

TRANSISTOR (PNP)

FEATURES

- Low Voltage
- High Current
- Complement to BSR43

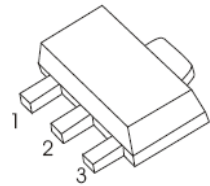
APPLICATIONS

- Medium Power Transistor

MARKING:BR4

SOT-89-3L

1. BASE
2. COLLECTOR
3. EMITTER



MAXIMUM RATINGS ($T_a=25^{\circ}\text{C}$ unless otherwise noted)

Symbol	Parameter	Value	Unit
V_{CB0}	Collector-Base Voltage	-90	V
V_{CEO}	Collector-Emitter Voltage	-80	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current	-1	A
P_C	Collector Power Dissipation	500	mW
$R_{\theta JA}$	Thermal Resistance From Junction To Ambient	250	$^{\circ}\text{C}/\text{W}$
T_j	Junction Temperature	150	$^{\circ}\text{C}$
T_{stg}	Storage Temperature	-55~+150	$^{\circ}\text{C}$

ELECTRICAL CHARACTERISTICS ($T_a=25^{\circ}\text{C}$ unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CB0}$	$I_C=-100\mu\text{A}, I_E=0$	-90			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=-1\text{mA}, I_B=0$	-80			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=-100\mu\text{A}, I_C=0$	-5			V
Collector cut-off current	I_{CB0}	$V_{CB}=-60\text{V}, I_E=0$			-100	nA
Emitter cut-off current	I_{EBO}	$V_{EB}=-5\text{V}, I_C=0$			-100	nA
DC current gain	$h_{FE(1)}^*$	$V_{CE}=-5\text{V}, I_C=0.1\text{mA}$	30			
	$h_{FE(2)}^*$	$V_{CE}=-5\text{V}, I_C=-100\text{mA}$	100		300	
	$h_{FE(3)}^*$	$V_{CE}=-5\text{V}, I_C=-500\text{mA}$	50			
Collector-emitter saturation voltage	$V_{CE(sat)}^*$	$I_C=-150\text{mA}, I_B=-15\text{mA}$			-0.25	V
		$I_C=-500\text{mA}, I_B=-50\text{mA}$			-0.5	V
Base-emitter saturation voltage	$V_{BE(sat)}^*$	$I_C=-150\text{mA}, I_B=-15\text{mA}$			-1	V
		$I_C=-500\text{mA}, I_B=-50\text{mA}$			-1.2	V
Transition frequency	f_T	$V_{CE}=-10\text{V}, I_C=-50\text{mA}, f=100\text{MHz}$	100			MHz

*Pulse test