

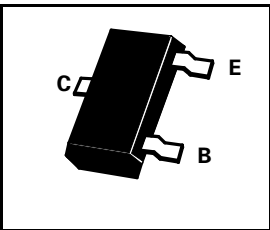
# SOT23 NPN SILICON PLANAR HIGH VOLTAGE TRANSISTOR

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## BSS64

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

\* Measured under pulsed conditions. Pulse width=300 $\mu\text{s}$ . Duty cycle  $\leq 2\%$