

Pb Free Plating Product

2SD1351



NPN Complementary Silicon Power Transistors

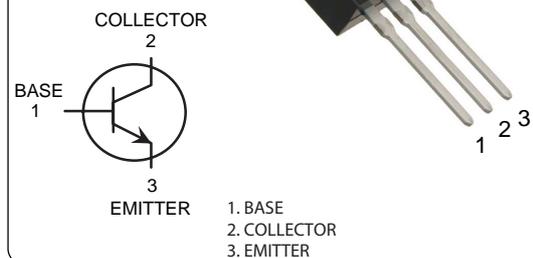
FEATURES

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

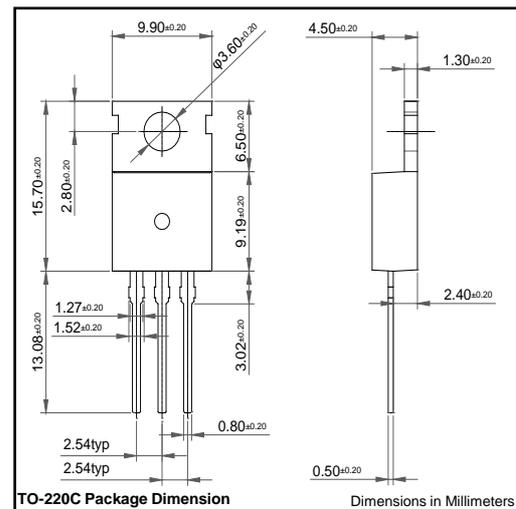
APPLICATIONS

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

TO-220C

ABSOLUTE MAXIMUM RATINGS ($T_a = 25^\circ\text{C}$)

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	$^\circ\text{C}$
Storage Temperature	T_{stg}	-55~150	$^\circ\text{C}$

ELECTRICAL CHARACTERISTICS ($T_a = 25^\circ\text{C}$)

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