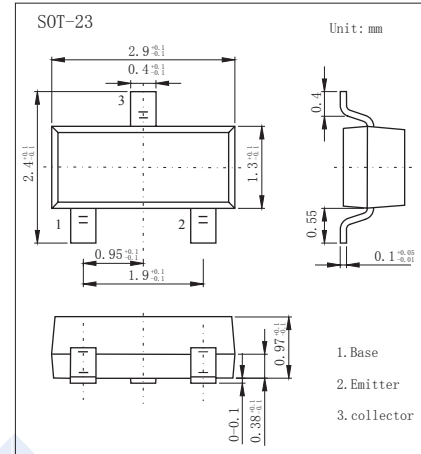


PNP Transistors

2SB831

■ Features

- Collector Current Capability $I_C = -0.7A$
- Collector Emitter Voltage $V_{CE0} = -20V$
- Complementary to 2SD1101



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

Parameter	Symbol	Rating	Unit
Collector - Base Voltage	V_{CB0}	-25	V
Collector - Emitter Voltage	V_{CE0}	-20	
Emitter - Base Voltage	V_{EB0}	-5	
Collector Current - Continuous	I_C	-0.7	A
Collector Current - Pulse	I_{CP}	-1	
Collector Power Dissipation	P_C	150	mW
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}	$I_C = -100 \mu A, I_E = 0$	-25			V
Collector- emitter breakdown voltage	V_{CE0}	$I_C = -1 mA, I_B = 0$	-20			
Emitter - base breakdown voltage	V_{EB0}	$I_E = -100 \mu A, I_C = 0$	-5			
Collector-base cut-off current	I_{CB0}	$V_{CB} = -20 V, I_E = 0$			-1	μA
Emitter cut-off current	I_{EB0}	$V_{EB} = -5V, I_C = 0$			-0.1	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -500mA, I_B = -50mA$			-0.5	V
Base - emitter saturation voltage	$V_{BE(sat)}$	$I_C = -500mA, I_B = -50mA$			-1.2	
Base - emitter voltage	V_{BE}	$V_{CE} = -1V, I_C = -150mA$			-1	
DC current gain	h_{FE}	$V_{CE} = -1V, I_C = -150mA$	85		240	

■ Classification of h_{FE}

Type	2SB831-B	2SB831-C
Range	85-170	120-240
Marking	BB	BC