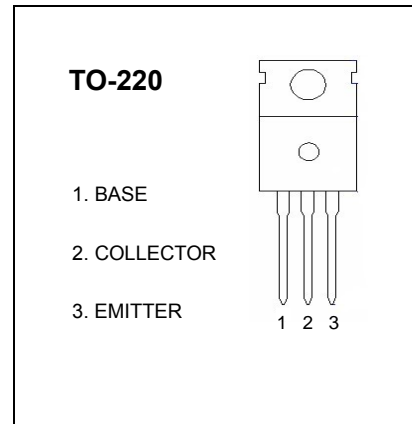


**TO-220 Plastic-Encapsulate Transistors**

**2SB834** TRANSISTOR (PNP)

**FEATURES**

- Low Collector -Emitter Saturation Voltage  
 $V_{CE(sat)}=1.0V(\text{Max})@ I_C=-3A, I_B=-0.3A$
- DC current Gain  
 $h_{FE} =60-200@ I_C=0.5A$
- Complementary to NPN 2SD880



**MAXIMUM RATINGS (T<sub>a</sub>=25°C unless otherwise noted)**

Symbol	Parameter	Value	Unit
V <sub>CB0</sub>	Collector- Base Voltage	-60	V
V <sub>CEO</sub>	Collector-Emitter Voltage	-60	V
V <sub>EBO</sub>	Emitter-Base Voltage	-7	V
I <sub>C</sub>	Collector Current -Continuous	-3	A
P <sub>C</sub>	Collector Power Dissipation	1.5	W
T <sub>J</sub>	Junction Temperature	150	°C
T <sub>stg</sub>	Storage Temperature	-55-150	°C

**ELECTRICAL CHARACTERISTICS (T<sub>a</sub>=25°C unless otherwise specified)**

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	V <sub>(BR)CBO</sub>	I <sub>C</sub> =-1mA, I <sub>E</sub> =0	-60			V
Collector-emitter breakdown voltage	V <sub>(BR)CEO</sub>	I <sub>C</sub> =-50mA, I <sub>B</sub> =0	-60			V
Emitter-base breakdown voltage	V <sub>(BR)EBO</sub>	I <sub>E</sub> =-1mA, I <sub>C</sub> =0	-7			V
Collector cut-off current	I <sub>CBO</sub>	V <sub>CB</sub> =-60V, I <sub>E</sub> =0			-100	μA
Emitter cut-off current	I <sub>EBO</sub>	V <sub>EB</sub> =-7V, I <sub>C</sub> =0			-100	μA
DC current gain	h <sub>FE(1)*</sub>	V <sub>CE</sub> =-5V, I <sub>C</sub> =-500mA	60		200	
	h <sub>FE(2)*</sub>	V <sub>CE</sub> =-5V, I <sub>C</sub> =-3A	20			
Collector-emitter saturation voltage	V <sub>CE(sat)*</sub>	I <sub>C</sub> =-3A, I <sub>B</sub> =-0.3A			-1	V
Base-emitter voltage	V <sub>BE*</sub>	V <sub>CE</sub> =-5V, I <sub>C</sub> =-500mA			-1	V
Transition frequency	f <sub>T</sub>	V <sub>CE</sub> =-5V, I <sub>C</sub> =-500mA, f=1MHz		9		MHz
Turn-on Time	t <sub>on</sub>	V <sub>CC</sub> =-30V, I <sub>C</sub> =-2A, I <sub>B1</sub> =I <sub>B2</sub> =-0.2A		0.4		μs
Storage Time	t <sub>stg</sub>			1.7		μs
Turn-off Time	t <sub>off</sub>			0.5		μs

\*Pulse test.

**CLASSIFICATION OF h<sub>FE(1)</sub>**

Rank	O	Y
Range	60-120	100-200