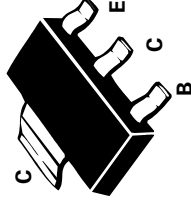


**SOT223 PNP SILICON PLANAR MEDIUM POWER
HIGH PERFORMANCE TRANSISTOR**
ISSUE 2 - OCTOBER 1995

FZT589

PARTMARKING DETAILS - FZT589
COMPLEMENTARY TYPES - FZT489



ABSOLUTE MAXIMUM RATINGS.

PARAMETER	SYMBOL	VALUE	UNIT
Collector-Base Voltage	V_{CB0}	-50	V
Collector-Emitter Voltage	V_{CE0}	-30	V
Emitter-Base Voltage	V_{EB0}	-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}	2	W
Operating and Storage Temperature Range	T_j, T_{sg}	-55 to +150	$^{\circ}C$

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

PARAMETER	SYMBOL	MIN.	MAX.	UNIT	CONDITIONS.
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	-50		V	$I_C = -100\mu A$
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	-30		V	$I_C = -1mA^*$
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	-5		V	$I_E = -100\mu A$
Collector Cut-Off Current	I_{CBO}		-100	nA	$V_{CB} = -30V$
Collector Emitter Cut-Off Current	I_{CES}		-100	nA	$V_{CE} = -30V$
Emitter Cut-Off Current	I_{EBO}		-100	nA	$V_{EB} = -4V$
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	-0.35 -0.65		V	$I_C = -1A, I_B = -100mA^*$ $I_C = -2A, I_B = -200mA^*$
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=300 μ s. Duty cycle $\leq 2\%$
For typical characteristics graphs see FMMT549 datasheet