



Silicon NPN Switching Ttransistors

2SC3835Y

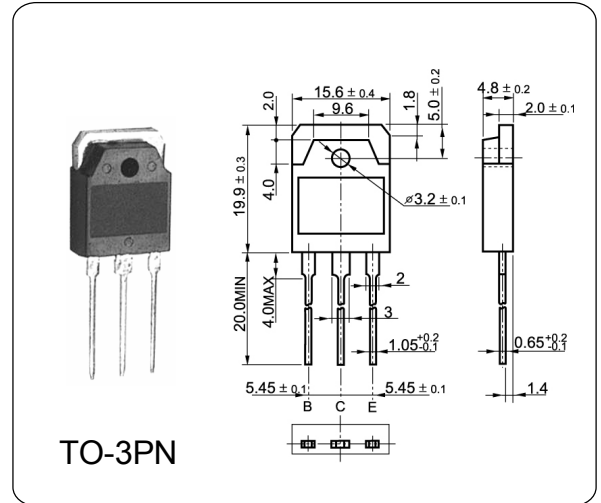


DESCRIPTION

The is an epitaxial pianar type NPN silicon transistor

ABSOLUTE MAXIMUM RATINGS (Ta = 25 °C)

Parameter	Symbol	Value	Unit
Collector-Base Voltage	V_{CBO}	200	V
Collector-Emitter Voltage	V_{CEO}	110	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}	60	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_{CEO}	$V_{CB}=100V, I_E=0$	—	—	0.1	mA
Emitter Cut-off Current	I_{EBO}	$V_{EB}=8.0V, I_C=0$	—	—	0.1	mA
Collector-Emitter Sustaining Voltage	V_{CEO}	$I_C=1.0mA, I_B=0$	110	—	—	V
DC Current Gain	$h_{FE(1)}$	$V_{CE}=4V, I_C=3.0A$	70	—	—	
	$h_{FE(2)}$	$V_{CE}=5V, I_C=1.0A$	100	—	200	
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	$V_{CE}=12V, I_C=500mA$	—	30	—	MHz