SOT323 PNP SILICON PLANAR MEDIUM POWER TRANSISTOR

ZUMT807-25
ZUMT807-40

ISSUE 2 – FEBRUARY 1999

PARTMARKING DETAILS	ZUMT807-25	-	T8
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COMPLEMENTARY TYPES	ZUMT807-25	-	ZUMT817-25
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ABSOLUTE MAXIMUM RATINGS.

PARAMETER	SYMBOL	VALUE	UNIT
Collector-Base Voltage	V_{CBO}	-50	V
Collector-Emitter Voltage	V_{CEO}	-45	V
Emitter-Base Voltage	V_{EBO}	-5	V
Peak Pulse Current	I_{CM}	-1	A
Continuous Collector Current	I_C	-500	mA
Base Current	I_B	-100	mA
Peak Base Current	I_{BM}	-200	mA
Power Dissipation at T_{amb}=25°C	P_{tot}	330	mW
Operating and Storage Temperature Range	T_j:T_{stg}	-55 to +150	°C

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

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	CONDITIONS.
Collector Cut-Off Current	I_{CBO}			-0.1 -5	µA µA	V_{CB}=-20V, I_E=0 V_{CB}=-20V, I_E=0, T_{amb}=150°C
Emitter Cut-Off Current	I_{EBO}			-10	µA	V_{EB}=-5V, I_C=0
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$			-700	mV	I_C=-500mA, I_B=-50mA*
Base-Emitter Turn-on Voltage	$V_{BE(on)}$			-1.2	V	I_C=-500mA, V_{CE}=-1V*
Static Forward Current Transfer Ratio	h_{FE}	100 40		600		I_C=-100mA, V_{CE}=-1V* I_C=-500mA, V_{CE}=-1V*
-25		160		400		I_C=-100mA, V_{CE}=-1V*
-40		250		600		I_C=-100mA, V_{CE}=-1V*
Transition Frequency	f_T		100		MHz	I_C=-10mA, V_{CE}=-5V f=35MHz
Collector-base Capacitance	C_{obo}		8.0		pF	I_E=I_e=0, V_{CB}=-10V f=1MHz

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

ZETEX