Pb Free Plating Product

2SD1351

NPN Complementary Silicon Power Transistors

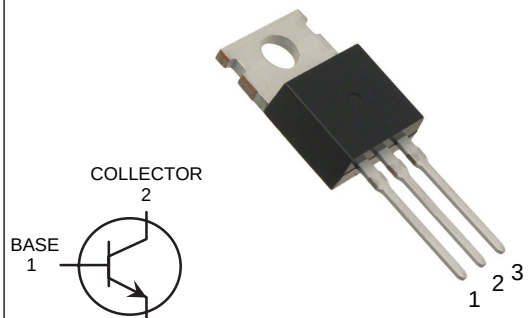
FEATURES

- Complements the 2SB988.
- Wide Safe Operationg Area.
- Fast Switching Speed.
- Wide ASO.

APPLICATIONS

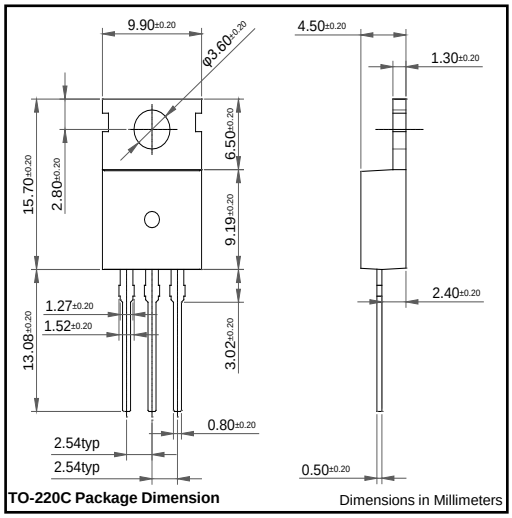
- Power Amplifier Applications.
- Vertical Output Applications.
- Switching Applications.

TO-220C



ABSOLUTE MAXIMUM RATINGS (Ta = 25 °C)

Parameter	I	Value	Unit
Collector-Base Voltage	V_{CBO}	60	V
Collector-Emitter Voltage	V_{CEO}	60	V
Emitter-Base Voltage	V_{EBO}	7	V
Collector Current	I_C	3.0	A
Base Current	I_B	0.5	A
Total Dissipation at	P_{tot}	30	W
Max. Operating Junction Temperature	T_j	150	ºC
Storage Temperature	T_{stg}	-55~150	ºC



ELECTRICAL CHARACTERISTICS (Ta = 25 °C)

Parameter	Symbol	Test Conditions	Min.	Typ.	Max.	Unit
Collector Cut-off Current	I_{CBO}	V_{CB}=60V, I_E=0	—	—	0.1	mA
Emitter Cut-off Current	I_{EBO}	V_{EB}=7V, I_C=0	—	—	0.1	mA
Collector-Emitter Sustaining Voltage	V_{CEO}	I_C=50mA, I_B=0	60	—	—	V
DC Current Gain	$h_{FE(1)}$	V_{CE}=5V, I_C=0.5A	60	—	300	
	$h_{FE(2)}$	V_{CE}=4V, I_C=3.0A	25	—	—	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	I_C=2A,I_B=200mA	—	—	1.0	V
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	V_{CE}=5V,I_C=0.5A	—	—	1.0	V
Current Gain Bandwidth Product	f_T	V_{CE}=5V,I_C=500mA	3.0	—	—	MHz