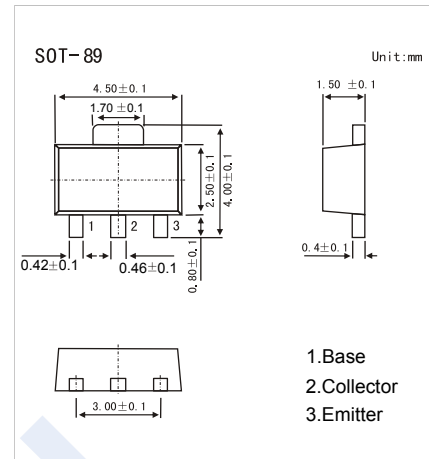


PNP Transistors

2SA1945-HF

■ Features

- High voltage
- High f_T , $f_T=150\text{MHz}(\text{typ})$
- High collector current $I_{CM}=-600\text{mA}$
- Small package for mounting
- Complements to 2SC5211-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}	-55	V
Collector - Emitter Voltage	V_{CE0}	-50	
Emitter - Base Voltage	V_{EB0}	-4	
Collector Current - Continuous	I_C	-400	mA
Collector Current - Pulse	I_{CM}	-600	
Collector Power Dissipation	P_C	0.5	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}	$I_C = -100 \mu\text{A}$, $I_E = 0$	-55			V
Collector- emitter breakdown voltage	V_{CE0}	$I_C = -1 \text{ mA}$, $R_{BE} = \infty$	-50			
Emitter - base breakdown voltage	V_{EB0}	$I_E = -100 \mu\text{A}$, $I_C = 0$	-4			
Collector-base cut-off current	I_{CB0}	$V_{CB} = -25 \text{ V}$, $I_E = 0$			-1	μA
Emitter cut-off current	I_{EB0}	$V_{EB} = -4 \text{ V}$, $I_C = 0$			-1	
Collector-emitter saturation voltage	$V_{CE(\text{sat})}$	$I_C = -200 \text{ mA}$, $I_B = -10 \text{ mA}$		-0.17	-0.5	V
Base - emitter saturation voltage	$V_{BE(\text{sat})}$	$I_C = -200 \text{ mA}$, $I_B = -10 \text{ mA}$			-1.2	
DC current gain	h_{FE}	$V_{CE} = -4 \text{ V}$, $I_C = -100 \text{ mA}$	90		500	
Transition frequency	f_T	$V_{CE} = -10 \text{ V}$, $I_E = 10 \text{ mA}$		150		MHz

■ Classification of h_{FE}

Type	2SA1945-D-HF	2SA1945-E-HF	2SA1945-F-HF
Range	90-180	150-300	250-500
Marking	ZD _F	ZE _F	ZF _F

PNP Transistors

2SA1945-HF

■ Typical Characteristics

