

ZUMT591

SOT323 PNP SILICON PLANAR HIGH PERFORMANCE TRANSISTOR DRAFT SPECIFICATION ISSUE A – OCTOBER 94

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

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	CONDITIONS.
Static Forward Current Transfer Ratio	h_{FE}	100		300		$I_C = -1\text{mA}, V_{CE} = -5\text{V}^*$
		100			$I_C = -500\text{mA}, V_{CE} = -5\text{V}^*$	
		80			$I_C = -1\text{A}, V_{CE} = -5\text{V}^*$	
		15			$I_C = -2\text{A}, V_{CE} = -5\text{V}^*$	
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 μs . Duty cycle@2%

NOTE

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

FEATURES

- * Extremely low saturation voltage
 - * 500mW power dissipation
 - * 1 Amp continuous collector current (I_C)
- ### APPLICATIONS
- * Ideally suited for space / weight critical applications

ABSOLUTE MAXIMUM RATINGS.

PARAMETER	SYMBOL	SYMBOL	MIN.	TYP.	MAX.
Collector-Base Voltage	V_{CBO}				
Collector-Emitter Voltage	V_{CEO}				
Emitter-Base Voltage	V_{EBO}				
Peak Pulse Current	I_{CM}				
Continuous Collector Current	I_C				
Base Current	I_B				
Power Dissipation at $T_{amb} = 25^{\circ}\text{C}$	P_{tot}				
Operating and Storage Temperature Range	T_j, T_{stg}				

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

PARAMETER	SYMBOL	MIN.	TYP.	MAX.
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	-80		
Collector-Emitter Breakdown Voltage	$V_{CE(sus)}$	-60		
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	-5		
Collector Cut-Off Current	I_{CBO}			-10
Collector Cut-Off Current	I_{CES}			-10
Emitter Cut-Off Current	I_{EBO}			-10

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