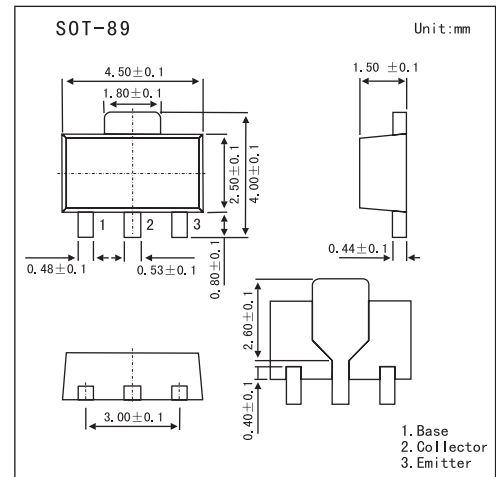


PNP Epitaxial Planar Silicon Transistors

2SB1120

■ Features

- Low collector-to-emitter saturation voltage :
 $V_{CE(sat)max} = -0.45V$.
- Large current capacity : $I_C = -2.5A$, $I_{CP} = -5A$.
- Very small size making it easy to provide high density, small-sized hybrid IC:s.

■ Absolute Maximum Ratings $T_a = 25^\circ C$

Parameter	Symbol	Rating	Unit
Collector-base voltage	V_{CB0}	-20	V
Collector-emitter voltage	V_{CE0}	-10	V
Emitter-base voltage	V_{EB0}	-7	V
Collector current	I_C	-2.5	A
Collector current (pulse)	I_{CP}	-5	A
Collector dissipation	P_C	500	mW
Junction temperature	T_j	150	$^\circ C$
Storage temperature	T_{stg}	-55 to +150	$^\circ C$

■ Electrical Characteristics $T_a = 25^\circ C$

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector cutoff current	I_{CB0}	$V_{CB} = -16V, I_E = 0$			-100	nA
Emitter cutoff current	I_{EB0}	$V_{CB} = -4V, I_E = 0$			-100	nA
DC current Gain	h_{FE}	$V_{CE} = -2V, I_C = -500mA$	100		560	
		$V_{CE} = -2V, I_C = -3A$	70			
Gain bandwidth product	f_T	$V_{CE} = -10V, I_C = -50mA$		250		MHz
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -1.5A, I_B = -0.15A$		-0.25	-0.45	V
Collector-base breakdown voltage	$V_{(BR)CB0}$	$I_C = -10\mu A, I_E = 0$	-20			V
Collector-emitter breakdown voltage	$V_{(BR)CE0}$	$I_C = -1mA, R_{BE} = \infty$	-10			V
Emitter-base breakdown voltage	$V_{(BR)EB0}$	$I_E = -10\mu A, I_C = 0$	-7			V
Output capacitance	C_{ob}	$V_{CB} = -10V, f = 1MHz$		70		pF

■ h_{FE} Classification

Marking	BC		
	E	F	G
Rank			
h_{FE}	100~200	160~320	280~560