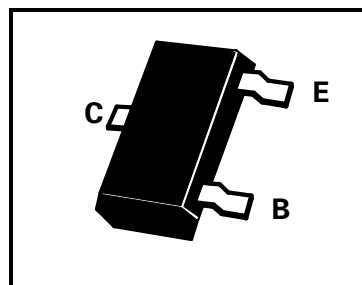


# SOT23 PNP SILICON PLANAR HIGH SPEED TRANSISTOR

## 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	$I_C$	-50	mA
Power Dissipation at $T_{amb}=25^{\circ}C$	$P_{TOT}$	330	mW
Operating and Storage Temperature Range	$t_j:t_{stg}$	-55 to +150	$^{\circ}C$

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

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