

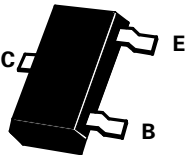
**SOT23 NPN SILICON PLANAR
HIGH VOLTAGE TRANSISTOR**

ISSUE 2 – SEPTEMBER 95 

BSS64

COMPLIMENTARY TYPE - BSS63

PARTMARKING DETAIL - BSS64 - U3
 BSS64R - U6



ABSOLUTE MAXIMUM RATINGS.

PARAMETER	SYMBOL	VALUE	UNIT
Collector-Base Voltage	V_{CBO}	120	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 $T_{amb}=25^{\circ}C$	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.	MAX.	UNIT	CONDITIONS.
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	120		V	$I_C=100\mu A$
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	80		V	$I_C=4mA$
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	5		V	$I_E=100\mu A$
Collector Cut-Off Current	I_{CBO}		100 50	nA μA	$V_{CB}=90V$ $V_{CB}=90V, T_j=150^{\circ}C$
Emitter Cut-Off Current	I_{EBO}		200	nA	$V_{EB}=5V$
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$		150 200	mV mV	$I_C=4mA, I_B=400\mu A$ $I_C=50mA, I_B=15mA$
Base-Emitter Saturation Voltage	$V_{BE(sat)}$		1.2	mV	$I_C=4mA, I_B=400\mu A$
Static Forward Current	h_{FE}	20	Typ. 60 80 55		$I_C=1mA, V_{CE}=1V$ $I_C=10mA, V_{CE}=1V$ $I_C=20mA, V_{CE}=1V$
Transition Frequency	f_T	60	Typ. 100	MHz	$V_{CE}=10V, I_C=4mA$ $f=35 MHz$
Output Capacitance	C_{obo}	Typ. 3	5	pF	$V_{CB}=10V, f=1MHz$

* Measured under pulsed conditions. Pulse width=300 μs . Duty cycle $\leq 2\%$