

SOT223 PNP SILICON PLANAR HIGH VOLTAGE TRANSISTOR

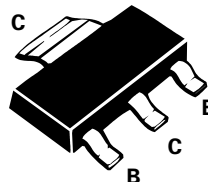
FZT560

ISSUE 1– NOVEMBER 1998

FEATURES

- * 500 Volt V_{CEO}
- * 150mA continuous current
- * $P_{tot} = 2$ Watt

PARTMARKING DETAIL – FZT560



ABSOLUTE MAXIMUM RATINGS.

PARAMETER	SYMBOL	VALUE	UNIT
Collector-Base Voltage	V_{CBO}	-500	V
Collector-Emitter Voltage	V_{CEO}	-500	V
Emitter-Base Voltage	V_{EBO}	-5	V
Peak Pulse Current	I_{CM}	-500	mA
Continuous Collector Current	I_C	-150	mA
Power Dissipation at $T_{amb}=25^{\circ}C$	P_{tot}	2	W
Operating and Storage Temperature Range	$T_j; T_{stg}$	-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	$V_{(BR)CBO}$	-500		V	$I_C = -100\mu A$
Collector-Emitter Breakdown Voltage	$V_{CEO(SUS)}$	-500		V	$I_C = -10mA^*$
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	-5		V	$I_E = -100\mu A$
Collector Cut-Off Current	I_{CBO}		-100	nA	$V_{CB} = -500V$
Collector Cut-Off Current	I_{CES}		-100	nA	$V_{CE} = -500V$
Emitter Cut-Off Current	I_{EBO}		-100	nA	$V_{EB} = -5V$
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$		-0.20 -0.5	V V	$I_C = -20mA, I_B = -2mA$ $I_C = -50mA, I_B = -10mA^*$
Base-Emitter Saturation Voltage	$V_{BE(sat)}$		-0.9	V	$I_C = -50mA, I_B = -10mA^*$
Base-Emitter Turn On Voltage	$V_{BE(on)}$		-0.9	V	$I_C = -50mA, V_{CE} = -10V^*$
Static Forward Current Transfer Ratio	h_{FE}	100 80 15 typ	300 300		$I_C = -1mA, V_{CE} = -10V$ $I_C = -50mA, V_{CE} = -10V^*$ $I_C = -100mA, V_{CE} = -10V^*$
Transition Frequency	f_T	60		MHz	$I_C = -10mA, V_{CE} = -20V$ $f = 50MHz$
Output Capacitance	C_{obo}		8	pF	$V_{CB} = -20, f = 1MHz$
Switching times	t_{on} t_{off}	110 typ. 1.5 typ		ns μs	$V_{CE} = -100, I_C = -50mA,$ $I_{B1} = -5mA, I_{B2} = 10mA,$

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

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TYPICAL CHARACTERISTICS

