

SOT23 PNP SILICON PLANAR MEDIUM POWER TRANSISTOR

FM551

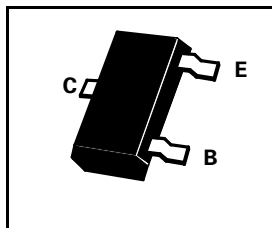
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FEATURES

- * 60 Volt V_{CE0}
- * 1 Amp continuous current

COMPLEMENTARY TYPE – FM551

PARTMARKING DETAIL – 551



ABSOLUTE MAXIMUM RATINGS.

| PARAMETER | SYMBOL | VALUE | UNIT |
|--|----------------|-------------|-------------|
| Collector-Base Voltage | V_{CBO} | -80 | V |
| Collector-Emitter Voltage | V_{CEO} | -60 | 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 +200 | $^{\circ}C$ |

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

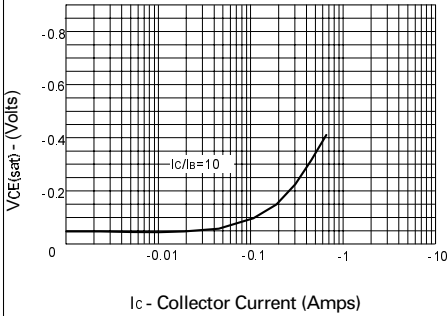
| PARAMETER | SYMBOL | MIN. | MAX. | UNIT | CONDITIONS. |
|---------------------------------------|----------------|----------|-------|---------|---|
| Collector-Base Breakdown Voltage | $V_{(BR)CBO}$ | -80 | | V | $I_C = -100\mu A$ |
| Collector-Emitter Sustaining Voltage | $V_{CEO(sus)}$ | -60 | | V | $I_C = -10mA^*$ |
| Emitter-Base Breakdown Voltage | $V_{(BR)EBO}$ | -5 | | V | $I_E = -100\mu A$ |
| Collector Cut-Off Current | I_{CBO} | | -0.1 | μA | $V_{CB} = -60V$ |
| Emitter Cut-Off Current | I_{EBO} | | -0.1 | μA | $V_{EB} = -4V$ |
| Collector-Emitter Saturation Voltage | $V_{CE(sat)}$ | | -0.35 | V | $I_C = -150mA, I_B = -15mA^*$ |
| Base-Emitter Saturation Voltage | $V_{BE(sat)}$ | | -1.1 | V | $I_C = -150mA, I_B = -15mA^*$ |
| Static Forward Current Transfer Ratio | h_{FE} | 50 10 | 150 | | $I_C = -150mA, V_{CE} = -10V^*$ $I_C = -1A, V_{CE} = -10V^*$ |
| Transition Frequency | f_T | 150 | | MHz | $I_C = -50mA, V_{CE} = -10V$ $f = 100MHz$ |
| Output Capacitance | C_{obo} | | 25 | pF | $V_{CB} = -10V, f = 1MHz$ |

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

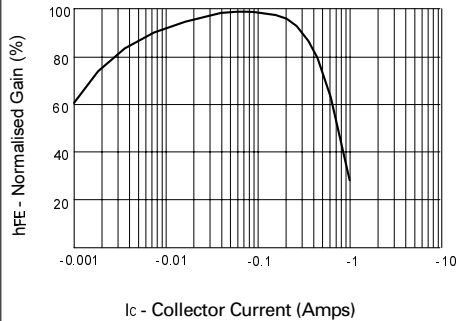
Spice parameter data is available upon request for this device

FMMT551

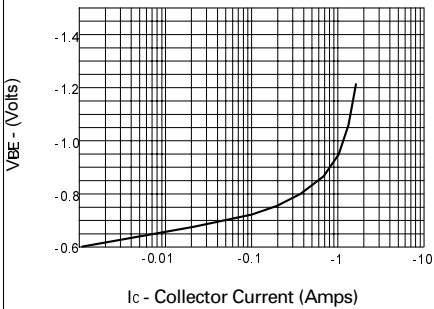
TYPICAL CHARACTERISTICS



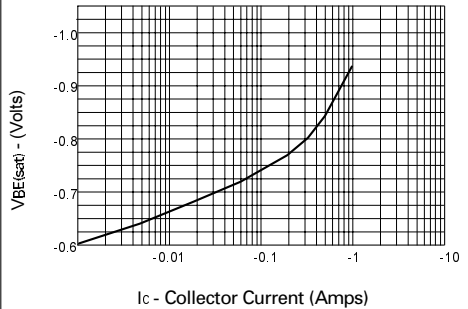
VCE(sat) v IC



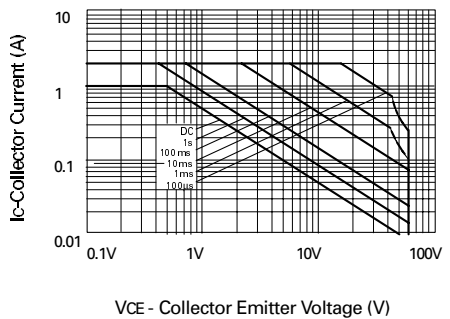
hFE v IC



VBE(on) v IC



VBE(sat) v IC



Safe Operating Area