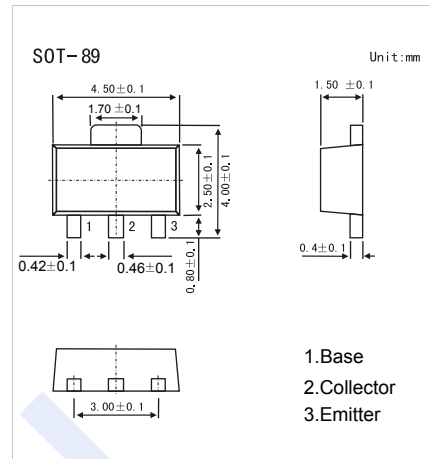


PNP Transistors

2SB766-HF

■ Features

- Large collector power dissipation P_c
- Complimentary to 2SD874-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}	-30	V
Collector - Emitter Voltage	V_{CE0}	-25	
Emitter - Base Voltage	V_{EB0}	-5	
Collector Current - Continuous	I_C	-1	A
Collector Current - Pulse	I_{CP}	-1.5	
Collector Power Dissipation	P_C	1	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}	$I_C = -2 \text{mA}$, $I_B = 0$	-25			
Emitter - base breakdown voltage	V_{EB0}	$I_E = -100 \mu\text{A}$, $I_C = 0$	-5			
Collector-base cut-off current	I_{CB0}	$V_{CB} = -20 \text{V}$, $I_E = 0$			-100	nA
Emitter cut-off current	I_{EB0}	$V_{EB} = -4 \text{V}$, $I_C = 0$			-100	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -500 \text{mA}$, $I_B = -50 \text{mA}$		-0.2	-0.4	V
Base - emitter saturation voltage	$V_{BE(sat)}$	$I_C = -500 \text{mA}$, $I_B = -50 \text{mA}$		-0.85	-1.2	
DC current gain	$h_{FE(1)}$	$V_{CE} = -10 \text{V}$, $I_C = -500 \text{mA}$	85		340	
	$h_{FE(2)}$	$V_{CE} = -5 \text{V}$, $I_C = -1 \text{A}$	50			
Collector output capacitance	C_{ob}	$V_{CB} = -10 \text{V}$, $I_E = 0$, $f = 1 \text{MHz}$		20	30	pF
Transition frequency	f_T	$V_{CE} = -10 \text{V}$, $I_C = -50 \text{mA}$, $f = 200 \text{MHz}$		200		MHz

■ Classification of $h_{FE(1)}$

Type	2SB766-Q-HF	2SB766-R-HF	2SB766-S-HF
Range	85-170	120-240	170-340
Marking	AQ _F	AR _F	AS _F

PNP Transistors

2SB766-HF

■ Typical Characteristics

