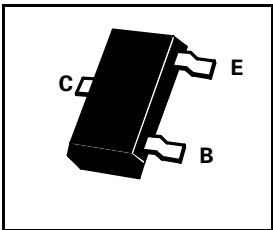


# SOT23 NPN SILICON PLANAR SWITCHING TRANSISTOR

ISSUE 2 – SEPTEMBER 95 

**BSS79B**  
**BSS79C**

PARTMARKING DETAILS - BSS79B - CE  
BSS79C - CF



## ABSOLUTE MAXIMUM RATINGS.

PARAMETER	SYMBOL	VALUE	UNIT
Collector-Base Voltage	$V_{CBO}$	75	V
Collector-Emitter Voltage	$V_{CEO}$	40	V
Emitter-Base Voltage	$V_{EBO}$	6	V
Peak Pulse Current	$I_{CM}$	800	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	$V_{(BR)CBO}$	75		V	$I_C=10\mu A$
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	40		V	$I_C=10mA$
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	6		V	$I_E=10\mu A$
Collector Base Cut-Off Current	$I_{CBO}$		10 10	nA $\mu A$	$V_{CB}=60V$ $V_{CB}=60V, T_{amb}=150^{\circ}C$
Emitter Base Cut-Off Current	$I_{EBO}$		10	nA	$V_{BE}=3.0V$
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$		0.3 1.0	V V	$I_C=150mA, I_B=15mA$ $I_C=500mA, I_B=50mA$
Static Forward Current Transfer Ratio	BSS79B BSS79C $h_{FE}$	40 100	120 300		$I_C=150mA, V_{CE}=10V$ $I_C=150mA, V_{CE}=10V$
Transition Frequency	$f_T$	250		MHz	$V_{CE}=20V, I_C=20mA$ $f=100MHz$
Collector-Base Capacitance	$C_{obo}$		8	pF	$V_{CB}=10V, f=1MHz$
Delay Time	$t_d$		10	ns	$V_{CC}=30V, I_C=150mA$ $I_{B1}=I_{B2}=15mA$
Rise Time	$t_r$		10	ns	
Storage Time	$t_s$		225	ns	$V_{CC}=30V, I_C=150mA$ $I_{B1}=I_{B2}=15mA$
Fall Time	$t_f$		60	ns	