

SOT-89 Plastic-Encapsulated Transistors

2SB1119 TRANSISTOR (PNP)

FEATURES

Power dissipation

$$P_{CM}: 500 \text{ mW (Tamb=25°C)}$$

Collector current

$$I_{CM}: -1 \text{ A}$$

Collector current (Pulse)

$$I_{CP}: -2 \text{ A}$$

Collector-base voltage

$$V_{(BR)CBO}: -25 \text{ V}$$

Operating and storage junction temperature range

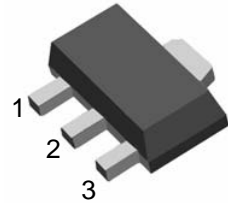
$$T_J, T_{stg}: -55^\circ\text{C to } +150^\circ\text{C}$$

SOT-89

1. BASE

2. COLLECTOR

3. EMITTER



ELECTRICAL CHARACTERISTICS (Tamb=25°C unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=-10\mu\text{A}, I_E=0$	-25			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=-1\text{mA}, I_B=0$	-25			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=-10\mu\text{A}, I_C=0$	-5			V
Collector cut-off current	I_{CBO}	$V_{CB}=-20\text{V}, I_E=0$			-0.1	μA
Emitter cut-off current	I_{EBO}	$V_{EB}=-4\text{V}, I_C=0$			-0.1	μA
DC current gain	$h_{FE(1)}$	$V_{CE}=-2\text{V}, I_C=-50\text{mA}$	100		560	
	$h_{FE(2)}$	$V_{CE}=-2\text{V}, I_C=-1\text{A}$	40			
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=-500\text{mA}, I_B=-50\text{mA}$			-0.7	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C=-500\text{mA}, I_B=-50\text{mA}$			-1.2	v
Transition frequency	f_T	$V_{CE}=-10\text{V}, I_C=-50\text{mA}$		180		MHz
Collector output capacitance	C_{ob}	$V_{CB}=-10\text{V}, f=1\text{MHz}$		25		pF

CLASSIFICATION OF $h_{FE(1)}$

Rank	R	S	T	U
Range	100-200	140-280	200-400	280-560
Marking	BB			