

## FEATURES

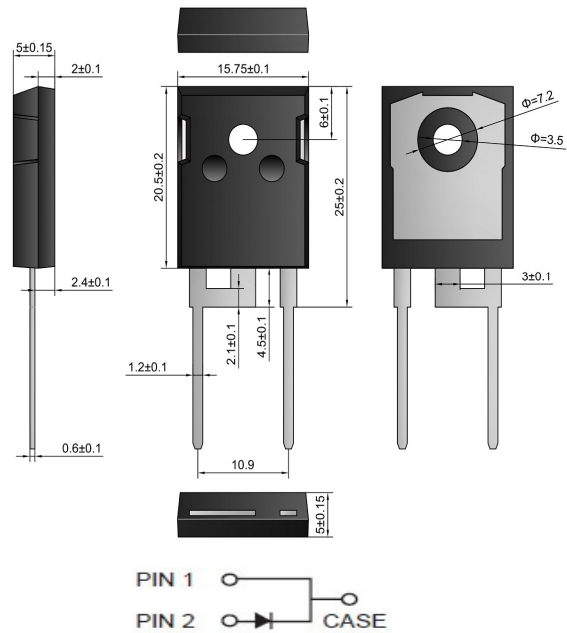
- Fred Chip Planar Construction
- UltraFast Switching,High Efficiency
- Low Power loss, High Efficiency
- Low Reverse Leakage Current
- High Surge Current Capability
- Plastic Material has UL Flammability Classification 94V-O

## MECHANICAL DATA

- Case:JEDEC TO-247AC,Molded Plast
- Terminals:Pure tin Plated ,Lead free Solderable per MIL-STD-750, Method 2026
- Polarity: As marked
- Weight: 5.6 grams(approx)
- Mounting Position:Any

## TO-247AC

unit:mm



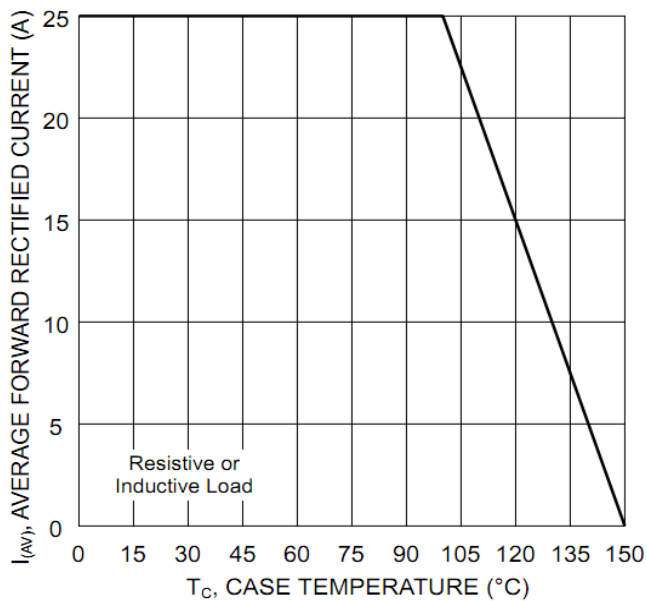
## Maximum Ratings and Electrical Characteristics @ $T_A=25^{\circ}\text{C}$ unless otherwise specified

Single Phase, half wave, 60Hz, resistive or inductive load.  
For capacitive load, derate current by 20%.

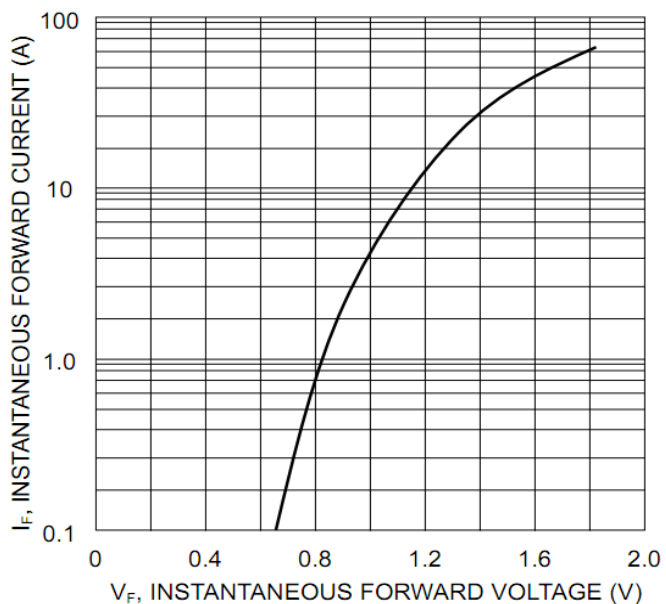
| Characteristic  | Symbol          | MUR2560P                  |      | Unit                 |
|---|-----------------|---------------------------|------|----------------------|
| Maximum Recurrent Peak Reverse Voltage  | $V_{RRM}$       | 600                       |      | V                    |
| Maximum RMS Voltage   | $V_{RMS}$       | 420                       |      | V                    |
| Maximum DC Blocking Voltage   | $V_{DC}$        | 600                       |      | V                    |
| Maximum Average Forward (See Figure 1)  | $I_{F(AV)}$     | 25                        |      | A                    |
| Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load(JEDEC method) | $I_{FSM}$       | 300                       |      | A                    |
| Maximum Forward Voltage at 25A  | $V_F$           | Typ.                      | Max. | V                    |
|   |                 | 1.3                       | 1.5  |                      |
| Maximum Reverse Recovery Time<br>(Measured With $I_F=0.5A$ , $I_R=1.0A$ , $IRR=0.25A$ )           | $T_{rr}$        | Typ.                      | Max. | nS                   |
|   |                 | 35                        | 50   |                      |
| Maximum DC Reverse Current at<br>Rated DC Blocking Voltage  | $I_R$           | $T_A=25^{\circ}\text{C}$  | 5    | uA                   |
|   |                 | $T_A=125^{\circ}\text{C}$ | 50   |                      |
| Typical Thermal Resistance Junction to case   | $R_{\theta JC}$ | 1.5                       |      | $^{\circ}\text{C/W}$ |
| Typical Thermal Resistance Junction to Ambient  | $R_{\theta JA}$ | 45                        |      | $^{\circ}\text{C/W}$ |
| Operating Junction and Storage Temperature Range  | $T_J, T_{STG}$  | -55 to +150               |      | $^{\circ}\text{C}$   |

# MUR2560P

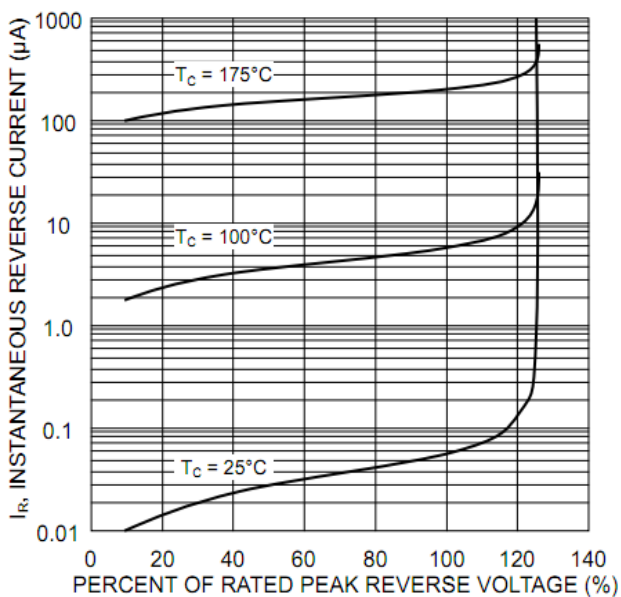
## RATING AND CHARACTERISTIC CUEVES



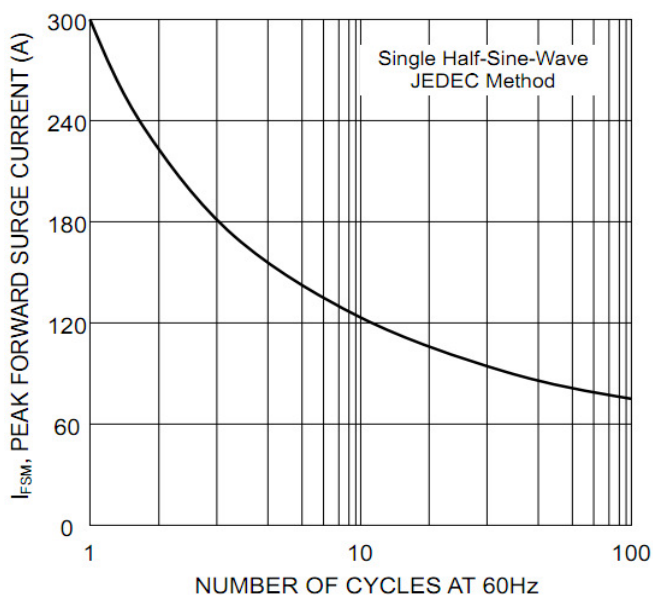
**Fig-1**  
**FORWARD CURRENT DERATING CURVE**



**Fig-2**  
**TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC**



**Fig-3**  
**TYPICAL REVERSE CHARACTERISTICS**



**Fig-4**  
**MAXIMUM NON-REPETITIVE SURGE CURRENT**