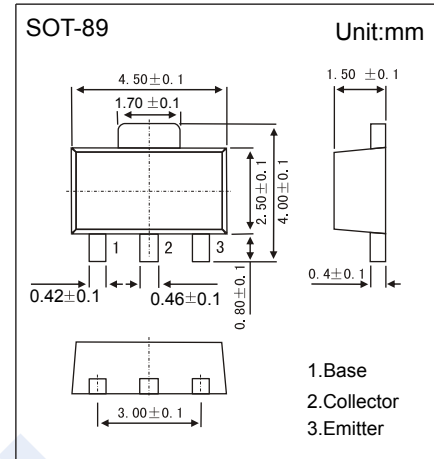


PNP Transistors

2SB1440

■ Features

- Collector Current Capability $I_C = -2A$
- Collector Emitter Voltage $V_{CE0} = -50V$
- Complementary to 2SD2185



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

Parameter	Symbol	Rating	Unit
Collector - Base Voltage	V_{CB0}	-50	V
Collector - Emitter Voltage	V_{CE0}	-50	
Emitter - Base Voltage	V_{EB0}	-5	
Collector Current - Continuous	I_C	-2	A
Collector Current - Pulse	I_{CP}	-3	
Collector Power Dissipation	P_D	1	W
Junction Temperature	T_J	150	$^\circ C$
Storage Temperature range	T_{stg}	-55 to 150	

■ Electrical Characteristics $T_a = 25^\circ C$

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector- base breakdown voltage	V_{CB0}	$I_C = -100 \mu A, I_E = 0$	-50			V
Collector- emitter breakdown voltage	V_{CE0}	$I_C = -1 mA, I_B = 0$	-50			
Emitter - base breakdown voltage	V_{EB0}	$I_E = -100 \mu A, I_C = 0$	-5			
Collector-base cut-off current	I_{CB0}	$V_{CB} = -50V, I_E = 0$			-0.1	μA
Emitter cut-off current	I_{EB0}	$V_{EB} = -5V, I_C = 0$			-0.1	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -1 A, I_B = -50mA$			-0.3	V
Base - emitter saturation voltage	$V_{BE(sat)}$	$I_C = -1 A, I_B = -50mA$			-1.2	
DC current gain	h_{FE}	$V_{CE} = -2V, I_C = -200mA$	120		340	
		$V_{CE} = -2V, I_C = -1 A$	60			
Collector output capacitance	C_{ob}	$V_{CB} = -10V, I_E = 0, f = 1MHz$			60	pF
Transition frequency	f_T	$V_{CB} = -10V, I_E = 50mA, f = 200MHz$		80		MHz

■ Classification of $h_{FE}(1)$

Type	2SB1440-R	2SB1440-S
Range	120-240	170-340
Marking	11R	11S

PNP Transistors

2SB1440

Typical Characteristics

