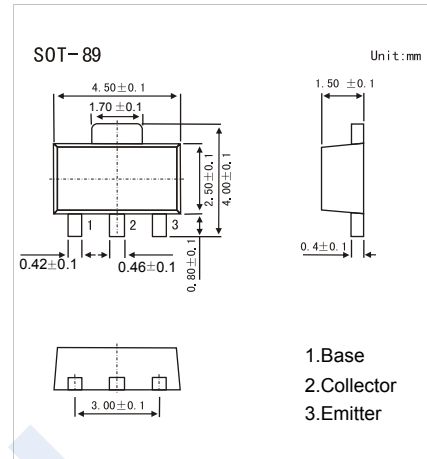


## PNP Transistors

### 2SB1427-HF

#### ■ Features

- Low saturation voltage,
- Excellent DC current gain characteristics.
- Pb-Free Package May be Available. The G-Suffix Denotes a Pb-Free Lead Finish



#### ■ Absolute Maximum Ratings Ta = 25°C

Parameter	Symbol	Rating	Unit
Collector - Base Voltage	V <sub>CB0</sub>	-20	V
Collector - Emitter Voltage	V <sub>CEO</sub>	-20	
Emitter - Base Voltage	V <sub>EB0</sub>	-6	
Collector Current - Continuous	I <sub>C</sub>	-2	A
Collector Current - Pulse	I <sub>CP</sub>	-3	
Collector Power Dissipation	P <sub>C</sub>	0.5	W
		2	
Junction Temperature	T <sub>J</sub>	150	°C
Storage Temperature range	T <sub>stg</sub>	-55 to 150	

#### ■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector- base breakdown voltage	V <sub>CB0</sub>	I <sub>C</sub> = -100 uA, I <sub>E</sub> =0	-20			V
Collector- emitter breakdown voltage	V <sub>CEO</sub>	I <sub>C</sub> = -1 mA, I <sub>B</sub> =0	-20			
Emitter - base breakdown voltage	V <sub>EB0</sub>	I <sub>E</sub> = -100 uA, I <sub>C</sub> =0	-6			
Collector-base cut-off current	I <sub>CB0</sub>	V <sub>CB</sub> = -16V, I <sub>E</sub> =0			-0.5	uA
Emitter cut-off current	I <sub>EB0</sub>	V <sub>EB</sub> = -5V, I <sub>C</sub> =0			-0.5	
Collector-emitter saturation voltage	V <sub>CE(sat)</sub>	I <sub>C</sub> =-1 A, I <sub>B</sub> =-50 mA			-0.5	V
Base - emitter saturation voltage	V <sub>BE(sat)</sub>	I <sub>C</sub> =-1 A, I <sub>B</sub> =-50 mA			-1.2	
DC current gain	h <sub>FE</sub>	V <sub>CE</sub> = -6V, I <sub>C</sub> = -500 mA	390		820	
Collector output capacitance	C <sub>ob</sub>	V <sub>CB</sub> = -10V, I <sub>E</sub> = 0, f=1MHz		30		pF
Transition frequency	f <sub>T</sub>	V <sub>CE</sub> = -10V, I <sub>E</sub> = 10 mA, f=100MHz		90		MHz

#### ■ Marking

Marking	BJ * F
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### PNP Transistors

### 2SB1427-HF

■ Typical Characteristics

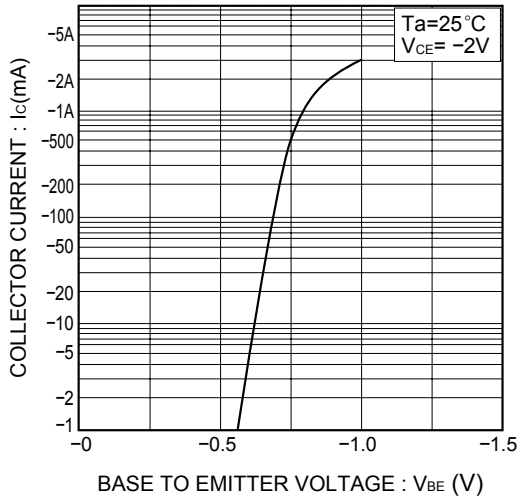


Fig.1 Grounded emitter propagation characteristics

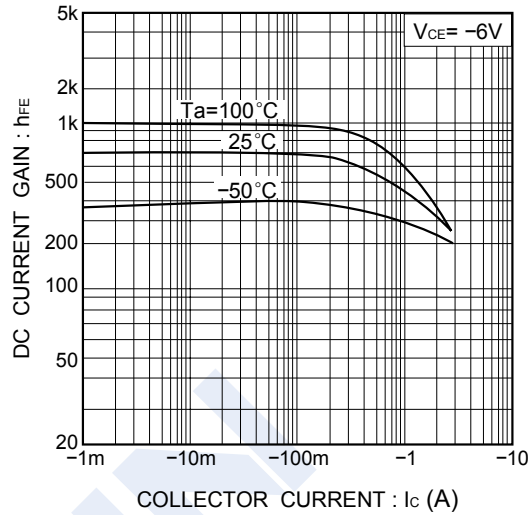


Fig.2 DC current gain vs. collector current

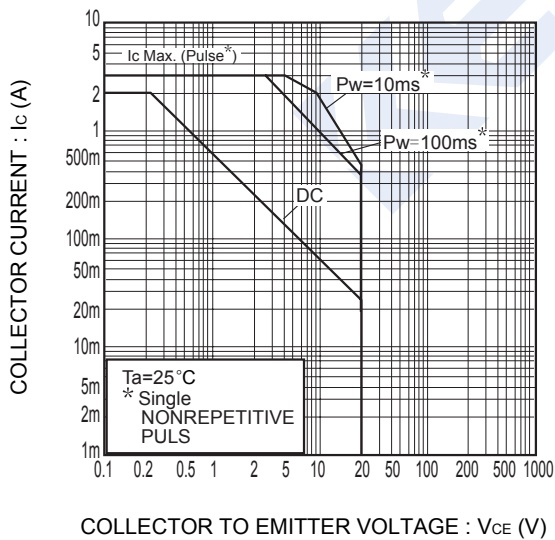


Fig.4 Safe Operating area

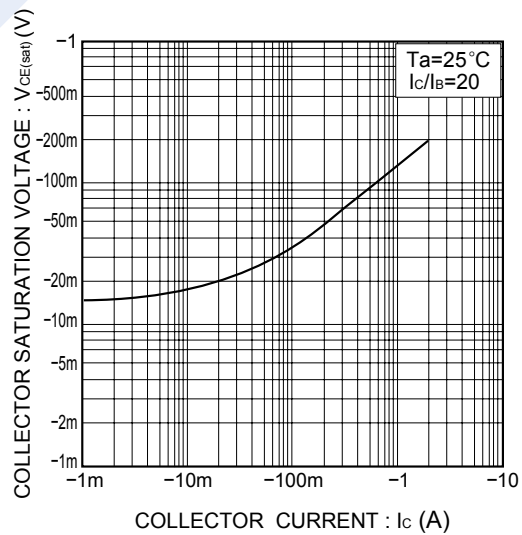


Fig.3 Collector-emitter saturation voltage vs. collector current