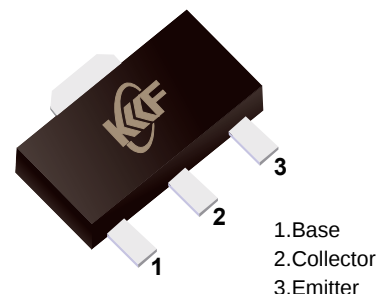


2SB1424

PNP Transistors

Features

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



■ Simplified outline(SOT-89)

Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

Parameter	Symbol	Rating	Unit
Collector - Base Voltage	V_{CB0}	-20	V
Collector - Emitter Voltage	V_{CE0}	-20	
Emitter - Base Voltage	V_{EB0}	-6	
Collector Current - Continuous	I_C	-3	A
Collector Power Dissipation	P_C	500	mW
Thermal Resistance From Junction To Ambient	$R_{\theta JA}$	250	$^\circ\text{C}/\text{W}$
Junction Temperature	T_J	150	$^\circ\text{C}$
Storage Temperature range	T_{stg}	-55 to 150	

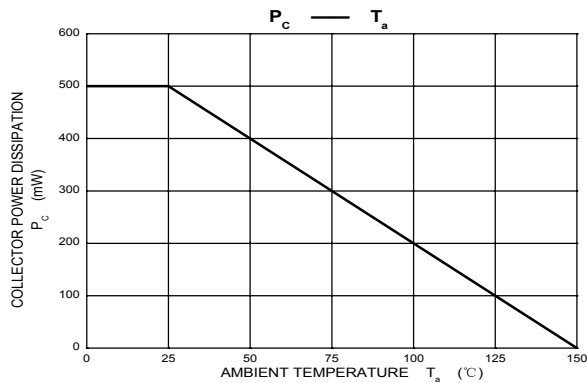
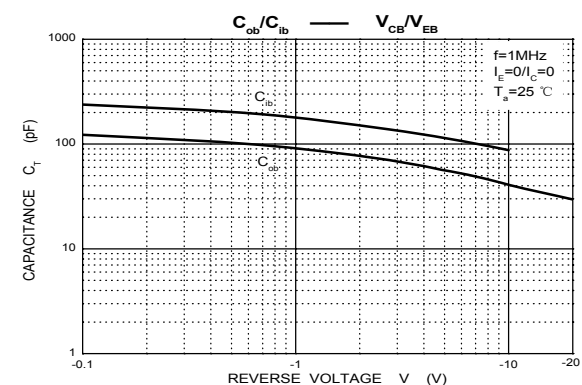
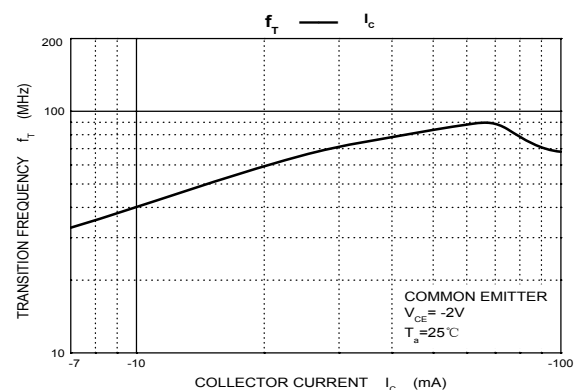
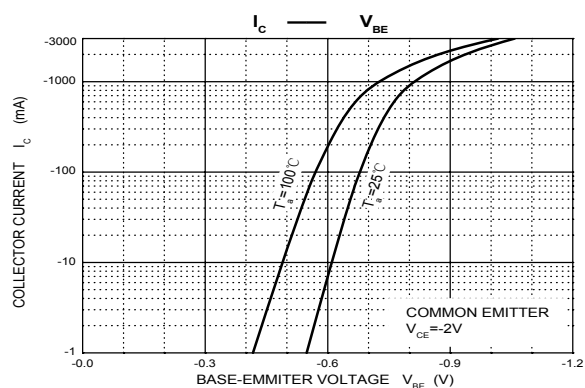
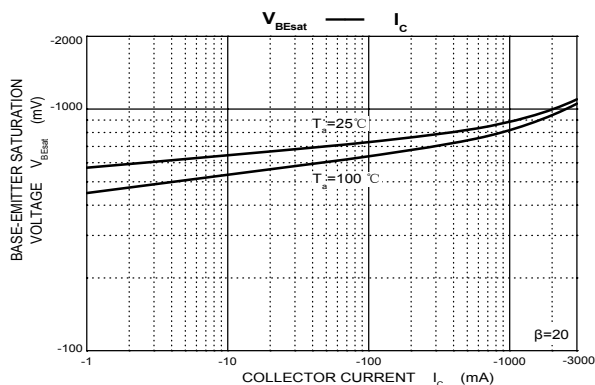
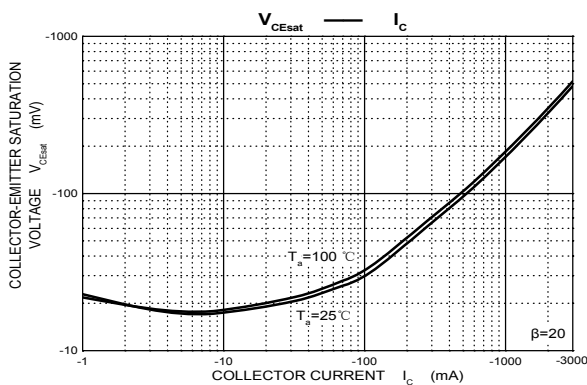
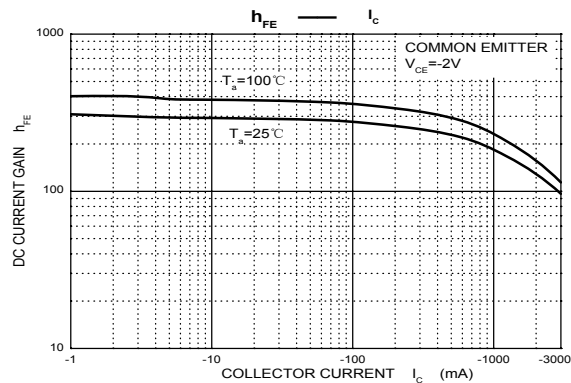
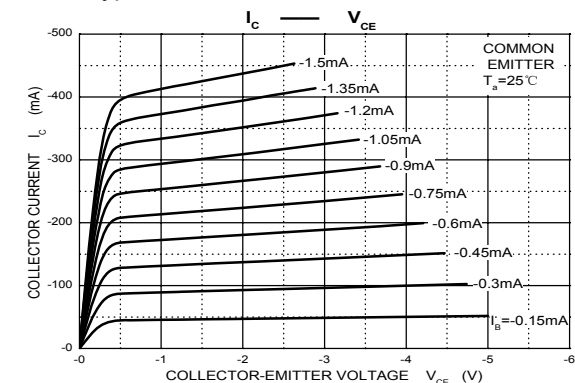
Electrical Characteristics $T_a = 25^\circ\text{C}$

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector- base breakdown voltage	V_{CB0}	$I_C = -100 \mu\text{A}, I_E = 0$	-20			V
Collector- emitter breakdown voltage	V_{CE0}	$I_C = -1 \text{ mA}, I_B = 0$	-20			
Emitter - base breakdown voltage	V_{EB0}	$I_E = -100 \mu\text{A}, I_C = 0$	-6			
Collector-base cut-off current	I_{CBO}	$V_{CB} = -20\text{V}, I_E = 0$			-0.1	μA
Emitter cut-off current	I_{EBO}	$V_{EB} = -5\text{V}, I_C = 0$			-0.1	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -2 \text{ A}, I_B = -100 \text{ mA}$			-0.5	V
Base - emitter saturation voltage	$V_{BE(sat)}$	$I_C = -2 \text{ A}, I_B = -100 \text{ mA}$			-1.2	
DC current gain	h_{FE}	$V_{CE} = -2\text{V}, I_C = -100 \text{ mA}$	120		390	
Collector output capacitance	C_{ob}	$V_{CB} = -10\text{V}, I_E = 0, f = 1\text{MHz}$		35		pF
Transition frequency	f_T	$V_{CE} = -2\text{V}, I_C = -500 \text{ mA}, f = 100\text{MHz}$		240		MHz

Classification of h_{FE}

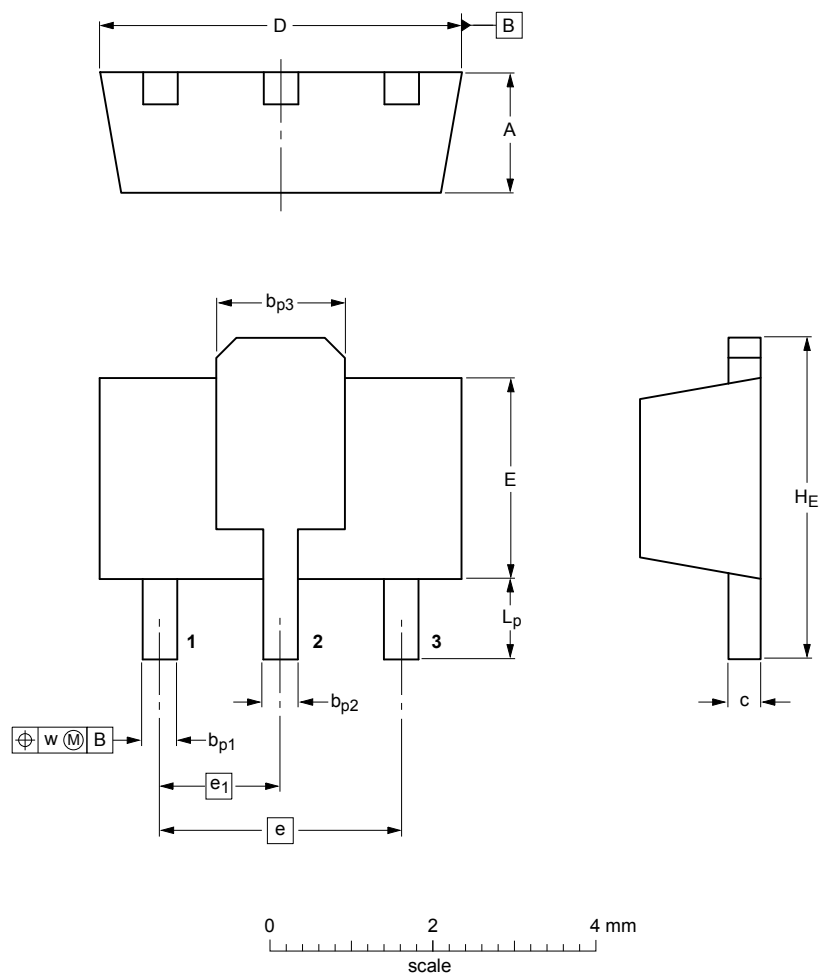
Type	2SB1424-Q	2SB1424-R
Range	120-270	180-390
Marking	AEQ	AER

■ Typical Characteristics



2SB1424

■ SOT-89



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