SOT323 NPN SILICON PLANAR MEDIUM POWER TRANSISTORS

ZUMT817-25
ZUMT817-40

ISSUE 2 – FEBRUARY 1999

PARTMARKING DETAILS ZUMT817-25 - T7

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COMPLEMENTARY TYPES ZUMT817-25 - ZUMT807-25

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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		200		MHz	I_C=10mA, V_{CE}=5V f=35MHz
Collector-base Capacitance		C_{obo}		5.0		pF	I_E=I_e=0, V_{CB}=10V f=1MHz

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