

# SOT323 PNP SILICON PLANAR HIGH PERFORMANCE TRANSISTOR

DRAFT SPECIFICATION ISSUE A – OCTOBER 94

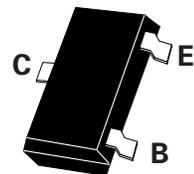
**ZUMT591**

## 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 $T_{amb}=25^{\circ}C$	$P_{tot}$	500	mW
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.	TYP.	MAX.	UNIT	CONDITIONS.

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

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	CONDITIONS.
Static Forward Current Transfer Ratio	$h_{FE}$	100 100 80 15		300		$I_C = -1\text{mA}, V_{CE} = -5\text{V}^*$ $I_C = -500\text{mA}, V_{CE} = -5\text{V}^*$ $I_C = -1\text{A}, V_{CE} = -5\text{V}^*$ $I_C = -2\text{A}, V_{CE} = -5\text{V}^*$
Transition Frequency	$f_T$	150			MHz	$I_C = -50\text{mA}, V_{CE} = -10\text{V}^*$ $f = 100\text{MHz}$
Output Capacitance	$C_{obo}$			10	pF	$V_{CB} = -10\text{V}, f = 1\text{MHz}$

\* Measured under pulsed conditions. Pulse width=300 $\mu\text{s}$ . Duty cycle $\text{\textcircled{R}}$ 2%

### NOTE

This data is derived from development material and does not necessarily mean that the device will go into production