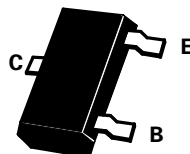


SOT23 NPN SILICON PLANAR HIGH VOLTAGE TRANSISTOR

ISSUE 2 - SEPTEMBER 1995

HT2

PARTMARKING DETAIL - 2T



ABSOLUTE MAXIMUM RATINGS.

PARAMETER	SYMBOL	VALUE	UNIT
Collector-Base Voltage	V_{CBO}	90	V
Collector-Emitter Voltage	V_{CEO}	80	V
Emitter-Base Voltage	V_{EBO}	5	V
Continuous Collector Current	I_C	100	mA
Power Dissipation at $T_{amb} = 25^\circ\text{C}$	P_{tot}	330	mW
Operating and Storage Temperature Range	$T_j; T_{stg}$	-55 to +150	$^\circ\text{C}$

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

PARAMETER	SYMBOL	MIN.	MAX.	UNIT	CONDITIONS.
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	90		V	$I_C = 10\mu\text{A}$
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	80		V	$I_C = 2\text{mA}$
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	5		V	$I_E = 10\mu\text{A}$
Collector Cut-Off Current	I_{CBO}		100	nA	$V_{CB} = 80\text{V}, I_E = 0$
	I_{CES}		100 5	nA μA	$V_{CE} = 80\text{V}, V_{BE} = 0$ $V_{CE} = 80\text{V}, V_{BE} = 0$ $T_j = 125^\circ\text{C}$
	I_{CEX}		10	μA	$V_{CE} = 80\text{V}, V_{BE} = 0.2\text{V},$ $T_j = 85^\circ\text{C}$
Emitter Cut-Off Current	I_{EBO}		200	nA	$V_{EB} = 4\text{V}$
Static Forward Current Transfer Ratio	h_{FE}	25			$I_C = 100\mu\text{A}, V_{CE} = 1\text{V}$ $I_C = 1\text{mA}, V_{CE} = 1\text{V}$ $I_C = 10\text{mA}, V_{CE} = 1\text{V}$ $I_C = 50\text{mA}, V_{CE} = 1\text{V}$
		30			
		50			
		30			
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$		750	mV	$I_C = 50\text{mA}, I_B = 5\text{mA}$
Base-Emitter Saturation Voltage	$V_{BE(sat)}$		1.1	V	$I_C = 50\text{mA}, I_B = 5\text{mA}$
Output Capacitance	C_{obo}		10	pF	$V_{CB} = 10\text{V}, I_E = 0, f = 1\text{MHz}$
Transition Frequency	f_T	60		MHz	$I_C = 10\text{mA}, V_{CE} = 5\text{V}$ $f = 10\text{MHz}$