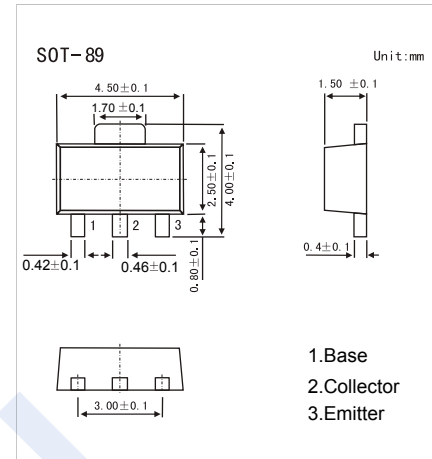


NPN Transistors

2SC5026-HF

■ Features

- Low collector to emitter saturation voltage $V_{CE(sat)}$.
- High collector to emitter voltage V_{CEO} .
- Complementary to 2SA1890-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_{CBO}	80	V
Collector - Emitter Voltage	V_{CEO}	80	
Emitter - Base Voltage	V_{EBO}	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_{CBO}	$I_C = 100 \mu\text{A}, I_E = 0$	80			V
Collector- emitter breakdown voltage	V_{CEO}	$I_C = 1 \text{ mA}, I_B = 0$	80			
Emitter - base breakdown voltage	V_{EBO}	$I_E = 100 \mu\text{A}, I_C = 0$	5			
Collector-base cut-off current	I_{CBO}	$V_{CB} = 60\text{V}, I_E = 0$			0.1	μA
Emitter cut-off current	I_{EBO}	$V_{EB} = 4\text{V}, I_C = 0$			0.1	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = 500\text{mA}, I_B = 50\text{mA}$		0.15	0.3	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}	$V_{CE} = 2\text{V}, I_C = 100\text{mA}$	120		340	
		$V_{CE} = 2\text{V}, I_C = 500\text{mA}$	60			
Collector output capacitance	C_{ob}	$V_{CB} = 10\text{V}, I_E = 0, f = 1\text{MHz}$		10	20	pF
Transition frequency	f_T	$V_{CE} = 10\text{V}, I_E = -50\text{mA}, f = 200\text{MHz}$		120		MHz

■ Classification of $h_{fe(1)}$

Type	2SC5026-R-HF	2SC5026-S-HF
Range	120-240	170-340
Marking	2AR _F	2AS _F

NPN Transistors

2SC5026-HF

■ Typical Characteristics

