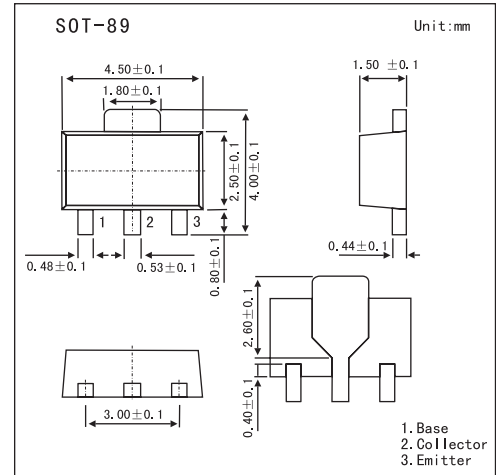


Low VCE(sat) Transistor

2SB1424

■ Features

- Low $V_{CE(sat)}$. $V_{CE(sat)} = -0.2V$ (Typ.) ($I_C/I_B = -2A / -0.1A$)
- Excellent DC current gain characteristics.
- PNP silicon transistor

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

Parameter	Symbol	Rating	Unit
Collector-base voltage	V_{CBO}	-20	V
Collector-emitter voltage	V_{CEO}	-20	V
Emitter-base voltage	V_{EBO}	-6	V
Collector current	I_C	-3	A
	I_{CP}^*	-5	A
Collector dissipation	P_C	0.5	W
Junction temperature	T_j	150	$^\circ C$
Storage temperature	T_{stg}	-55 to +150	$^\circ C$

* Single pulse $P_w=10ms$.

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

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	V_{CBO}	$I_C = -50\mu A$	-20			V
Collector-emitter breakdown voltage	V_{CEO}	$I_C = -1mA$	-20			V
Emitter-base breakdown voltage	V_{EBO}	$I_E = -50\mu A$	-6			V
Collector cutoff current	I_{CBO}	$V_{CB} = -20V$			-0.1	μA
Emitter cutoff current	I_{EBO}	$V_{EB} = -5V$			-0.1	μA
DC current gain	h_{FE}	$V_{CE} = -2V, I_C = -0.1A$	120		390	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C/I_B = -2A / -0.1A$			-0.5	V
Output capacitance	C_{ob}	$V_{CB} = -10V, I_E = 0A, f = 1MHz$		35		pF
Transition frequency	f_T	$V_{CE} = -2V, I_E = 0.5A, f = 100MHz$		240		MHz

■ h_{FE} Classification

Marking	AEQ	AER
Rank	Q	R
h_{FE}	120~270	180~390