

## PNP General Purpose Amplifier

## BSS63

## ■ Features

- PNP general purpose amplifier

■ Absolute Maximum Ratings  $T_a = 25^\circ\text{C}$ 

Parameter	Symbol	Rating	Unit
Collector-emitter voltage	$V_{CE0}$	100	V
Collector-base voltage	$V_{CBO}$	110	V
Emitter-base voltage	$V_{EBO}$	6	V
Collector current	$I_C$	200	mA
Junction temperature	$T_j$	150	$^\circ\text{C}$
Storage temperature	$T_{stg}$	-55 to +150	$^\circ\text{C}$
Total device dissipation	$P_D$	350	mW
Derate above $25^\circ\text{C}$		2.8	mW/ $^\circ\text{C}$
Thermal resistance, junction to ambient	$R_{\theta JA}$	357	$^\circ\text{C/W}$

■ Electrical Characteristics  $T_a = 25^\circ\text{C}$ 

Parameter	Symbol	Testconditions	Min	Typ	Max	Unit
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = 100 \mu\text{A}, I_B = 0$	100			V
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C = 10 \mu\text{A}, I_E = 0$	110			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E = 1.0 \mu\text{A}, I_C = 0$	6			V
Collector-cutoff current	$I_{CBO}$	$V_{CB} = 90 \text{ V}, I_E = 0$			100	nA
		$V_{CB} = 90 \text{ V}, I_E = 0, T_A = 150^\circ\text{C}$			50	$\mu\text{A}$
Emitter-base cut-off current	$I_{EBO}$	$V_{EB} = 6.0 \text{ V}, I_C = 0$			200	nA
DC current gain	$h_{FE}$	$I_C = 10 \text{ mA}, V_{CE} = 1.0 \text{ V}$	30			
		$I_C = 25 \text{ mA}, V_{CE} = 1.0 \text{ V}$	30			
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = 25 \text{ mA}, I_B = 2.5 \text{ mA}$			0.25	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C = 25 \text{ mA}, I_B = 2.5 \text{ mA}$			0.9	V
Current gain - bandwidth product	$f_T$	$I_C = 25 \text{ mA}, V_{CE} = 5.0, f = 35 \text{ MHz}$	50			MHz

## ■ Marking

Marking	T3