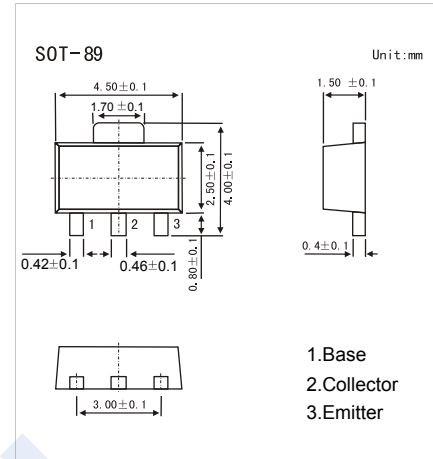
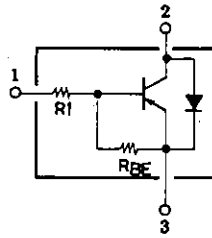


PNP Transistors

2SB1394

■ Features

- Contains diode between collector and emitter.
- Low saturation voltage.
- Large current capacity.
- Complementary to 2SD2099



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

Parameter	Symbol	Rating	Unit
Collector - Base Voltage	V_{CB0}	-40	V
Collector - Emitter Voltage	V_{CE0}	-30	
Emitter - Base Voltage	V_{EB0}	-6	
Collector Current - Continuous	I_C	-3	A
Collector Current - Pulse	I_{CP}	-5	
Collector Power Dissipation	P_C	1.5	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}	$I_C = -100 \mu\text{A}$, $I_E = 0$	-40			V
Collector- emitter breakdown voltage	V_{CE0}	$I_C = -10 \text{ mA}$, $R_{BE} = \infty$	-30			
Emitter - base breakdown voltage	V_{EB0}	$I_E = -100 \mu\text{A}$, $I_C = 0$	-6			
Collector-base cut-off current	I_{CB0}	$V_{CB} = -35 \text{ V}$, $I_E = 0$			-1	μA
Emitter cut-off current	I_{EB0}	$V_{EB} = -5 \text{ V}$, $I_C = 0$			-0.1	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -1 \text{ A}$, $I_B = -50 \text{ mA}$			-0.3	V
Base - emitter saturation voltage	$V_{BE(sat)}$	$I_C = -1 \text{ A}$, $I_B = -50 \text{ mA}$			-1.2	
DC current gain	$h_{FE(1)}$	$V_{CE} = -2 \text{ V}$, $I_C = -500 \text{ mA}$	70			
	$h_{FE(2)}$	$V_{CE} = -2 \text{ V}$, $I_C = -2 \text{ A}$	50			
Base-to-Emitter Resistance	R_{BE}			0.8		$\text{k}\Omega$
Base Resistance	R_1		60		120	Ω
Diode Forward Voltage	V_F	$I_F = 500 \text{ mA}$			1.5	V
Collector output capacitance	C_{ob}	$V_{CB} = -10 \text{ V}$, $I_E = 0$, $f = 1 \text{ MHz}$		55		pF
Transition frequency	f_T	$V_{CE} = -2 \text{ V}$, $I_C = -500 \text{ mA}$		100		MHz

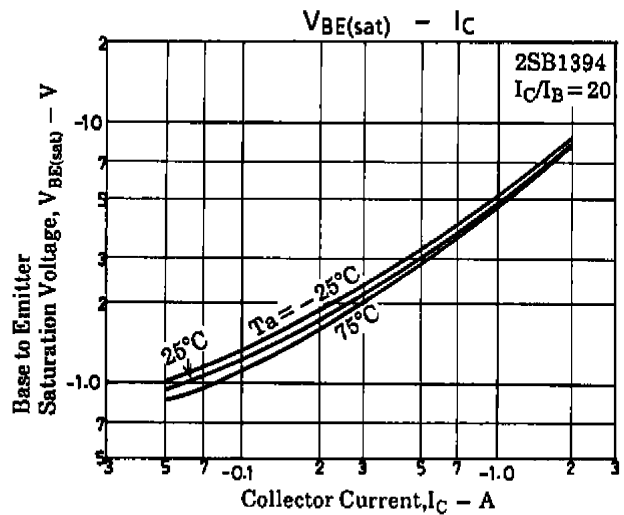
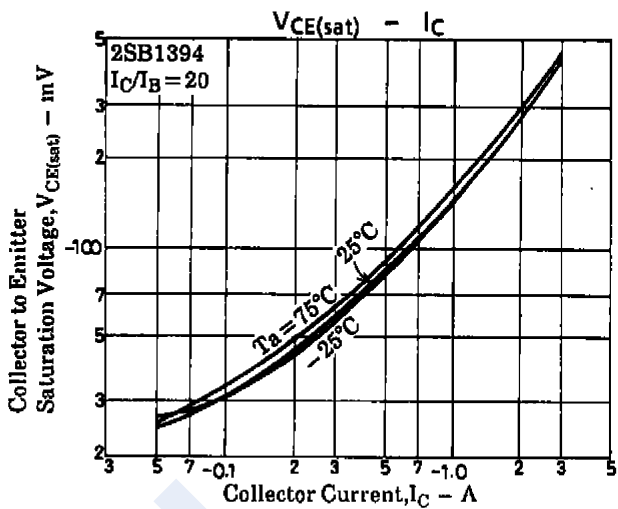
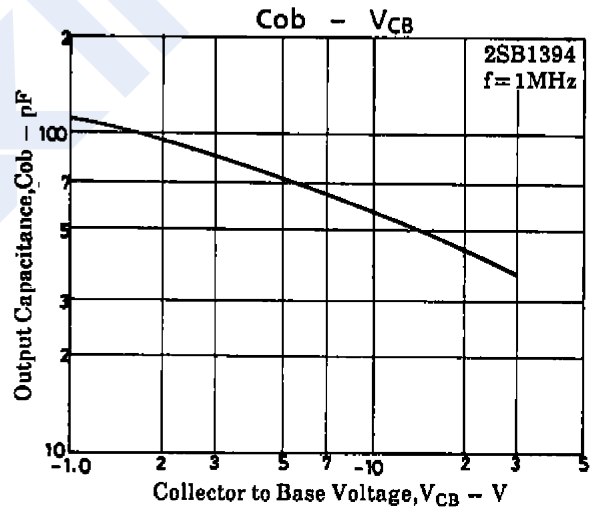
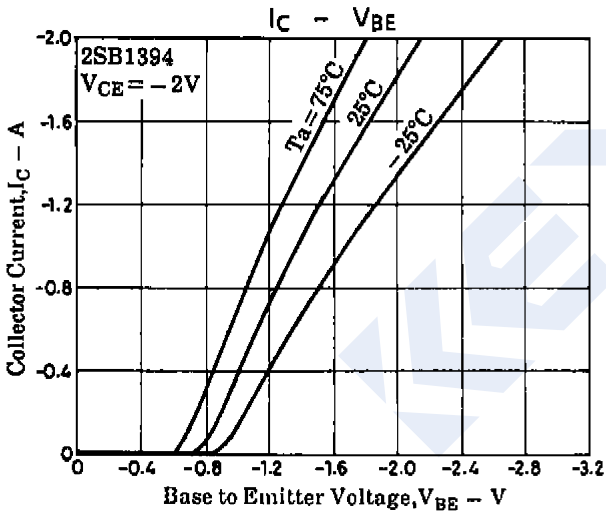
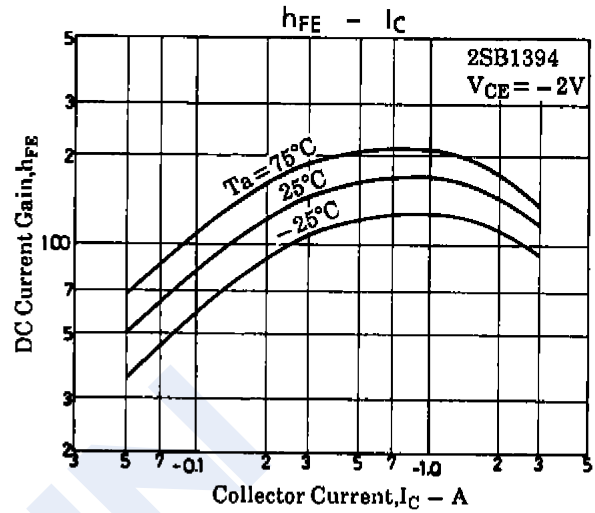
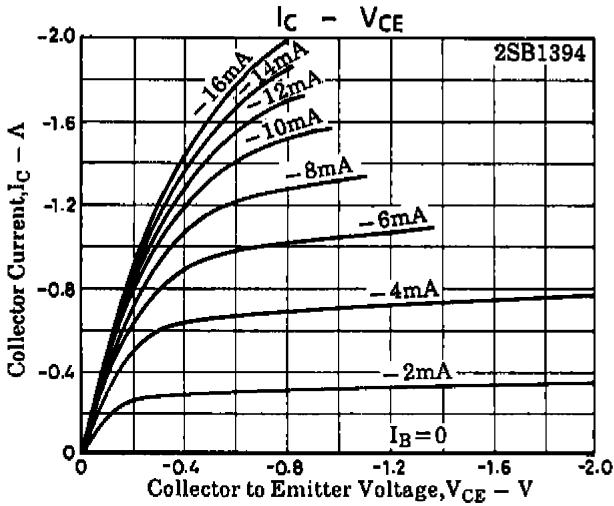
■ Marking

Marking	BN
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PNP Transistors

2SB1394

■ Typical Characteristics



PNP Transistors

2SB1394

■ Typical Characteristics

