

**FEATURES**

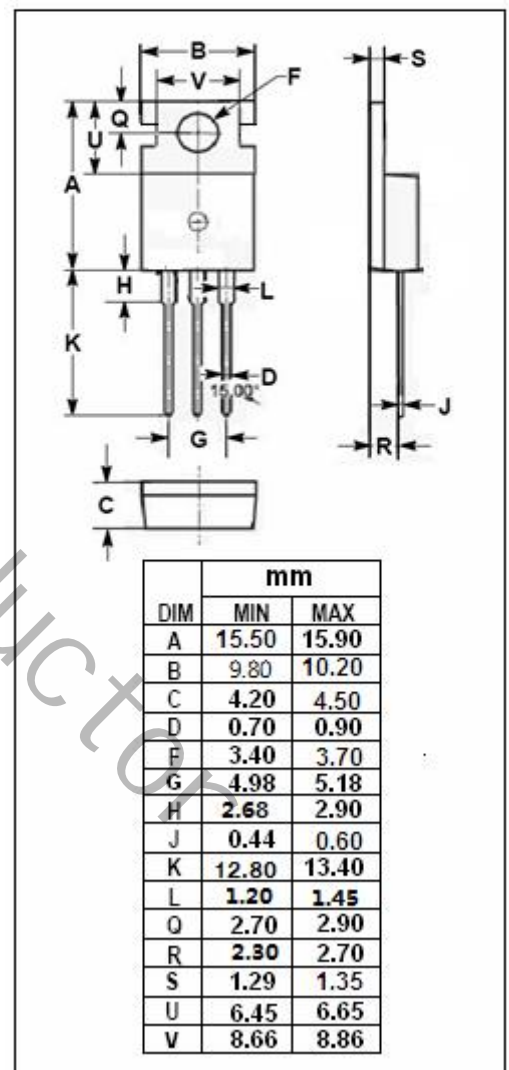
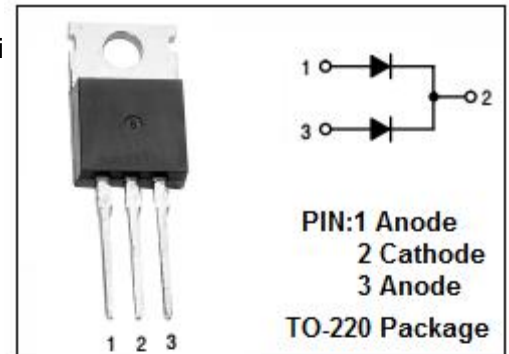
- Plastic package has Underwriters Laboratory Flammability Classification
- Ultrafast 35 and 60 Nanosecond Recovery Times
- 175° C Operating Junction Temperature
- Popular TO-220 Package
- High Temperature Glass Passivated Junction
- High Voltage Capability to 600 V
- Low Leakage Specified @ 150° C Case 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<sub>a</sub>=25°C)**

SYMBOL	PARAMETER	VALUE	UNIT
V <sub>R</sub> RM V <sub>R</sub> WM V <sub>R</sub>	Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	600	V
I <sub>F(AV)</sub>	Average Rectified Forward Current Per Leg: T <sub>c</sub> =150°C; Total Device:	8.0 16	A
I <sub>F(RSM)</sub>	RMS Forward Current T <sub>c</sub> =150°C 20KHz; Squre wave	16	A
I <sub>FSM</sub>	Nonrepetitive Peak Surge Current Single phase;60HZ;	100	A
T <sub>J</sub>	Junction Temperature	-65~175	°C
T <sub>stg</sub>	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  $\mu\text{s}$ , 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