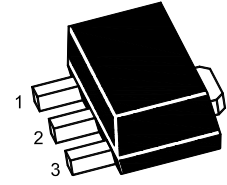


2SB1124U

PNP Silicon Epitaxial Planar Transistor



1.Base 2.Collector 3.Emitter
SOT-89 Plastic Package

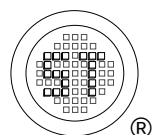
Absolute Maximum Ratings ($T_a = 25^\circ\text{C}$)

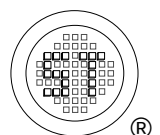
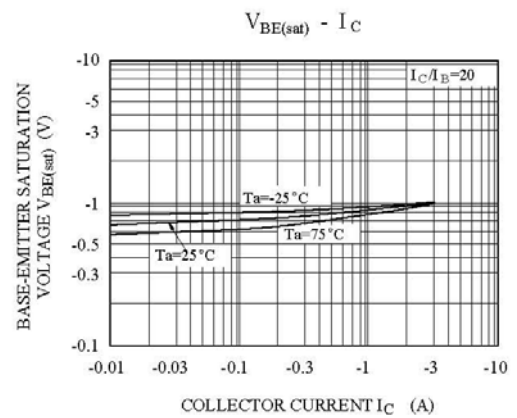
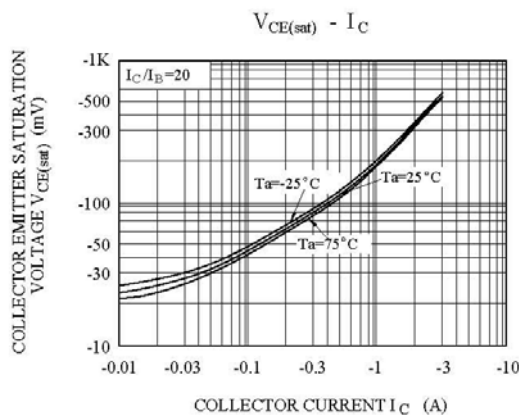
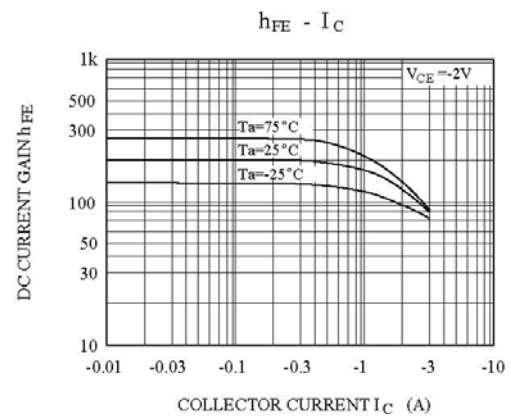
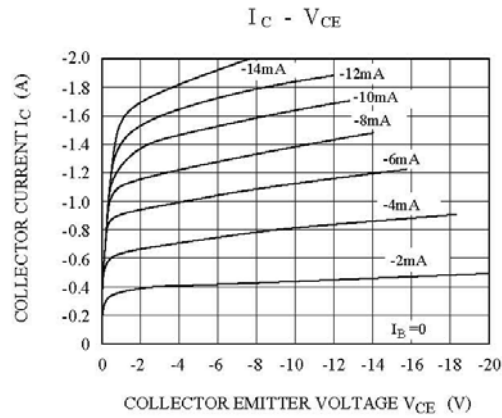
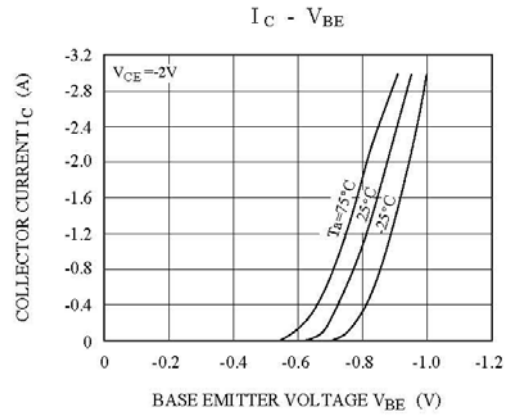
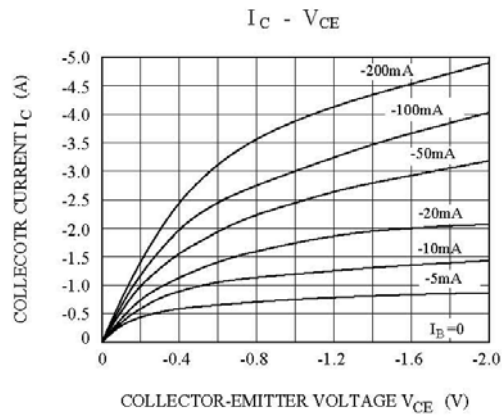
Parameter	Symbol	Value	Unit
Collector Base Voltage	$-V_{CBO}$	60	V
Collector Emitter Voltage	$-V_{CEO}$	50	V
Emitter Base Voltage	$-V_{EBO}$	6	V
Collector Current	$-I_C$	3	A
Collector Current (Pulse)	$-I_{CP}$	6	A
Collector Power Dissipation	P_C	0.5 1 ¹⁾	W
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	- 55 to + 150	$^\circ\text{C}$

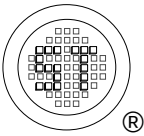
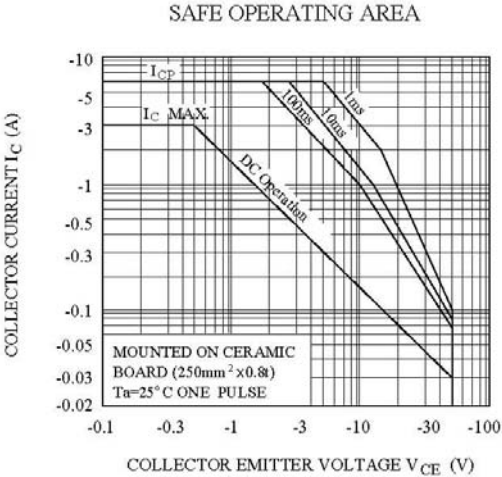
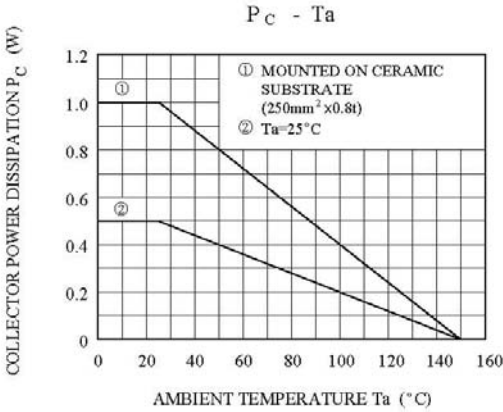
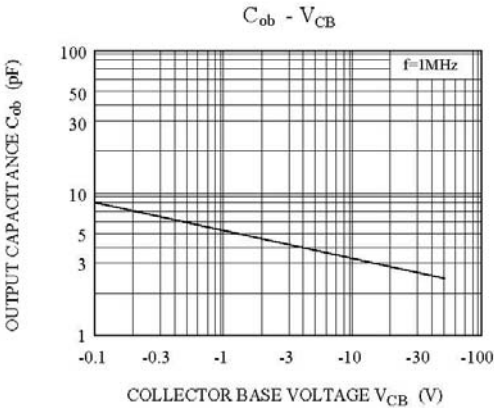
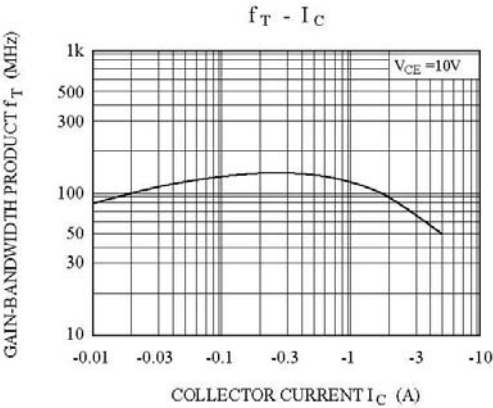
¹⁾ Package mounted on ceramic substrate (250 mm² x 0.8 t)

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

Parameter	Symbol	Min.	Typ.	Max.	Unit
DC Current Gain					
at $-V_{CE} = 2\text{ V}$, $-I_C = 100\text{ mA}$					
Current Gain Group	A	100	-	200	-
	B	140	-	280	-
	C	200	-	400	-
at $-V_{CE} = 2\text{ V}$, $-I_C = 3\text{ A}$		35	-	-	-
Collector Base Cutoff Current	$-I_{CBO}$	-	-	1	μA
at $-V_{CB} = 40\text{ V}$					
Emitter Base Cutoff Current	$-I_{EBO}$	-	-	1	μA
at $-V_{EB} = 4\text{ V}$					
Collector Emitter Saturation Voltage	$-V_{CE(sat)}$	-	-	0.7	V
at $-I_C = 2\text{ A}$, $-I_B = 100\text{ mA}$					
Base Emitter Saturation Voltage	$-V_{BE(sat)}$	-	-	1.2	V
at $-I_C = 2\text{ A}$, $-I_B = 100\text{ mA}$					
Transition Frequency	f_T	-	150	-	MHz
at $-V_{CE} = 10\text{ V}$, $-I_C = 50\text{ mA}$					
Output Capacitance	C_{ob}	-	39	-	pF
at $-V_{CB} = 10\text{ V}$, $f = 1\text{ MHz}$					
Turn on Time	t_{on}	-	40	-	ns
at $-V_{CC} = 10\text{ V}$, $-I_C = 500\text{ mA}$, $-I_{B1} = -I_{B2} = 50\text{ mA}$					
Turn off Time	t_{off}	-	450	-	ns
at $-V_{CC} = 10\text{ V}$, $-I_C = 500\text{ mA}$, $-I_{B1} = -I_{B2} = 50\text{ mA}$					

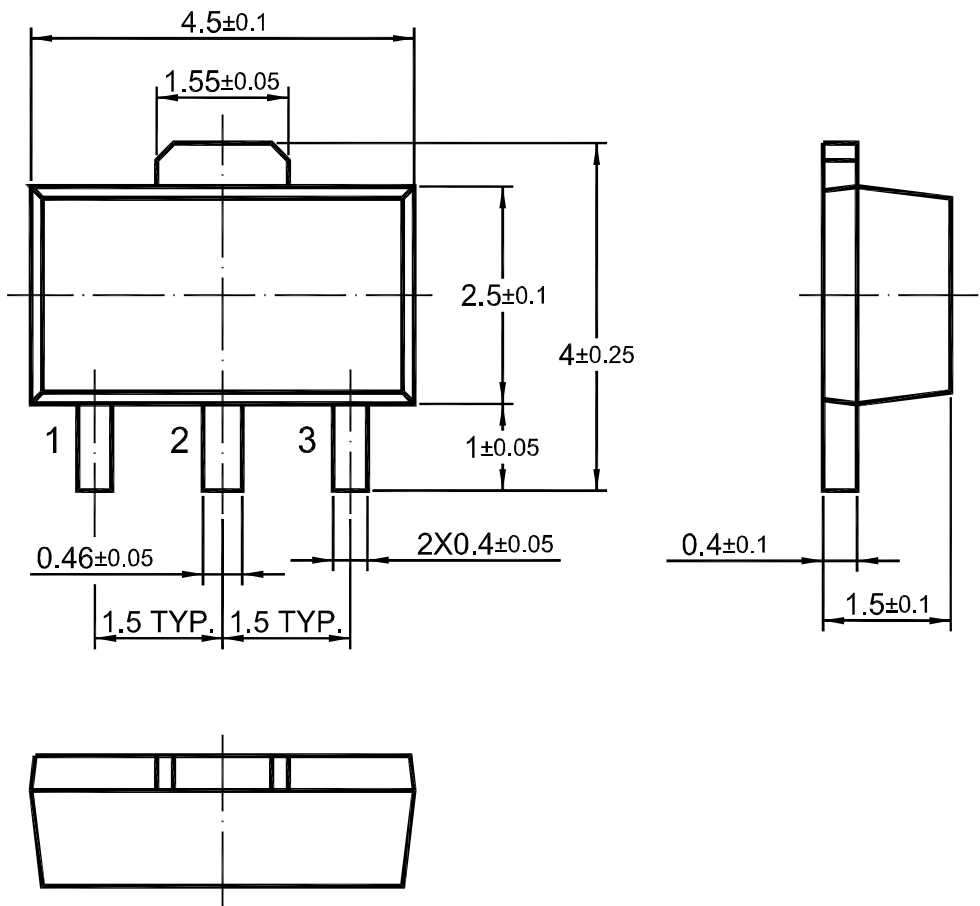






2SB1124U

SOT-89 PACKAGE OUTLINE



Dimensions in mm

