

SOT23 PNP SILICON PLANAR MEDIUM POWER TRANSISTORS

FMMTA56

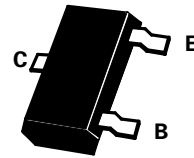
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FEATURES

* Gain of 50 at $I_C=100\text{mA}$

PARTMARKING DETAIL - FMMTA56 - 2G
FMMTA56R - MB



SOT23

ABSOLUTE MAXIMUM RATINGS.

| PARAMETER | SYMBOL | FMMTA56 | UNIT |
|---|----------------|-------------|------------------|
| Collector-Base Voltage | V_{CBO} | -80 | V |
| Collector-Emitter Voltage | V_{CEO} | -80 | V |
| Emitter-Base Voltage | V_{EBO} | -4 | V |
| Continuous Collector Current | I_C | -500 | mA |
| Power Dissipation at $T_{amb}=25^\circ\text{C}$ | P_{tot} | 330 | mW |
| Operating and Storage Temperature Range | $T_j; T_{stg}$ | -55 to +150 | $^\circ\text{C}$ |

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

| PARAMETER | SYMBOL | FMMTA56 | | UNIT | CONDITIONS. |
|---------------------------------------|---------------|----------|-------|---------------|---|
| | | MIN. | MAX. | | |
| Collector-Emitter Breakdown Voltage | $V_{(BR)CEO}$ | -80 | | V | $I_C=-1\text{mA}, I_B=0^*$ |
| Emitter-Base Breakdown Voltage | $V_{(BR)EBO}$ | -4 | | V | $I_E=-100\mu\text{A}, I_C=0$ |
| Collector-Emitter Cut-Off Current | I_{CES} | | -0.1 | μA | $V_{CE}=-60\text{V}$ |
| Collector-Base Cut-Off Current | I_{CBO} | | -0.1 | μA | $V_{CB}=-80\text{V}, I_E=0$ $V_{CB}=-60\text{V}, I_E=0$ |
| Static Forward Current Transfer Ratio | h_{FE} | 50 50 | | | $I_C=-10\text{mA}, V_{CE}=1\text{V}^*$ $I_C=-100\text{mA}, V_{CE}=1\text{V}^*$ |
| Collector-Emitter Saturation Voltage | $V_{CE(sat)}$ | | -0.25 | V | $I_C=-100\text{mA}, I_B=-10\text{mA}^*$ |
| Base-Emitter Turn-On Voltage | $V_{BE(on)}$ | | -1.2 | V | $I_C=-100\text{mA}, V_{CE}=-1\text{V}^*$ |
| Transition Frequency | f_T | 100 | | MHz | $I_C=-10\text{mA}, V_{CE}=-2\text{V}$ $f=100\text{MHz}$ |

*Measured under pulsed conditions. Pulse width=300 μs . Duty cycle $\leq 2\%$

