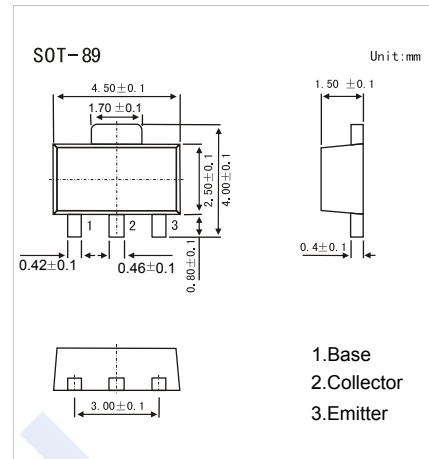


PNP Transistors

2SA1575-HF

■ Features

- High fr.
- High breakdown voltage.
- Small reverse transfer capacitance and excellent high-frequency characteristic.
- Complementary to 2SC4080-HF
- Pb-Free Package May be Available. The G-Suffix Denotes a Pb-Free Lead Finish

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

Parameter	Symbol	Rating	Unit
Collector - Base Voltage	V_{CB0}	-200	V
Collector - Emitter Voltage	V_{CE0}	-200	
Emitter - Base Voltage	V_{EB0}	-4	
Collector Current - Continuous	I_C	-100	mA
Collector Current - Pulse	I_{CP}	-200	
Collector Power Dissipation	P_C	500	mW
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}	$I_C = -100 \mu\text{A}$, $I_E = 0$	-200			V
Collector- emitter breakdown voltage	V_{CE0}	$I_C = -1 \text{mA}$, $R_{BE} = \infty$	-200			
Emitter - base breakdown voltage	V_{EB0}	$I_E = -100 \mu\text{A}$, $I_C = 0$	-4			
Collector-base cut-off current	I_{CBO}	$V_{CB} = -150 \text{V}$, $I_E = 0$			-0.1	μA
Emitter cut-off current	I_{EBO}	$V_{EB} = -3\text{V}$, $I_C = 0$			-0.1	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -20 \text{mA}$, $I_B = -2 \text{mA}$			-1	V
Base - emitter saturation voltage	$V_{BE(sat)}$	$I_C = -20 \text{mA}$, $I_B = -2 \text{mA}$			-1	
DC current gain	h_{FE}	$V_{CE} = -10\text{V}$, $I_C = -10\text{mA}$	40		320	
		$V_{CE} = -10\text{V}$, $I_C = -60\text{mA}$	20			
Reverse Transfer Capacitance	C_{re}	$V_{CB} = -30\text{V}$, $f = 1\text{MHz}$		1.7		pF
Collector output capacitance	C_{ob}	$V_{CB} = -30\text{V}$, $f = 1\text{MHz}$		2.3		
Transition frequency	f_T	$V_{CE} = -30\text{V}$, $I_C = -30\text{mA}$		400		MHz

■ Classification of h_{FE}

Type	2SA1575-C-HF	2SA1575-D-HF	2SA1575-E-HF	2SA1575-F-HF
Range	40-80	60-120	100-200	160-320
Marking	AFC _F	AFD _F	AFE _F	AFF _F