

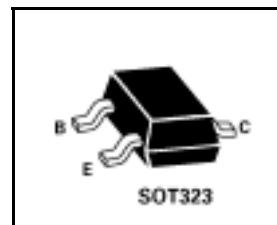
# SOT323 PNP SILICON PLANAR MEDIUM POWER TRANSISTOR

ISSUE 2 - FEBRUARY 1999

**ZUMT807-25**  
**ZUMT807-40**

PART MARKING DETAILS      ZUMT807-25 - T8  
                                  ZUMT807-40 - T24

COMPLEMENTARY TYPES      ZUMT807-25 - ZUMT817-25  
                                  ZUMT807-40 - ZUMT817-40



## 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 $T_{amb}=25^\circ C$	$P_{tot}$	330	mW
Operating and Storage Temperature Range	$T_j: T_{stg}$	-55 to +150	°C

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

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	CONDITIONS.
Collector Cut-Off Current	$I_{CBO}$			-0.1 -5	$\mu A$	$V_{CB}=-20V, I_E=0$ $V_{CB}=-20V, I_E=0, T_{amb}=150^\circ C$
Emitter Cut-Off Current	$I_{EBO}$			-10	$\mu A$	$V_{EB}=-5V, I_C=0$
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		$I_C=-100mA, V_{CE}=-1V^*$ $I_C=-500mA, V_{CE}=-1V^*$
		160		400		$I_C=-100mA, V_{CE}=-1V^*$
		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	$C_{cbo}$		8.0		pF	$I_E=I_e=0, V_{CB}=-10V$ $f=1MHz$

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