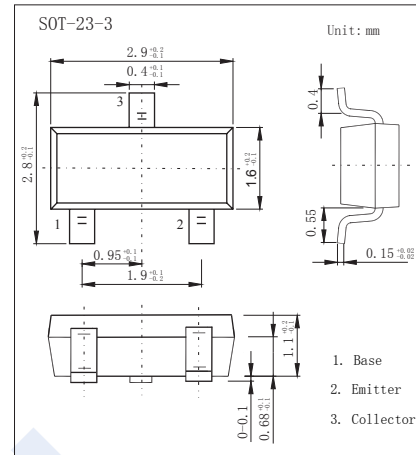


PNP Transistors

2SB709A-HF

■ Features

- For general amplification
- Complimentary to 2SD601A-HF
- Pb-Free Package May be Available. The G-Suffix Denotes a Pb-Free Lead Finish



■ Absolute Maximum Ratings Ta = 25°C

Parameter	Symbol	Rating	Unit
Collector - Base Voltage	V _{CB0}	-45	V
Collector - Emitter Voltage	V _{CE0}	-45	
Emitter - Base Voltage	V _{EB0}	-7	
Collector Current - Continuous	I _c	-100	mA
Collector Power Dissipation	P _c	200	mW
Junction Temperature	T _J	150	°C
Storage Temperature range	T _{stg}	-55 to 150	

■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector- base breakdown voltage	V _{CB0}	I _c = -100 μA, I _E =0	-45			V
Collector- emitter breakdown voltage	V _{CE0}	I _c = -2 mA, I _B =0	-45			
Emitter - base breakdown voltage	V _{EB0}	I _E = -100 μA, I _C =0	-7			
Collector-base cut-off current	I _{cB0}	V _{CB} = -40 V, I _E =0			-0.1	μA
Collector-Emitter cut-off current	I _{CE0}	V _{CE} = -20 V, I _B =0			-100	
Emitter cut-off current	I _{EB0}	V _{EB} = -6V, I _C =0			-0.1	
Collector-emitter saturation voltage	V _{CE(sat)}	I _C =-100 mA, I _B =-10mA			-0.5	V
Base - emitter saturation voltage	V _{BE(sat)}	I _C =-100 mA, I _B =-10mA			-1.2	
DC current gain	h _{FE}	V _{CE} = -10V, I _C = -2mA	160		460	
Collector output capacitance	C _{ob}	V _{CB} = -10V, I _E = 0, f=1MHz			2.7	pF
Transition frequency	f _T	V _{CE} = -10V, I _C = -1mA, f=200MHz	60			MHz

■ Classification of h_{FE}

Type	2SB709A-Q-HF	2SB709A-R-HF	2SB709A-S-HF
Range	160-260	210-340	290-460
Marking	BQ1 _F	BR1 _F	BS1 _F

PNP Transistors

2SB709A-HF

Typical Characteristics

