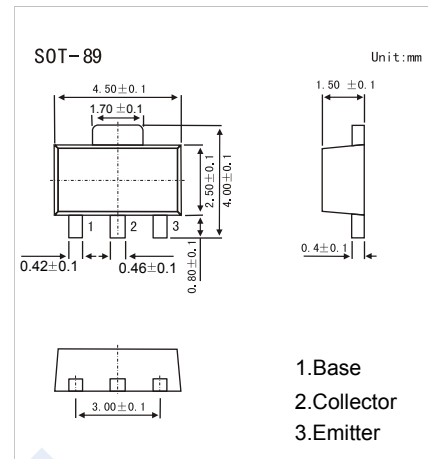


PNP Transistors

2SA1314-HF

■ Features

- Low Saturation Voltage
: $V_{CE(sat)} = -0.5V$ (max) ($I_C = -2A, I_B = -50mA$)
- Small Flat Package
- Complementary to 2SC2982-HF
- Pb-Free Package May be Available. The G-Suffix Denotes a Pb-Free Lead Finish



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

Parameter	Symbol	Rating	Unit
Collector - Base Voltage	V_{CBO}	-20	V
Collector - Emitter Voltage	V_{CEO}	-10	
Emitter - Base Voltage	V_{EBO}	-6	
Collector Current - Continuous	I_C	-2	A
Collector Current - Pulsed *1	I_{CP}	-4	
Base Current	I_B	-2	
Collector Power Dissipation	P_C	500	mW
Junction Temperature	T_J	150	$^\circ C$
Storage Temperature range	T_{stg}	-55 to 150	

*1 Pulse test: pulse width = 10ms (max), duty cycle = 30% (max)

■ Electrical Characteristics $T_a = 25^\circ C$

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector- base breakdown voltage	V_{CBO}	$I_C = -1mA, I_E = 0$	-20			V
Collector- emitter breakdown voltage	V_{CEO}	$I_C = -10 mA, I_E = 0$	-10			
Emitter - base breakdown voltage	V_{EBO}	$I_E = -1mA, I_C = 0$	-6			
Collector-base cut-off current	I_{CBO}	$V_{CB} = -20 V, I_E = 0$			-100	nA
Emitter cut-off current	I_{EBO}	$V_{EB} = -6V, I_C = 0$			-100	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -2A, I_B = -50mA$		-0.2	-0.5	V
Base - emitter saturation voltage	$V_{BE(sat)}$	$I_C = -2A, I_B = -50mA$			-1.2	
Base - emitter voltage	V_{BE}	$V_{CE} = -1V, I_C = -2A$		-0.83	-1.5	
DC current gain	$h_{FE(1)}$	$V_{CE} = -1V, I_C = -0.5A$	140		600	
	$h_{FE(2)}$	$V_{CE} = -1V, I_C = -4A$	60	120		
Collector output capacitance	C_{ob}	$V_{CB} = -10V, I_E = 0, f = 1MHz$		50		pF
Transition frequency	f_T	$V_{CE} = -1V, I_C = -0.5A$		140		MHz

■ Classification of $h_{FE(1)}$

Type	2SA1314-A-HF	2SA1314-B-HF	2SA1314-C-HF
Range	140-280	200-400	300-600
Marking	TA_F	TB_F	TC_F

PNP Transistors

2SA1314-HF

Typical Characteristics

