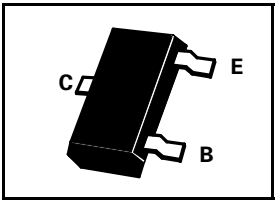
SOT23 PNP SILICON PLANAR MEDIUM POWER HIGH PERFORMANCE TRANSISTOR

FMMT589

ISSUE 5 - JANUARY 1997 ✪

FEATURES

* Low equivalent on-resistance; **$R_{CE(sat)}$ 250mΩ at 1A**



PARTMARKING DETAILS - 589
COMPLEMENTARY TYPE - FMMT489

ABSOLUTE MAXIMUM RATINGS.

PARAMETER	SYMBOL	VALUE	UNIT
Collector-Base Voltage	V_{CBO}	-50	V
Collector-Emitter Voltage	V_{CEO}	-30	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 +150	°C

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

PARAMETER	SYMBOL	MIN.	MAX.	UNIT	CONDITIONS.
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	-50		V	I_C=-100μA
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	-30		V	I_C=-10mA*
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	-5		V	I_E=-100μA
Collector Cut-Off Current	I_{CBO}		-100	nA	V_{CB}=-30V
Collector -Emitter Cut-Off Current	I_{CES}		-100	nA	V_{CES}=-30V
Emitter Cut-Off Current	I_{EBO}		-100	nA	V_{EB}=-4V
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$		-0.25 -0.35 -0.65	V V V	I_C=-0.5A, I_B=-50mA* I_C=-1A, I_B=-100mA* I_C=-2A, I_B=-200mA*
Base-Emitter Saturation Voltage	$V_{BE(sat)}$		-1.2	V	I_C=-1A, I_B=-100mA*
Base-Emitter Turn-on Voltage	$V_{BE(on)}$		-1.1	V	I_C=-1A, V_{CE}=-2V*
Static Forward Current Transfer Ratio	h_{FE}	100 100 80 40	300		I_C=-1mA, V_{CE}=-2V* I_C=-500mA, V_{CE}=-2V* I_C=-1A, V_{CE}=-2V* I_C=-2A, V_{CE}=-2V*
Transition Frequency	f_T	100		MHz	I_C=-100mA, V_{CE}=-5V f=100MHz
Output Capacitance	C_{obo}		15	pF	V_{CB}=-10V, f=1MHz

*Measured under pulsed conditions. Pulse width=300μs. Duty cycle ≤ 2%
For typical Characteristics graphs see FMMT549 datasheet