

Ultra fast Rectifier
MUR8120
FEATURES

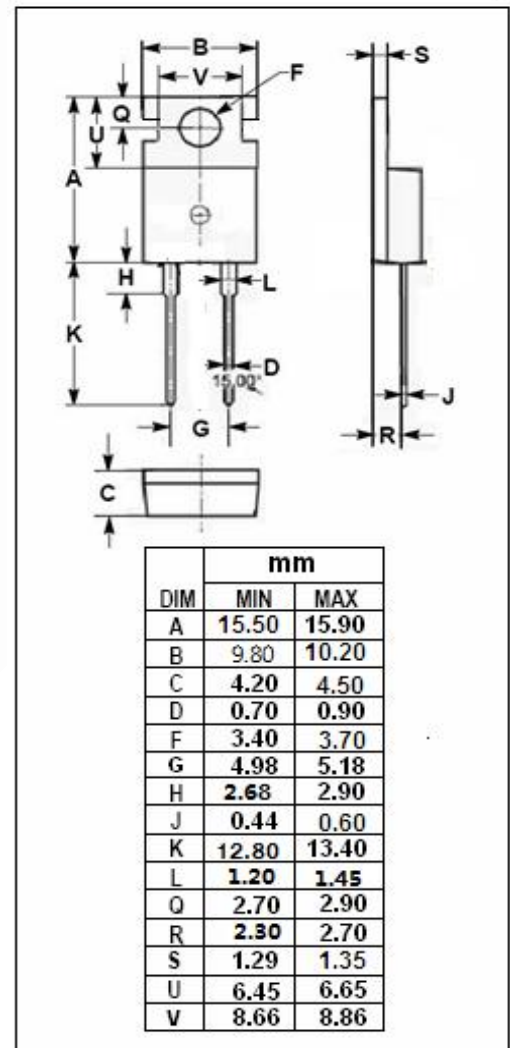
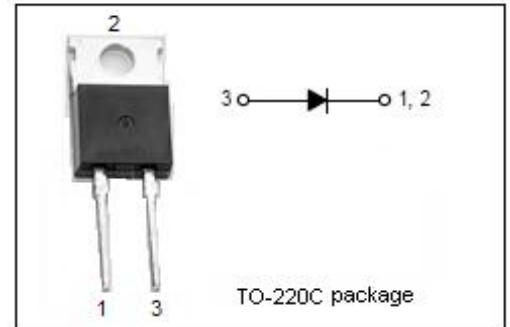
- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Fast switching for high efficiency
- Low forward voltage drop
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Freewheeling, Snubber, Clamp
- Inversion Welder
- PFC
- Plating Power Supply
- Ultrasonic Cleaner and Welder
- Converter & Chopper
- UPS

ABSOLUTE MAXIMUM RATINGS(T_a=25°C)

SYMBOL	PARAMETER	VALUE	UNIT
V _{RRM} V _{RWM} V _R	Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	1200	V
I _{F(AV)}	Average Rectified Forward Current T _c =110°C	8	A
I _{F(RSM)}	RMS Forward Current T _c =110°C	15	A
I _{FSM}	Nonrepetitive Peak Surge Current T _j =45°C; t=10ms;50HZ;sine	100	A
T _J	Junction Temperature	-40~150	°C
T _{stg}	Storage Temperature Range	-40~150	°C



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THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
R_{thj-c}	Thermal Resistance, Junction to Case	1.8	$^{\circ}\text{C}/\text{W}$

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	$I_F=10\text{A}; T_j=25^{\circ}\text{C}$ $I_F=10\text{A}; T_j=125^{\circ}\text{C}$	2.4 1.85	V
I_R	Maximum Instantaneous Reverse Current	$V_R=1200\text{V}; T_j=25^{\circ}\text{C}$ $V_R=1200\text{V}; T_j=125^{\circ}\text{C}$	100 500	μA
t_{rr}	Maximum Reverse Recovery Time	$I_F=1\text{A}; V_R=30\text{V}; diF/dt=200\text{A}/\mu\text{s}$	22	ns