

FEATURES

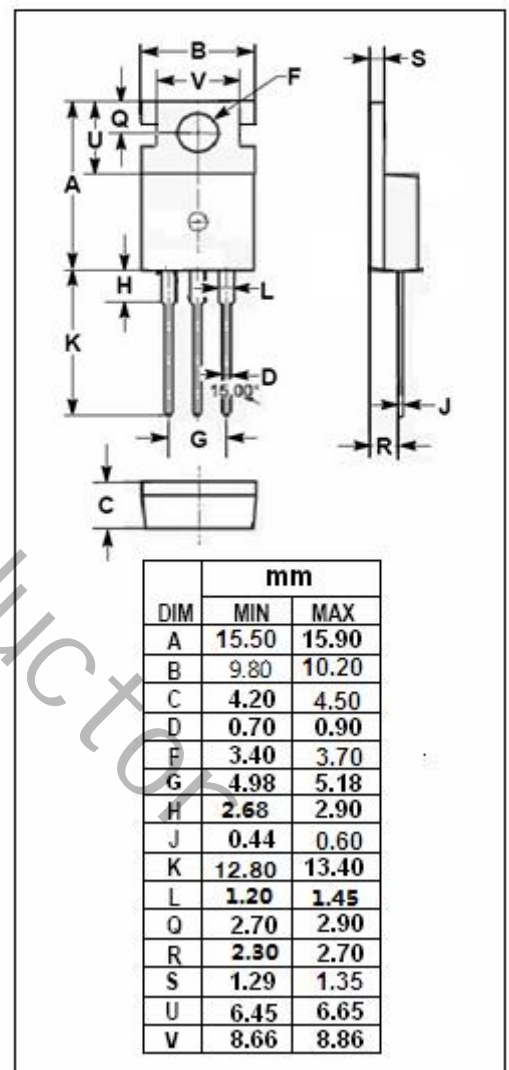
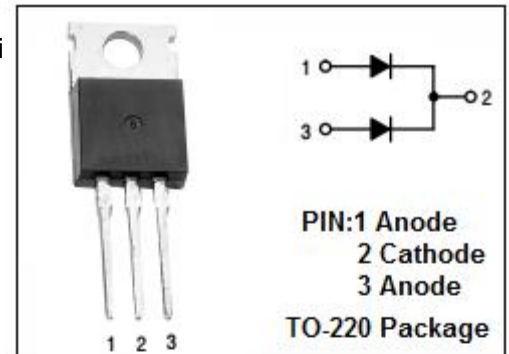
- Plastic package has Underwriters Laboratory Flammability Classification
- Ultrafast 35 and 60 Nanosecond Recovery Times
- 175° C Operating Junction Temperature
- Popular TO-220 Package
- High Temperature Glass Passivated Junction
- High Voltage Capability to 600 V
- Low Leakage Specified @ 150° C Case Temperature
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Switching power supply
- Power switching circuits
- General purpose

ABSOLUTE MAXIMUM RATINGS(T_a=25°C)

SYMBOL	PARAMETER	VALUE	UNIT
V _R RM V _R WM V _R	Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	600	V
I _F (AV)	Average Rectified Forward Current Per Leg: T _c =150°C; Total Device:	8.0 16	A
I _F (RSM)	RMS Forward Current T _c =150°C 20KHz; Squre wave	16	A
I _{FSM}	Nonrepetitive Peak Surge Current Single phase;60HZ;	100	A
T _J	Junction Temperature	-65~175	°C
T _{stg}	Storage Temperature Range	-65~175	°C



THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
R_{thj-c}	Thermal Resistance, Junction to Case	2.0	$^{\circ}\text{C}/\text{W}$

ELECTRICAL CHARACTERISTICS ($T_a=25^{\circ}\text{C}$) (Pulse Test: Pulse Width=300 μs , Duty Cycle $\leq 2\%$)

SYMBOL	PARAMETER	CONDITIONS	MAX	UNIT
V_F	Maximum Instantaneous Forward Voltage	$I_F=10\text{A}; T_j=25^{\circ}\text{C}$ $I_F=10\text{A}; T_j=150^{\circ}\text{C}$	1.2 1.5	V
I_R	Maximum Instantaneous Reverse Current	Rated DC Voltage; $T_j=25^{\circ}\text{C}$ Rated DC Voltage; $T_j=125^{\circ}\text{C}$	500 10	mA
t_{rr}	Maximum Reverse Recovery Time	$I_F=0.5\text{A}; I_R=1.0\text{A}; I_{REC}=0.25\text{A}$	50	ns