

FEATURES

High voltage transistor

MMBTA92 (PNP)
MARKING: 2D
MAXIMUM RATINGS (TA=25°C unless otherwise noted)

| Parameter | Symbol | Value | Unit |
|---|-----------|-------------|-------|
| Collector-Base Voltage | V_{CBO} | 300 | V |
| Collector-Emitter Voltage | V_{CEO} | 300 | V |
| Emitter-Base Voltage | V_{EBO} | 5 | V |
| Collector Current -Continuous | I_C | 500 | mA |
| Collector Power Dissipation | P_C | 0.3 | W |
| Junction Temperature | T_J | 150 | °C |
| Storage Temperature | T_{stg} | -55 to +150 | °C |
| Thermal Resistance, junction to Ambient | R_{JA} | 410 | °C/mW |


ELECTRICAL CHARACTERISTICS (Tamb=25°C unless otherwise specified)

| Parameter | Symbol | Test conditions | Min | Max | Unit |
|--------------------------------------|---------------|---|------|-------|---------|
| Collector-base breakdown voltage | V_{CBO} | $I_C = -100\mu A, I_E = 0$ | -300 | | V |
| Collector-emitter breakdown voltage | V_{CEO} | $I_C = -1mA, I_B = 0$ | -300 | | V |
| Emitter-base breakdown voltage | V_{EBO} | $I_E = -100\mu A, I_C = 0$ | -5 | | V |
| Collector cut-off current | I_{CB} | $V_{CB} = -200V, I_E = 0$ | | -0.25 | μA |
| Emitter cut-off current | I_{EB} | $V_{EB} = -5V, I_C = 0$ | | -0.1 | μA |
| DC current gain | $h_{FE(1)}$ | $V_{CE} = -10V, I_C = -1mA$ | 60 | | |
| | $h_{FE(2)}$ | $V_{CE} = -10V, I_C = -10mA$ | 100 | 200 | |
| | $h_{FE(3)}$ | $V_{CE} = -10V, I_C = -30mA$ | 60 | | |
| Collector-emitter saturation voltage | $V_{CE(sat)}$ | $I_C = -20mA, I_B = -2mA$ | | -0.2 | V |
| Base-emitter saturation voltage | $V_{BE(sat)}$ | $I_C = -20mA, I_B = -2mA$ | | -0.9 | V |
| Transition frequency | f_T | $V_{CE} = -20V, I_C = -10mA$ $f = 30MHz$ | 50 | | MHz |

MMBTA92 Typical Characteristics

