ZUMT491

SOT323 NPN SILICON PLANAR HIGH PERFORMANCE TRANSISTOR

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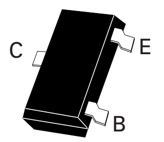
FEATURES

- Extremely low saturation voltage
- 500mW power dissipation
- 1 Amp continuous collector current (I_C)

APPLICATIONS

- Ideally suited for space / weight critical applications



SOT323

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 +150	°C

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

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	CONDITIONS.
Collector Base Breakdown Voltage	$V_{(BR)CBO}$	80			V	I_C=100μA, I_E=0
Collector Emitter Breakdown Voltage	$V_{CEO(sus)}$	60			V	I_C=10mA*, I_B=0
Emitter Base Breakdown Voltage	$V_{(BR)EBO}$	5			V	I_E=100μA, I_C=0
Collector Cut Off Current	I_{CBO}			100	nA	V_{CB}=60V
Collector Cut Off Current	I_{CES}			100	nA	VCE=60V
Emitter Cut Off Current	I_{EBO}			100	nA	V_{EB}=4V, I_C=0
Collector Emitter Saturation Voltage	$V_{CE(sat)}$			0.25 0.50	V V	I_C=500mA, I_B=50mA* I_C=1A, I_B=100mA*
Base Emitter Saturation Voltage	$V_{BE(sat)}$			1.1	V	I_C=1A, I_B=100mA*
Base Emitter Turn On Voltage	$V_{BE(on)}$			1.0	V	IC=1A, V_{CE}=5V*

* Measured under pulsed conditions. Pulse width 300μS. Duty cycle ≤2%.

ZETEX