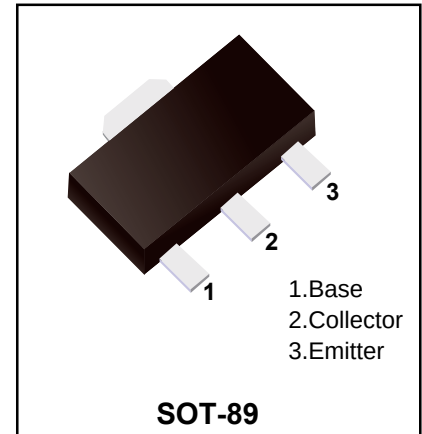


Plastic-Encapsulate Transistors

TRANSISTOR(PNP)

FEATURES

- ♦Fast switching speed
- ♦Low collector-to-emitter saturation voltage
- ♦Large current capacity and wide ASO
- ♦RoHS compliant with Halogen-free



MAXIMUM RATINGS (Ta=25°C unless otherwise noted)

Parameter	Symbol	Value	Unit
Collector-Base Voltage	V_{CBO}	-60	V
Collector-Emitter Voltage	V_{CEO}	-50	V
Emitter-Base Voltage	V_{EBO}	-6	V
Collector Current -Continuous	I_C	-3	A
Collector current (pulse)	I_{CP}	-6	A
Collector Dissipation	P_C	1	W
Junction and Storage Temperature	T_J, T_{stg}	-55 to +150	°C

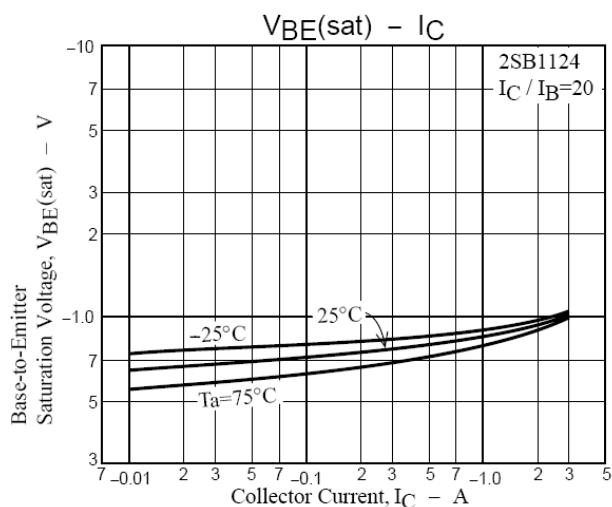
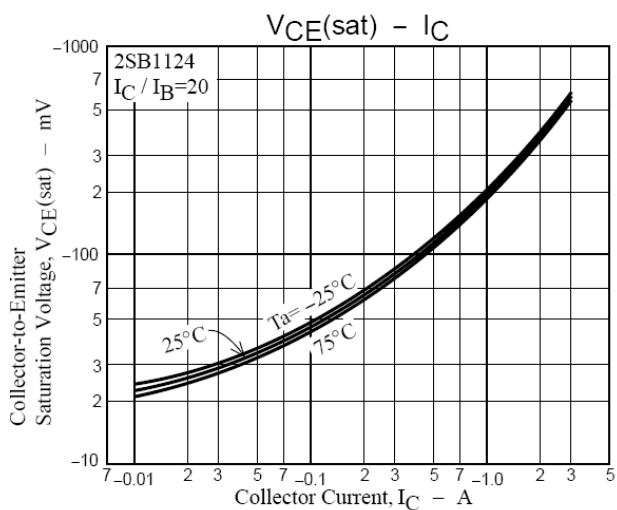
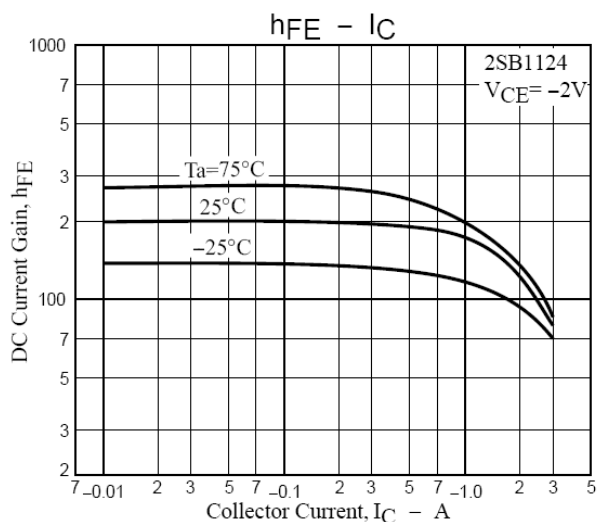
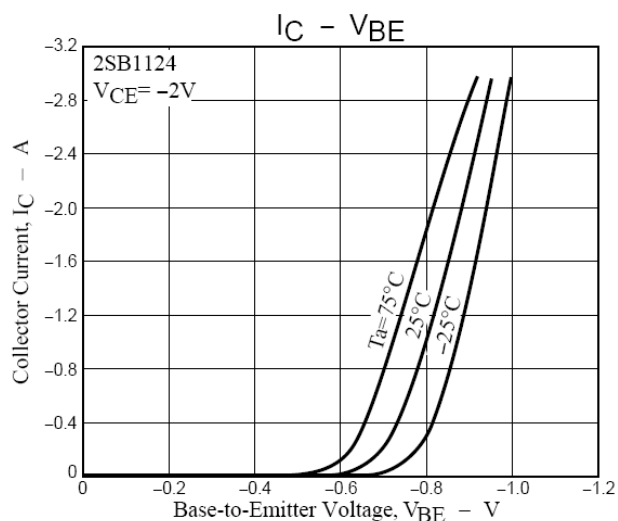
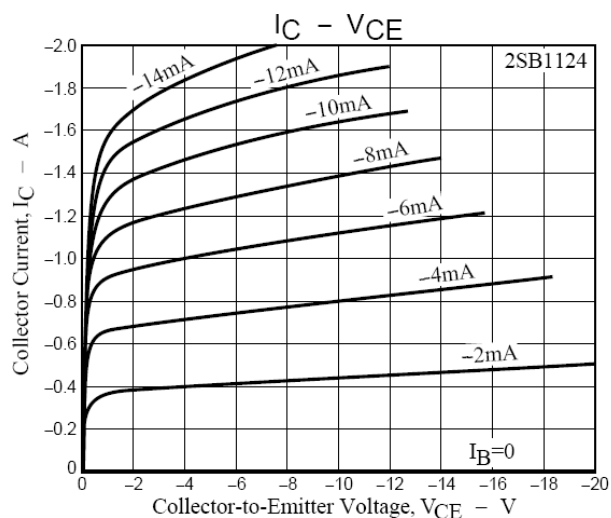
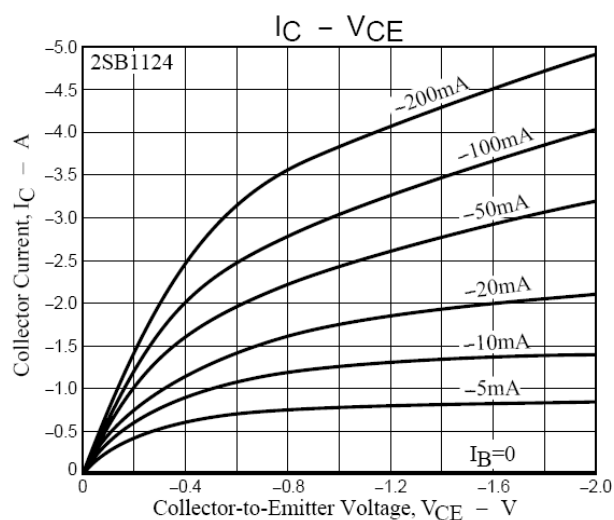
ELECTRICAL CHARACTERISTICS (Ta=25°C unless otherwise specified)

Parameter	Test conditions	Symbol	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$I_C = -10\mu A, I_E = 0$	$V_{(BR)CBO}$	-60			V
Collector-emitter breakdown voltage	$I_C = -1mA, I_B = 0$	$V_{(BR)CEO}$	-50			V
Emitter-base breakdown voltage	$I_E = -10\mu A, I_C = 0$	$V_{(BR)EBO}$	-6			V
Collector cut-off current	$V_{CB} = -40V, I_E = 0$	I_{CBO}			-1	μA
Emitter cut-off current	$V_{EB} = -4V, I_C = 0$	I_{EBO}			-	μA
DC current gain	$V_{CE} = -2V, I_C = -100mA$ $V_{CE} = -2V, I_C = -3A$	h_F	100 35		560	
Collector-emitter saturation voltage	$I_C = -2A, I_B = -100mA$	$V_{CE(sat)}$		-0.35	-0.7	V
Base-emitter saturation voltage	$I_C = -2A, I_B = -100mA$	$V_{BE(sat)}$		-0.94	-1.2	V
Transition frequency	$V_{CE} = -10V, I_C = -50mA$	f_T		150		MHz
Output Capacitance	$V_{CB} = -10V, f = 1.0MHz, I_E = 0$	C_{obo}		39		pF

CLASSIFICATION OF h_{FE}

Rank	2SB1124SI-R	2SB1124SI-S	2SB1124SI-T	2SB1124SI-U
Range	100-200	140-280	200-400	280-560
MARKING	BG			

Typical Characteristics



Ordering information

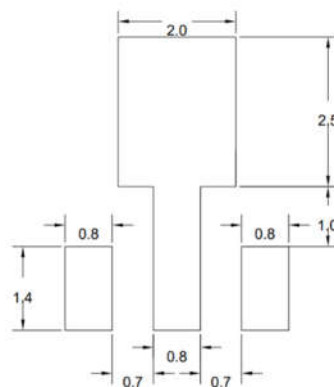
Package	Packing Description	Base Quantity	Packing Quantity
SOT-89	Tape/Reel, 7" reel	1000pcs/Reel	6000PCS/Box 30000PCS/Carton

Package Dimensions

SOT-89

Dim	Millimeter		Inches	
	Min.	Max.	Min.	Max.
A	1.40	1.60	0.055	0.063
b	0.32	0.52	0.013	0.020
b1	0.38	0.58	0.015	0.023
c	0.35	0.45	0.014	0.018
D	4.40	4.60	0.173	0.181
D1	1.45	1.65	0.057	0.065
D2	1.70	1.80	0.067	0.071
E	2.30	2.60	0.091	0.102
E1	3.95	4.25	0.156	0.167
E2	1.80	2.00	0.071	0.079
e	1.40	1.60	0.055	0.063
e1	2.80	3.20	0.110	0.126
L	0.90	1.20	0.035	0.047

The recommended mounting pad size



UNIT:MM

Disclaimer

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