

SOT223 NPN SILICON PLANAR
HIGH VOLTAGE TRANSISTOR

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FEATURES

* 400 Volt V_{CEO}

COMPLEMENTARY TYPE – FZT558
PARTMARKING DETAIL – FZT458

ABSOLUTE MAXIMUM RATINGS.

PARAMETER	SYMBOL	VALUE	UNIT
Collector-Base Voltage	V_{CBO}	400	V
Collector-Emitter Voltage	V_{CEO}	400	V
Emitter-Base Voltage	V_{EBO}	5	V
Continuous Collector Current	I_C	300	mA
Peak Pulse Current	I_{CM}	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_{stg}	-55 to +150	$^{\circ}C$

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

PARAMETER	SYMBOL	MIN.	MAX.	UNIT	CONDITIONS.
Breakdown Voltages	$V_{(BR)CBO}$	400		V	$I_C = 100\mu A$
	$V_{CE(sus)}$	400		V	$I_C = 10mA^*$
	$V_{(BR)EBO}$	5		V	$I_E = 100\mu A$
Collector Cut-Off Currents	I_{CBO}		100	nA	$V_{CB} = 320V$
	I_{CES}		100	nA	$V_{CE} = 320V$
Emitter Cut-Off Current	I_{EBO}		100	nA	$V_{EB} = 4V$
	$V_{CE(sat)}$		0.2 0.5	V	$I_C = 20mA, I_B = 2mA^*$ $I_C = 50mA, I_B = 6mA^*$
Base-Emitter Turn On Voltage	$V_{BE(sat)}$		0.9	V	$I_C = 50mA, I_B = 5mA^*$
	$V_{BE(on)}$		0.9	V	$I_C = 50mA, V_{CE} = 10V^*$
Static Forward Current Transfer Ratio	h_{FE}	100 100 15	300		$I_C = 1mA, V_{CE} = 10V$ $I_C = 50mA, V_{CE} = 10V^*$ $I_C = 100mA, V_{CE} = 10V^*$
	f_T	50		MHz	$I_C = 10mA, V_{CE} = 20V$ $f = 20MHz$
	C_{obo}		5	pF	$V_{CB} = 20V, f = 1MHz$
Switching times	t_{on}		135 Typical	ns	$I_C = 50mA, V_{CC} = 100V$
	t_{off}		2260 Typical	ns	$I_B = 5mA, I_{BZ} = 10mA$

*Measured under pulsed conditions. Pulse width=300 μs . Duty cycle $\leq 2\%$
Spice parameter data is available upon request for this device
For typical characteristics graphs see FMMT458 datasheet

查询FZT458供应商

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