

# MUR1520/S

**PRV : 200 Volts**  
**Io : 15 Ampere**

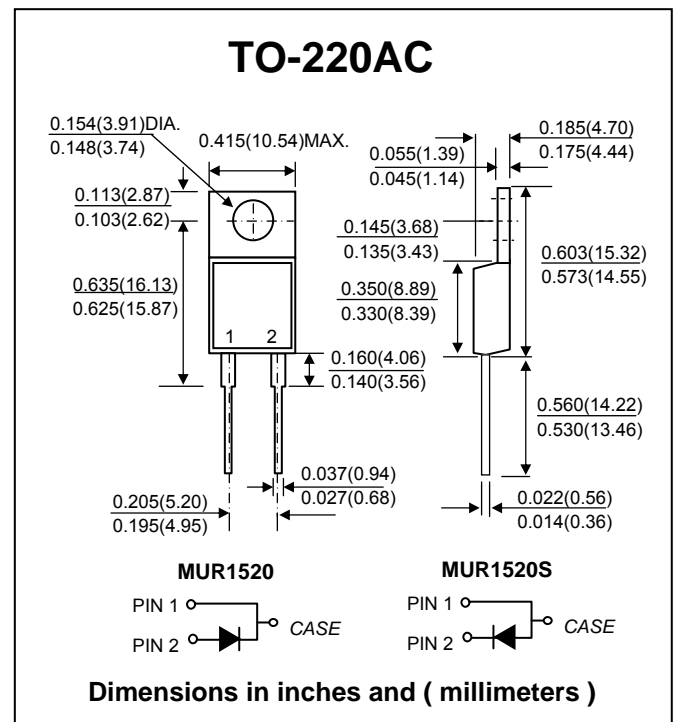
## FEATURES :

- \* Glass passivated junction chip
- \* High current capability
- \* Low forward drop
- \* Low leakage
- \* Pb / RoHS Free

## MECHANICAL DATA :

- \* Case : Epoxy, Molded
- \* Lead Temperature for Soldering Purposes:  
260°C Max. for 10 Seconds
- \* Polarity: As marked
- \* Mounting Position: Any
- \* Weight : 2.24 grams (Approximately)

# ULTRAFAST RECTIFIERS



## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25 °C ambient temperature unless otherwise specified.

RATING	SYMBOL	VALUE	UNIT
Maximum Peak Repetitive Reverse Voltage	$V_{RRM}$	200	V
Maximum Working Peak Reverse Voltage	$V_{RWM}$	200	V
Maximum DC Blocking Voltage	$V_R$	200	V
Maximum Average Forward Current, $T_C = 150^\circ\text{C}$	$I_{F(AV)}$	15	A
Maximum Non-repetitive Peak Surge Current (Surge applied at rated load conditions halfwave, single phase, 60 Hz)	$I_{FSM}$	200	A
Maximum Instantaneous Forward Voltage ( $I_F = 15\text{ A}$ , $T_C = 25^\circ\text{C}$ ) (Note 1)	$V_F$	1.05	V
( $I_F = 15\text{ A}$ , $T_C = 150^\circ\text{C}$ )		0.85	
Maximum Instantaneous Reverse Current at $T_C = 25^\circ\text{C}$	$I_R$	10	$\mu\text{A}$
Rated DC Voltage (Note 1) at $T_C = 150^\circ\text{C}$	$I_{R(H)}$	500	$\mu\text{A}$
Maximum Reverse Recovery Time ( $I_F = 1.0\text{ Amp}$ , $di/dt = 50\text{ A}/\mu\text{s}$ )	$T_{rr}$	35	ns
Maximum Thermal Resistance, Junction to Case	$R_{\theta JC}$	1.5	$^\circ\text{C}/\text{W}$
Operating Junction Temperature	$T_J$	- 50 to + 200	$^\circ\text{C}$
Storage Temperature Range	$T_{STG}$	- 50 to + 175	$^\circ\text{C}$

### Note :

(1) Pulse Test: Pulse Width = 300  $\mu\text{s}$ , Duty Cycle  $\leq 2.0\%$ .

## RATING AND CHARACTERISTIC CURVES ( MUR1520/S )

FIG.1 - CURRENT DERATING, CASE

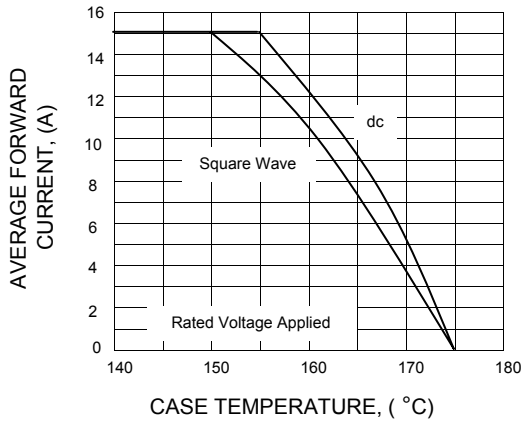


FIG.2 - POWER DISSIPATION

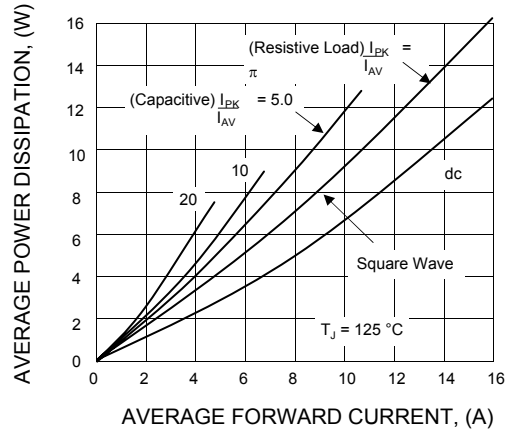


FIG.3 - TYPICAL FORWARD VOLTAGE

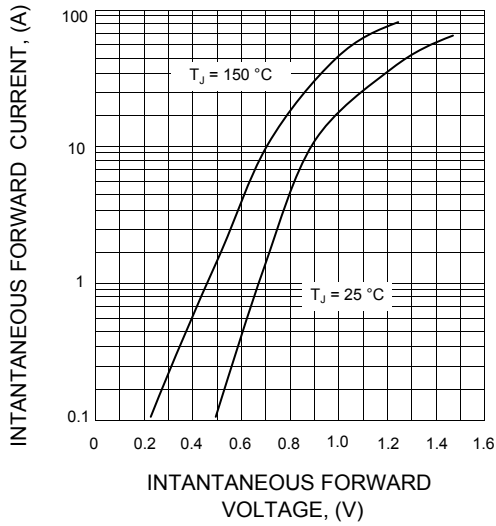


FIG. 4 - TYPICAL REVERSE CURRENT

