

Ultrafast Recovery Rectifier
MUR8100E
FEATURES

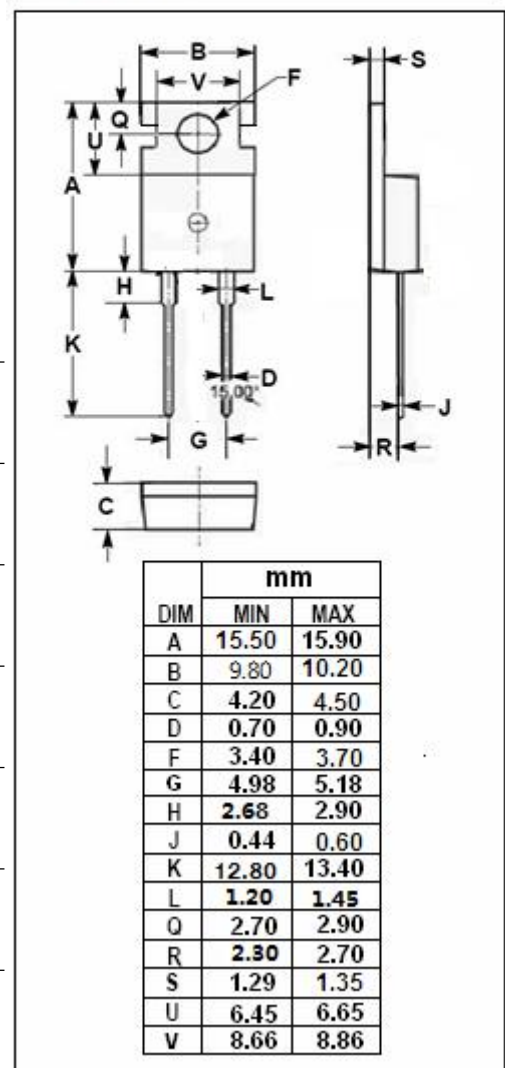
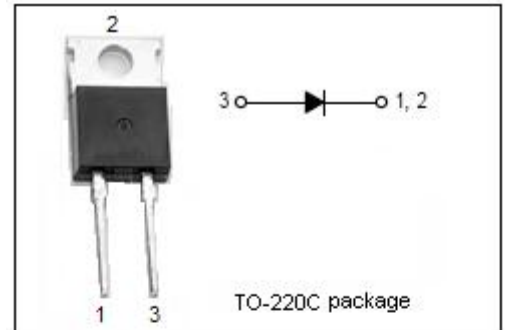
- Ultrafast Recovery Time
- Low Forward Voltage
- Low Leakage Current
- 175°C Operating Junction Temperature
- High Temperature Glass Passivated Junction
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Designed for use in switching power supplies and other power Switching applications.

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	1000	V
I _{F(AV)}	Average Rectified Forward Current (Rated V _R)	8	A
I _{FM}	Peak Repetitive Forward Current (Rated V _R , Square Wave, 20kHz)	16	A
I _{FSM}	Nonrepetitive Peak Surge Current (Surge applied at rated load conditions half-wave, single phase, 60Hz)	100	A
T _J	Junction Temperature	-55~175	°C
T _{stg}	Storage Temperature Range	-55~175	°C



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THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
R _{thj-c}	Thermal Resistance, Junction to Case	2.0	°C/W

ELECTRICAL CHARACTERISTICS (T_a=25°C) (Pulse Test: Pulse Width=300 μs, Duty Cycle≤2%)

SYMBOL	PARAMETER	CONDITIONS	MAX	UNIT
V _F	Maximum Instantaneous Forward Voltage	I _F = 8A	1.8	V
		I _F = 8A; T _C =150°C	1.5	V
I _R	Maximum Instantaneous Reverse Current	V _{RRM} = 1000V	100	μA
		V _{RRM} = 1000V; T _C =150°C	500	μA
t _{rr}	Maximum Reverse Recovery Time	I _F = 1A	85	ns

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