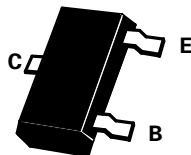


SOT23 PNP SILICON PLANAR HIGH VOLTAGE TRANSISTOR

ISSUE 3 – MARCH 1996

FMMT576

PARTMARKING DETAILS – 576



ABSOLUTE MAXIMUM RATINGS.

| PARAMETER | SYMBOL | VALUE | UNIT |
|--|----------------|-------------|-------------|
| Collector-Base Voltage | V_{CBO} | -200 | V |
| Collector-Emitter Voltage | V_{CEO} | -200 | V |
| Emitter-Base Voltage | V_{EBO} | -5 | V |
| Peak Pulse Current | I_{CM} | -2 | A |
| Continuous Collector Current | I_C | -1 | A |
| Base Current | I_B | -200 | mA |
| Power Dissipation at $T_{amb}=25^{\circ}C$ | P_{tot} | 500 | mW |
| Operating and Storage Temperature Range | $T_j; T_{stg}$ | -55 to +150 | $^{\circ}C$ |

ELECTRICAL CHARACTERISTICS (at $T_{amb} = 25^{\circ}C$).

| PARAMETER | SYMBOL | MIN. | TYP. | MAX. | UNIT | CONDITIONS. |
|---------------------------------------|---------------|----------|------|------|------|---|
| Collector-Base Breakdown Voltage | $V_{(BR)CBO}$ | -200 | | | V | $I_C = -100\mu A$ |
| Collector-Emitter Breakdown Voltage | $V_{(BR)CEO}$ | -200 | | | V | $I_C = -10mA^*$ |
| Emitter-Base Breakdown Voltage | $V_{(BR)EBO}$ | -5 | | | V | $I_E = -100\mu A$ |
| Collector Cut-Off Current | I_{CBO} | | | -100 | nA | $V_{CB} = -160V$ |
| Emitter Cut-Off Current | I_{EBO} | | | -100 | nA | $V_{EB} = -4V$ |
| Collector-Emitter Saturation Voltage | $V_{CE(sat)}$ | | | -0.3 | V | $I_C = -100mA, I_B = -10mA^*$ |
| Base-Emitter Saturation Voltage | $V_{BE(sat)}$ | | | -1 | V | $I_C = -100mA, I_B = -10mA^*$ |
| Base-Emitter Turn-on Voltage | $V_{BE(on)}$ | | | -1 | V | $I_C = -100mA, V_{CE} = -10V^*$ |
| Static Forward Current Transfer Ratio | h_{FE} | 50 50 | | 300 | | $I_C = -10mA, V_{CE} = -10V^*$ $I_C = -300mA, V_{CE} = -10V^*$ |
| Transition Frequency | f_T | 100 | | | MHz | $I_C = -50mA, V_{CE} = -10V$ $f = 100MHz$ |
| Output Capacitance | C_{obo} | | | 10 | pF | $V_{CB} = -10V, f = 1MHz$ |

*Measured under pulsed conditions. Pulse width=300 μs . Duty cycle $\leq 2\%$
For typical characteristics graphs see FMMT596 datasheet.