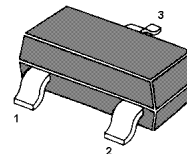


MMBTSA1504

PNP Silicon Epitaxial Planar Transistor

For switching and general purpose applications.

The transistor is subdivided into three groups O, Y and G, according to its DC current gain.



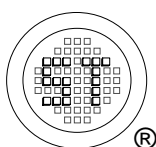
1. Base 2. Emitter 3. Collector
SOT-23 Plastic Package

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

| Parameter | Symbol | Value | Unit |
|---------------------------|------------|---------------|------------------|
| Collector Base Voltage | $-V_{CB0}$ | 50 | V |
| Collector Emitter Voltage | $-V_{CEO}$ | 50 | V |
| Emitter Base Voltage | $-V_{EBO}$ | 5 | V |
| Collector Current | $-I_C$ | 150 | mA |
| Base Current | $-I_B$ | 30 | mA |
| Power Dissipation | P_{tot} | 200 | mW |
| Junction Temperature | T_j | 150 | $^\circ\text{C}$ |
| Storage Temperature Range | T_{stg} | - 55 to + 150 | $^\circ\text{C}$ |

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

| Parameter | Symbol | Min. | Max. | Unit |
|---|----------------|------|------|------|
| DC Current Gain at $-V_{CE} = 6\text{ V}$, $-I_C = 2\text{ mA}$ Current Gain Group | O | 70 | 140 | - |
| | Y | 120 | 240 | - |
| | G | 200 | 400 | - |
| Collector Base Cutoff Current at $-V_{CB} = 50\text{ V}$ | $-I_{CBO}$ | - | 100 | nA |
| Emitter Base Cutoff Current at $-V_{EB} = 5\text{ V}$ | $-I_{EBO}$ | - | 100 | nA |
| Collector Emitter Saturation Voltage at $-I_C = 100\text{ mA}$, $-I_B = 10\text{ mA}$ | $-V_{CE(sat)}$ | - | 0.3 | V |
| Transition Frequency at $-V_{CE} = 10\text{ V}$, $-I_C = 1\text{ mA}$ | f_T | 80 | - | MHz |
| Collector Output Capacitance at $-V_{CB} = 10\text{ V}$, $f = 1\text{ MHz}$ | C_{ob} | - | 7 | pF |

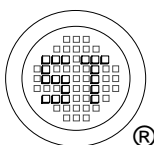
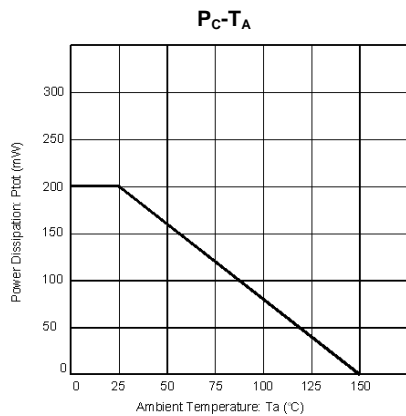
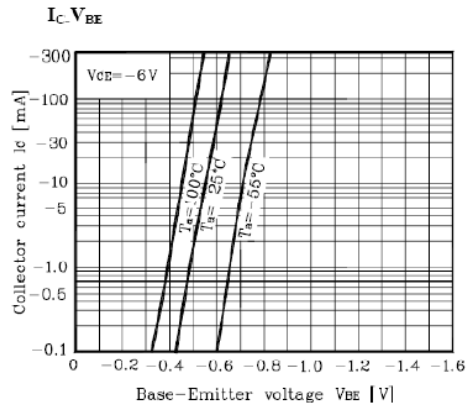
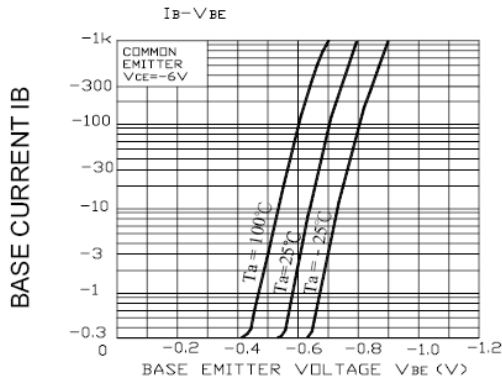
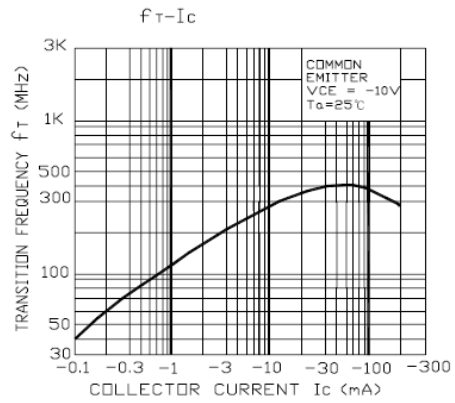
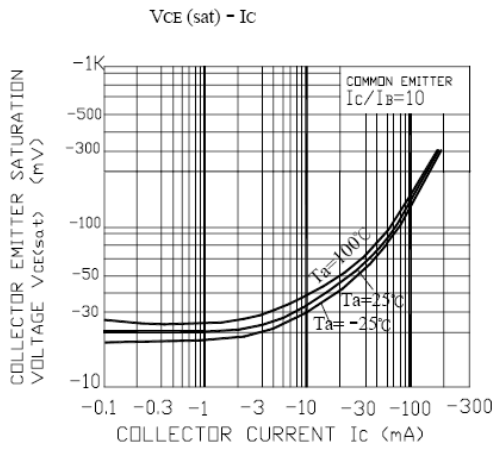
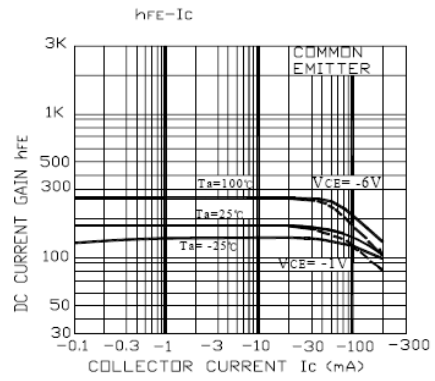
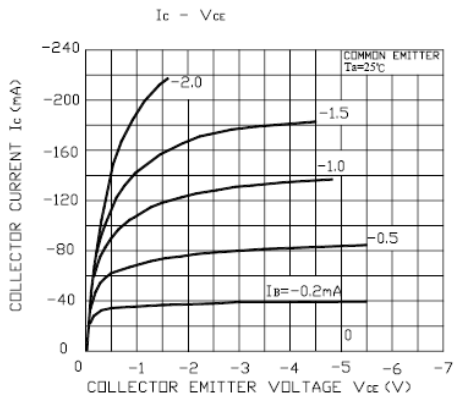


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Dated: 11/08/2012 Rev: 02

MMBTA1504



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