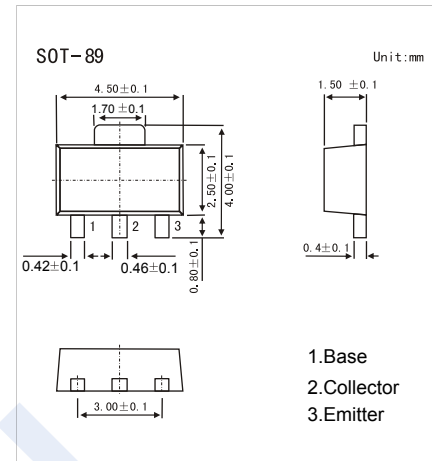


PNP Transistors

2SB1308

■ Features

- Power Transistor
- Excellent DC current Gain
- Low Collector-emitter Saturation Voltage



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

Parameter	Symbol	Rating	Unit
Collector - Base Voltage	V_{CB0}	-30	V
Collector - Emitter Voltage	V_{CE0}	-20	
Emitter - Base Voltage	V_{EB0}	-6	
Collector Current - Continuous	I_c	-3	A
Collector Power Dissipation	P_c	500	mW
Thermal Resistance From Junction To Ambient	$R_{\theta JA}$	250	$^\circ\text{C}/\text{W}$
Junction Temperature	T_J	150	$^\circ\text{C}$
Storage Temperature range	T_{stg}	-55 to 150	

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

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector- base breakdown voltage	V_{CB0}	$I_c = -100 \mu\text{A}, I_E = 0$	-30			V
Collector- emitter breakdown voltage	V_{CE0}	$I_c = -1 \text{ mA}, I_B = 0$	-20			
Emitter - base breakdown voltage	V_{EB0}	$I_E = -100 \mu\text{A}, I_c = 0$	-6			
Collector-base cut-off current	I_{CB0}	$V_{CB} = -25\text{V}, I_E = 0$			-0.5	μA
Emitter cut-off current	I_{EB0}	$V_{EB} = -5\text{V}, I_c = 0$			-0.5	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_c = -1.5 \text{ A}, I_B = -150 \text{ mA}$			-0.45	V
Base - emitter saturation voltage	$V_{BE(sat)}$	$I_c = -1.5 \text{ A}, I_B = -150 \text{ mA}$			-1.2	
DC current gain	h_{FE}	$V_{CE} = -2\text{V}, I_c = -500 \text{ mA}$	82		390	
Collector output capacitance	C_{ob}	$V_{CB} = -20\text{V}, I_E = 0, f = 1\text{MHz}$		60		pF
Transition frequency	f_t	$V_{CE} = -6\text{V}, I_c = -50 \text{ mA}, f = 30\text{MHz}$		120		MHz

■ Classification of h_{FE}

Type	2SB1308-P	2SB1308-Q	2SB1308-R
Range	82-180	120-270	180-390
Marking	BF P*	BF Q*	BF R*

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2SB1308

Typical Characteristics

