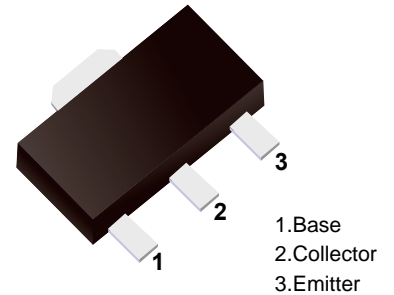


■ PNP Transistors

■ Features

- Excellent DC current gain
- Low collector-emitter saturation voltage
- Complementary to 2SD2150



■ Simplified outline(SOT-89)

■ 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>EBO</sub>	-6	
Collector Current - Continuous	I <sub>c</sub>	-3	A
Collector Power Dissipation	P <sub>c</sub>	500	mW
Thermal Resistance From Junction To Ambient	R <sub>θJA</sub>	250	°C/W
Junction Temperature	T <sub>J</sub>	150	°C
Storage Temperature range	T <sub>stg</sub>	-55 to 150	

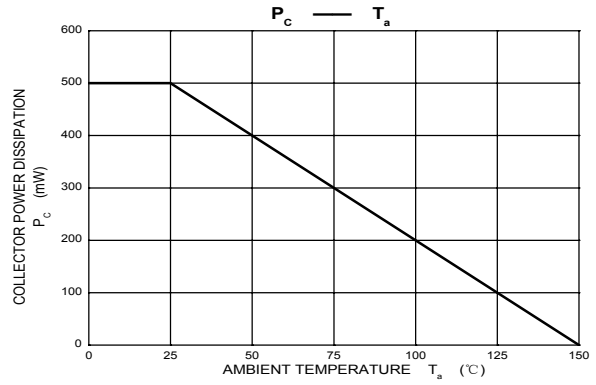
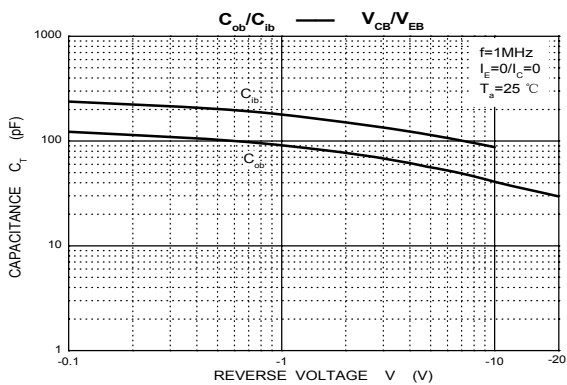
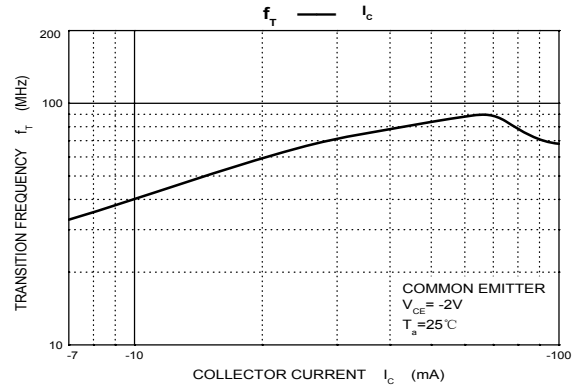
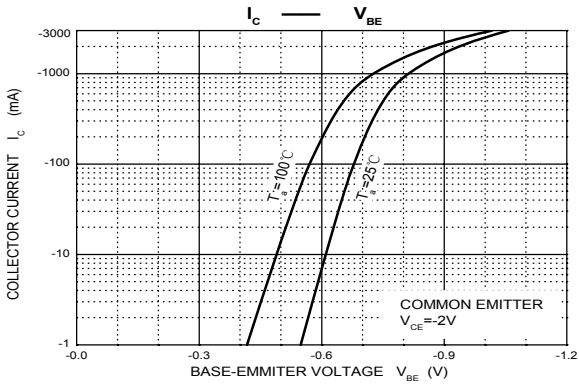
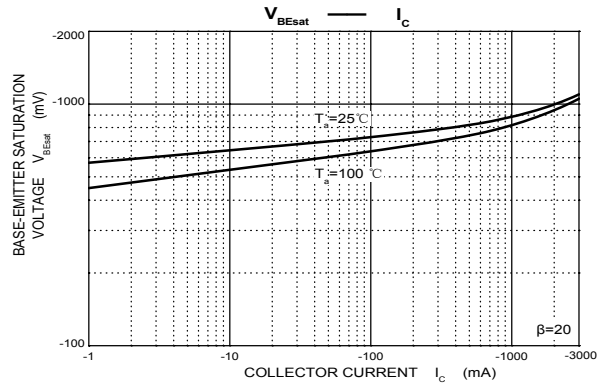
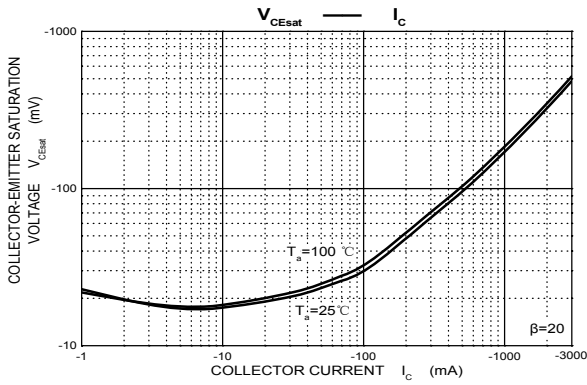
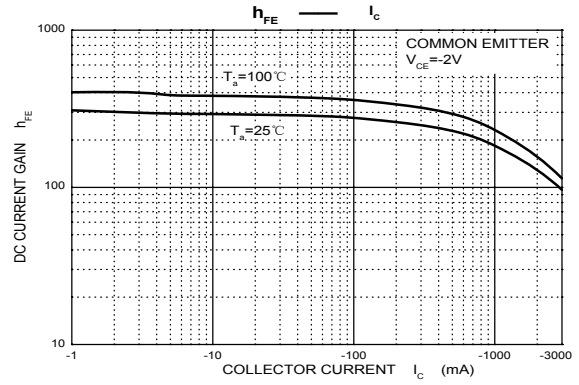
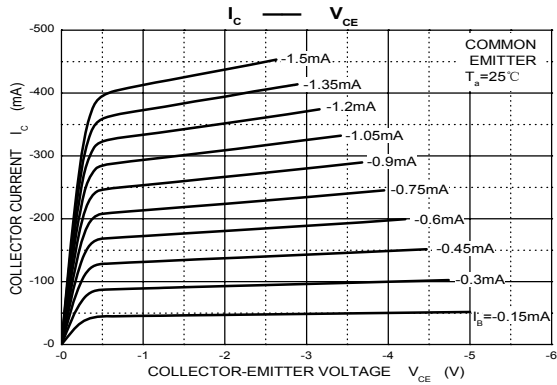
■ Electrical Characteristics Ta = 25°C

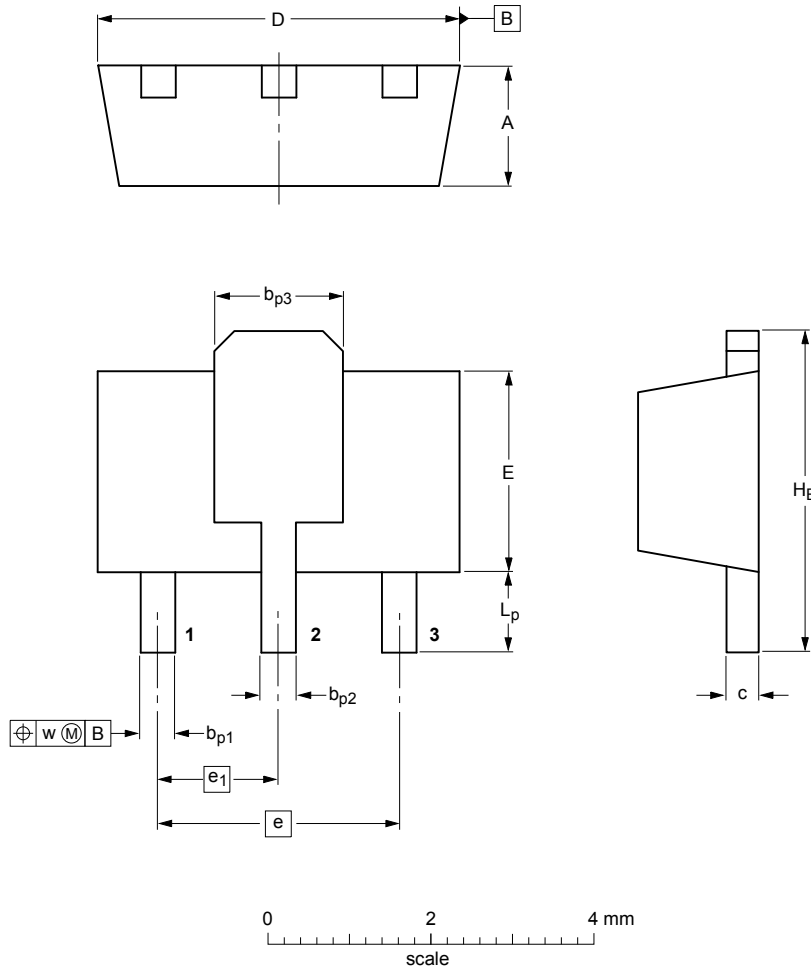
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector- base breakdown voltage	V <sub>CB0</sub>	I <sub>c</sub> = -100 μA, I <sub>E</sub> =0	-20			V
Collector- emitter breakdown voltage	V <sub>CEO</sub>	I <sub>c</sub> = -1 mA, I <sub>B</sub> =0	-20			
Emitter - base breakdown voltage	V <sub>EBO</sub>	I <sub>E</sub> = -100 μA, I <sub>c</sub> =0	-6			
Collector-base cut-off current	I <sub>CB0</sub>	V <sub>CB</sub> = -20V, I <sub>E</sub> =0			-0.1	μA
Emitter cut-off current	I <sub>EBO</sub>	V <sub>EB</sub> = -5V, I <sub>c</sub> =0			-0.1	
Collector-emitter saturation voltage	V <sub>CE(sat)</sub>	I <sub>c</sub> =-2 A, I <sub>B</sub> =-100 mA			-0.5	V
Base - emitter saturation voltage	V <sub>BE(sat)</sub>	I <sub>c</sub> =-2 A, I <sub>B</sub> =-100 mA			-1.2	
DC current gain	h <sub>FE</sub>	V <sub>CE</sub> = -2V, I <sub>c</sub> = -100 mA	120		390	
Collector output capacitance	C <sub>ob</sub>	V <sub>CB</sub> = -10V, I <sub>E</sub> = 0, f=1MHz		35		pF
Transition frequency	f <sub>T</sub>	V <sub>CE</sub> = -2V, I <sub>c</sub> = -500 mA, f=100MHz		240		MHz

■ Classification of h<sub>FE</sub>

Type	2SB1424-Q	2SB1424-R
Range	120-270	180-390
Marking	AEQ	AER

■ Typical Characteristics





DIMENSIONS (mm are the original dimensions)

UNIT	A	$b_{p1}$	$b_{p2}$	$b_{p3}$	c	D	E	e	$e_1$	$H_E$	$L_p$	w
mm	1.6 1.4	0.48 0.35	0.53 0.40	1.8 1.4	0.44 0.23	4.6 4.4	2.6 2.4	3.0	1.5	4.25 3.75	1.2 0.8	0.13

### Summary of Packing Options

Package	Package Description	Packing Quantity	Industry Standard
SOT-89	Tape/Reel, 7" reel	1000	EIA-481-1