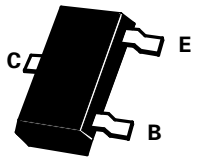
SOT23 PNP SILICON PLANAR MEDIUM POWER TRANSISTOR

FMMT551

ISSUE 3 - OCTOBER 1995

FEATURES

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



COMPLEMENTARY TYPE – FMMT451
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°C	P_{tot}	500	mW
Operating and Storage Temperature Range	T_j:T_{stg}	-55 to +200	°C

ELECTRICAL CHARACTERISTICS (at T_{amb} = 25°C).

PARAMETER	SYMBOL	MIN.	MAX.	UNIT	CONDITIONS.
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	-80		V	I_C=-100μA
Collector-Emitter Sustaining Voltage	$V_{CEO(sus)}$	-60		V	I_C=-10mA*
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	-5		V	I_E=-100μA
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=300μs. Duty cycle ≤ 2%
Spice parameter data is available upon request for this device

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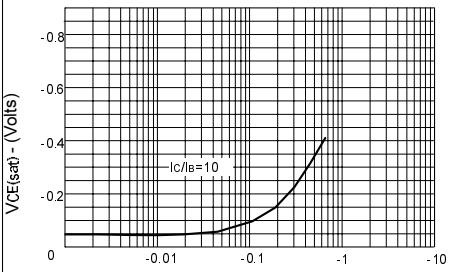
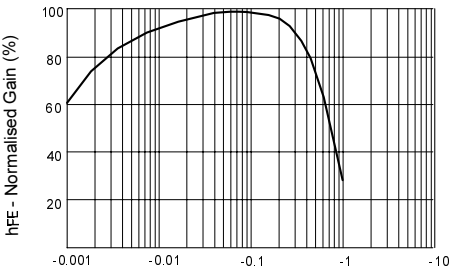
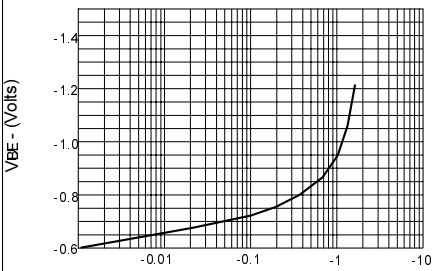
TYPICAL CHARACTERISTICS



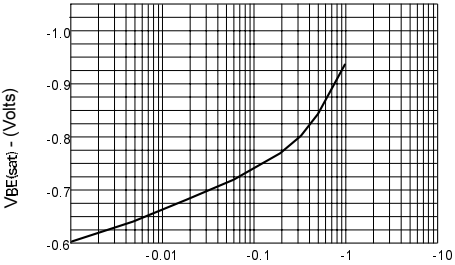
VCE(sat) v IC



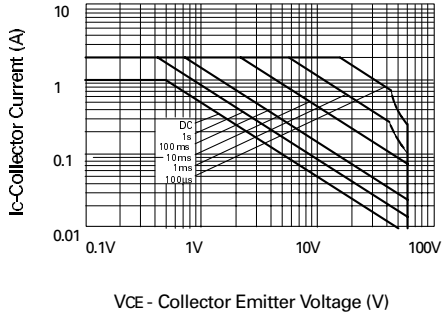
hFE v IC



VBE(on) v IC



VBE(sat) v IC



Safe Operating Area