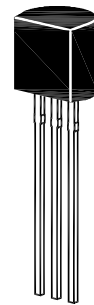


BC212

PNP Silicon Epitaxial Planar Transistor

for general purpose amplifier



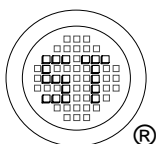
1. Emitter 2. Collector 3. Base
TO-92 Plastic Package

Absolute Maximum Ratings ($T_a = 25\text{ }^\circ\text{C}$)

| Parameter | Symbol | Value | Unit |
|---------------------------|------------|---------------|------------------|
| Collector Base Voltage | $-V_{CBO}$ | 60 | V |
| Collector Emitter Voltage | $-V_{CEO}$ | 50 | V |
| Emitter Base Voltage | $-V_{EBO}$ | 5 | V |
| Collector Current | $-I_C$ | 300 | mA |
| Total Power Dissipation | P_{tot} | 625 | mW |
| Junction Temperature | T_j | 150 | $^\circ\text{C}$ |
| Storage Temperature Range | T_s | - 55 to + 150 | $^\circ\text{C}$ |

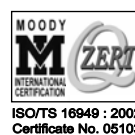
Characteristics at $T_a = 25\text{ }^\circ\text{C}$

| Parameter | Symbol | Min. | Max. | Unit |
|---|----------------------|----------|----------|--------|
| DC Current Gain at $-V_{CE} = 5\text{ V}$, $-I_C = 10\text{ }\mu\text{A}$ at $-V_{CE} = 5\text{ V}$, $-I_C = 2\text{ mA}$ | h_{FE} h_{FE} | 40 60 | - 300 | - - |
| Collector Base Cutoff Current at $-V_{CB} = 30\text{ V}$ | $-I_{CBO}$ | - | 15 | nA |
| Emitter Base Cutoff Current at $-V_{EB} = 4\text{ V}$ | $-I_{EBO}$ | - | 15 | nA |
| Collector Base Breakdown Voltage at $-I_C = 10\text{ }\mu\text{A}$ | $-V_{(BR)CBO}$ | 60 | - | V |
| Collector Emitter Breakdown Voltage at $-I_C = 2\text{ mA}$ | $-V_{(BR)CEO}$ | 50 | - | V |
| Emitter Base Breakdown Voltage at $-I_E = 10\text{ }\mu\text{A}$ | $-V_{(BR)EBO}$ | 5 | - | V |
| Collector Emitter Saturation Voltage at $-I_C = 100\text{ mA}$, $-I_B = 5\text{ mA}$ | $-V_{CE(sat)}$ | - | 0.6 | V |
| Base Emitter Saturation Voltage at $-I_C = 100\text{ mA}$, $-I_B = 5\text{ mA}$ | $-V_{BE(sat)}$ | - | 1.1 | V |
| Base Emitter On Voltage at $-V_{CE} = 5\text{ V}$, $-I_C = 2\text{ mA}$ | $-V_{BE(on)}$ | 0.6 | 0.72 | V |
| Gain Bandwidth Product at $-V_{CE} = 5\text{ V}$, $-I_C = 10\text{ mA}$, $f = 100\text{ MHz}$ | f_T | 200 | - | MHz |
| Output Capacitance at $-V_{CB} = 10\text{ V}$, $f = 1\text{ MHz}$ | C_{CBO} | - | 10 | pF |



SEMTECH ELECTRONICS LTD.

(Subsidiary of Sino-Tech International Holdings Limited, a company
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ISO/TS 16949 : 2002
Certificate No. 05103



ISO 14001:2004
Certificate No. 7116



ISO 9001:2000
Certificate No. 0506098

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