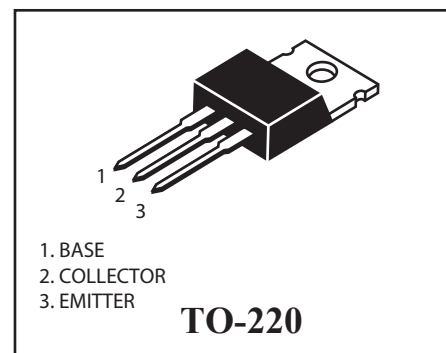
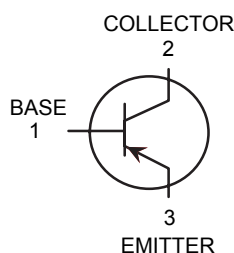


### PNP Silicon Epitaxial Power Transistor

**(Pb)** Lead(Pb)-Free

#### Features:

- \* DC Current Gain  $h_{FE} = 60-200$  @  $I_C = 0.5A$
- \* Low  $V_{CE(sat)} \leq 1.0V(MAX)$  @  $I_C = 3.0A, I_B = 0.3A$
- \* Complementary to NPN 2SD880



#### ABSOLUTE MAXIMUM RATINGS ( $T_A=25^\circ C$ )

Rating	Symbol	Value	Unit
Collector to Base Voltage	$V_{CBO}$	-60	V
Collector to Emitter Voltage	$V_{CEO}$	-60	V
Collector to Base Voltage	$V_{EBO}$	-7.0	V
Collector Current	$I_C$	-3.0	A
Total Device Dissipation $T_A=25^\circ C$ $T_C=25^\circ C$ Derate above $25^\circ C$	$P_D$	1.5 30 0.24	W W/ $^\circ C$
Junction Temperature	$T_J$	+150	$^\circ C$
Storage Temperature	$T_{stg}$	-55 to +150	$^\circ C$

#### ELECTRICAL CHARACTERISTICS

Characteristics	Symbol	Min	Max	Max	Unit
Collector-Base Breakdown Voltage $I_C=-100\mu A, I_E=0$	$BV_{CBO}$	-60	-	-	V
Collector-Emitter Breakdown Voltage $I_C=-50mA, I_B=0$	$BV_{CEO}$	-60	-	-	V
Emitter-Base Breakdown Voltage $I_E=-100\mu A, I_C=0$	$BV_{EBO}$	-7.0	-	-	V
Collector Cut-Off Current $V_{CB}=-60V, I_E=0$	$I_{CBO}$	-	-	-100	$\mu A$
Emitter-Cut-Off Current $V_{EB}=-7V, I_C=0$	$I_{EBO}$	-	-	-100	$\mu A$

# 2SB834



## ELECTRICAL CHARACTERISTICS (T<sub>A</sub>=25°C Unless otherwise noted)

Characteristic	Symbol	Min	Typ	Max	Unit
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### ON CHARACTERISTICS

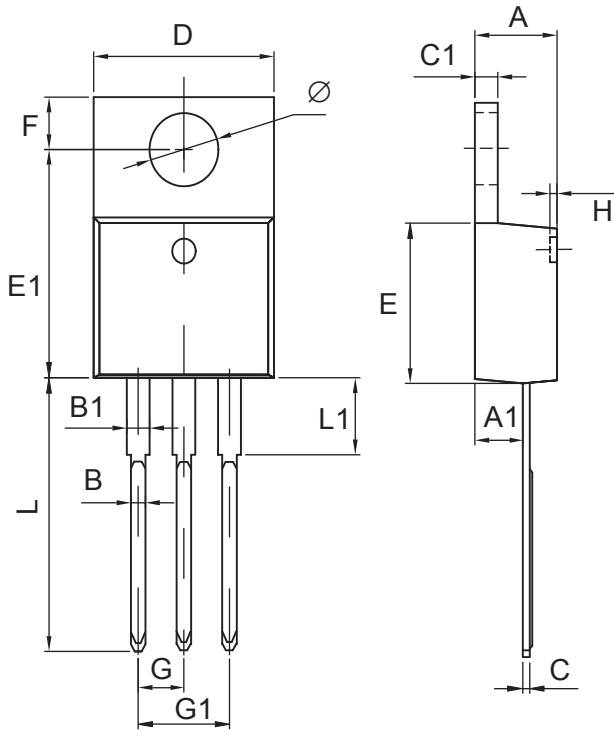
DC Current Gain V <sub>CE</sub> = -5V, I <sub>C</sub> = -500mA V <sub>CE</sub> = -5V, I <sub>C</sub> = -3A	h <sub>FE1</sub> h <sub>FE2</sub>	60 20	- -	200 -	-
Collector-Emitter Saturation Voltage I <sub>C</sub> = -3A, I <sub>B</sub> = -0.3A	V <sub>CE(sat)</sub>	-	-	-1.0	V
Base-Emitter On Voltage V <sub>CE</sub> = -5V, I <sub>C</sub> = -500mA	V <sub>BE</sub>	-	-	-1.0	V
Transition Frequency V <sub>CE</sub> = -5V, I <sub>C</sub> = -500mA	f <sub>T</sub>	-	9	-	MHz
Transition Frequency V <sub>CB</sub> = -10V, I <sub>E</sub> = 0, f=1MHz	C <sub>ob</sub>	-	150	-	pF
Turn-on Time V <sub>CC</sub> = -30V, I <sub>C</sub> = -2A, I <sub>B1</sub> =I <sub>B2</sub> = -0.2A	t <sub>on</sub>	-	0.4	-	μs
Storage Time V <sub>CC</sub> = -30V, I <sub>C</sub> = -2A, I <sub>B1</sub> =I <sub>B2</sub> = -0.2A	t <sub>stg</sub>	-	1.7	-	
Turn-off Time V <sub>CC</sub> = -30V, I <sub>C</sub> = -2A, I <sub>B1</sub> =I <sub>B2</sub> = -0.2A	t <sub>off</sub>	-	0.5	-	

### ON CHARACTERISTICS

Rank	O	Y
Range	60-120	100-200

## TO-220 Outline Dimensions

unit:mm



TO-220		
Dim	Min	Max
A	4.47	4.67
A1	2.52	2.82
B	0.71	0.91
B1	1.17	1.37
C	0.31	0.53
C1	1.17	1.37
D	10.01	10.31
E	8.50	8.90
E1	12.06	12.446
G	2.54 TYP	
G1	4.98	5.18
F	2.59	2.89
H	0.00	0.30
L	13.4	13.8
L1	3.56	3.96
Φ	3.73	3.93