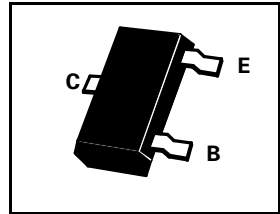


SOT23 PNP SILICON PLANAR HIGH SPEED TRANSISTOR

BSS65

ISSUE 2 - SEPTEMBER 1995

PARTMARKING DETAIL — BSS65 - L1
BSS65R - L5



ABSOLUTE MAXIMUM RATINGS.

PARAMETER	SYMBOL	VALUE	UNIT
Collector-Base Voltage	V_{CBO}	-12	V
Collector-Emitter Voltage	V_{CEO}	-12	V
Emitter-Base Voltage	V_{EBO}	-4	V
Peak Pulse Current	I_{CM}	-200	mA
Continuous Collector Current	I_C	-100	mA
Base Current	I_B	-50	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.	TYP.	MAX.	UNIT	CONDITIONS.
Breakdown Voltages	$V_{(BR)CEO}$	-12			V	$I_C = -10\text{mA}$
	$V_{(BR)CBO}$	-12			V	$I_C = -10\mu\text{A}$ *
	$V_{(BR)EBO}$	-4			V	$I_E = -10\mu\text{A}$
Cut-Off Currents	I_{CBO}			-100	nA	$V_{CB} = -6\text{V}, I_E = 0$
	I_{EBO}			-100	nA	$V_{EB} = -4\text{V}, I_C = 0$
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$			-0.15 -0.25	V V	$I_C = -10\text{mA}, I_B = -1\text{mA}$ $I_C = -30\text{mA}, I_B = -3\text{mA}$
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	-0.75 -0.82		-0.98 -1.20	V V	$I_C = -10\text{mA}, I_B = -1\text{mA}$ $I_C = -30\text{mA}, I_B = -3\text{mA}$
Static Forward Current Transfer Ratio	h_{FE}	30 40		150		$I_C = -10\text{mA}, V_{CE} = -0.3\text{V}$ $I_C = -30\text{mA}, V_{CE} = -0.5\text{V}$
Transition Frequency	f_T	400			MHz	$I_C = -30\text{mA}, V_{CE} = -10\text{V},$ $f = 100\text{MHz}$
Collector-Base Capacitance	C_{obo}			6	pF	$V_{CB} = -5\text{V}, I_E = 0,$ $f = 1\text{MHz}$
Emitter Base Capacitance	C_{ebo}			6	pF	$V_{EB} = -0.5\text{V}, I_C = 0, f = 1\text{MHz}$
Switching Times						
Turn-On Time	t_{on}		23	60	nS	$I_C = -30\text{mA}$
Turn-Off Time	t_{off}		34	90	nS	$I_{B1} = -I_{B2} = -1.5\text{mA}$ $V_{CC} = -10\text{V}$