



## Silicon NPN Triple Diffused Planar Transistor

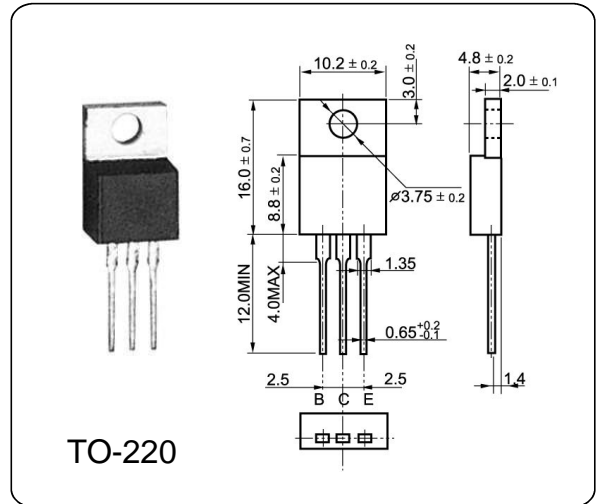
## 2SC3834

### DESCRIPTION

It is intended for use in power amplifier and switching applications.

### ABSOLUTE MAXIMUM RATINGS ( Ta = 25 °C)

Parameter	Symbol	Value	Unit
Collector-Base Voltage	$V_{CBO}$	200	V
Collector-Emitter Voltage	$V_{CEO}$	120	V
Emitter-Base Voltage	$V_{EBO}$	8.0	V
Collector Current	$I_C$	7.0	A
Base Current	$I_B$	3.0	A
Total Dissipation at	$P_{tot}$	50	W
Max. Operating Junction Temperature	$T_j$	150	°C
Storage Temperature	$T_{stg}$	-55~150	°C



### ELECTRICAL CHARACTERISTICS ( Ta = 25 °C)

Parameter	Symbol	Test Conditions	Min.	Typ.	Max.	Unit
Collector Cut-off Current	$I_{CBO}$	$V_{CB}=200V, I_E=0$			0.1	mA
Emitter Cut-off Current	$I_{EBO}$	$V_{EB}=8V, I_C=0$			0.1	mA
Collector-Emitter Sustaining Voltage	$V_{CEO}$	$I_C=50mA, I_B=0$	120			V
DC Current Gain	$h_{FE(1)}$	$V_{CE}=4V, I_C=0.3A$	100			
	$h_{FE(2)}$	$V_{CE}=4V, I_C=3.0A$	70		220	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=3.0A, I_B=300mA$			0.5	V
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C=3.0A, I_B=300mA$			1.2	V
Current Gain Bandwidth Product	$f_T$	$V_{CE}=12V, I_C=500mA$	10			MHz