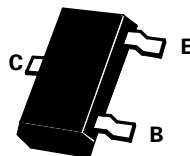


SOT23 PNP SILICON PLANAR HIGH VOLTAGE TRANSISTOR

ISSUE 2 - SEPTEMBER 1995

HT3

PARTMARKING DETAIL - 3T



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}	30 35 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 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	50		MHz	$I_C = -10\text{mA}, V_{CE} = -5\text{V}$ $f = 10\text{MHz}$
Switching Times	t_{on}		500	ns	$I_C = -10\text{mA}$,
	t_{off}		1000	ns	$I_{B1} = I_{B2} = -1\text{ma}$