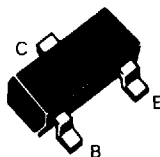


SOT23 NPN SILICON PLANAR HIGH VOLTAGE TRANSISTOR

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	$t_j:tstg$	-55 to +150	$^\circ\text{C}$

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

PARAMETER	SYMBOL	MIN.	TYP.	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	$V_{CE} = 80\text{V}$ $V_{BE} = 0.2\text{V}, T_J = 85^\circ\text{C}$
	I_{EBO}			200	nA	$V_{BE} = 4\text{V}$
Static Forward Current Transfer Ratio	h_{FE}	25 30 50 30				$I_C = 100\mu\text{A}, V_{CE} = 1\text{V}$ $I_C = 1\text{mA}, V_{CE} = 1\text{V}$ $I_C = 10\text{mA}, V_{CE} = 1\text{V}$ $I_C = 50\text{mA}, V_{CE} = 1\text{V}$
Collector-Emitter 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	$V_{CB} = 10, I_E = 0$ $f = 1\text{MHz}$
Transition Frequency	f_T	60			MHz	$V_{CE} = 5\text{V}, I_C = 10\text{mA},$ $f = 10\text{MHz}$
Switching Times	t_{on}			500	ns	$I_C = 10\text{mA}$
	t_{off}			2000	ns	$I_{B1} = I_{B2} = 1\text{mA}$

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