

SOT23 PNP SILICON PLANAR MEDIUM POWER TRANSISTOR

ISSUE 3 - OCTOBER 1995

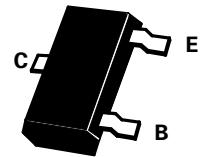
FEATURES

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

COMPLEMENTARY TYPE - FMMT451

PARTMARKING DETAIL - 551

FMMT551



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 $T_{amb}=25^\circ\text{C}$	P_{tot}	500	mW
Operating and Storage Temperature Range	$T_j; T_{stg}$	-55 to +200	°C

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

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

*Measured under pulsed conditions. Pulse width=300μs. Duty cycle ≤ 2%

Spice parameter data is available upon request for this device

FMMT551

TYPICAL CHARACTERISTICS

