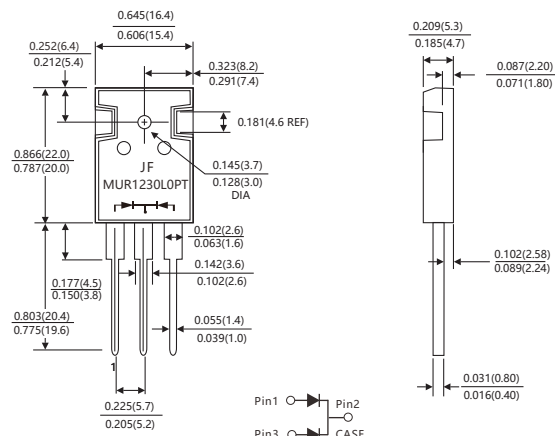


### FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Fast switching for high efficiency
- Low forward voltage drop
- Single rectifier construction
- High surge capability
- For use in low voltage ,high frequency inverters, free wheeling ,and polarity protection applications
- High temperature soldering guaranteed:260°C/10 seconds, 0.25"(6.35mm)from case
- Component in accordance to RoHS 2011/65/EU

### TO-247AB



### MECHANICAL DATA

- Case: JEDEC TO-247AB molded plastic body
- Terminals: Lead solderable per MIL-STD-750,method 2026
- Polarity: As marked
- Mounting Position: Any

Dimensions in millimeters

### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(Ratings at 25°C ambient temperature unless otherwise specified ,Single phase ,half wave ,resistive or inductive load. For capacitive load,derate by 20%.)

|                                                                                                  | Symbols            | MUR 1230LPT     | Units         |
|--------------------------------------------------------------------------------------------------|--------------------|-----------------|---------------|
| Maximum repetitive peak reverse voltage                                                          | $V_{RRM}$          | 300             | Volts         |
| Maximum RMS voltage                                                                              | $V_{RMS}$          | 210             | Volts         |
| Maximum DC blocking voltage                                                                      | $V_{DC}$           | 300             | Volts         |
| Maximum average forward rectified current(see Fig.1)                                             | Per leg            | 6.0             | Amps          |
|                                                                                                  | Total device       | 12.0            |               |
| Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC method) | $I_{FSM}$          | 150             | Amps          |
| Maximum instantaneous forward voltage at 6.0 A(Note 1)                                           | $V_F$              | 1.05            | Volts         |
| Maximum instantaneous reverse current at rated DC blocking voltage(Note 1)                       | $T_a=25^{\circ}C$  | 10              | $\mu A$       |
|                                                                                                  | $T_a=125^{\circ}C$ | TYP. 20 MAX. 50 |               |
| Maximum Reverse Recovery Time (Note 2)                                                           | $T_{rr}$           | 35              | ns            |
| Typical thermal resistance (Note 3)                                                              | $R_{\theta JC}$    | 2.5             | $^{\circ}C/W$ |
| Operating junction temperature range                                                             | $T_J$              | -65 to+175      | $^{\circ}C$   |
| Storage temperature range                                                                        | $T_{STG}$          | -65 to+175      | $^{\circ}C$   |

- Notes:**
1. Pulse test: 300  $\mu s$  pulse width,1% duty cycle
  2. Reverse recovery test conditions  $I_F=0.5A, I_R=1.0A, I_{rr}=0.25A$
  3. Thermal resistance from junction to case

# RATINGS AND CHARACTERISTIC CURVES MUR1230LPT

FIG.1-FORWARD CURRENT DERATING CURVE

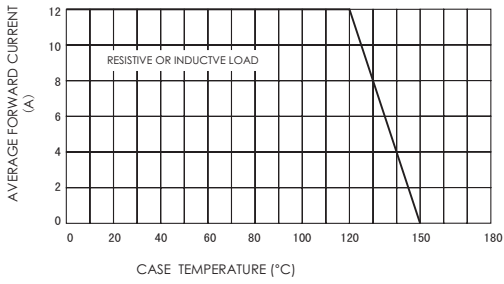


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

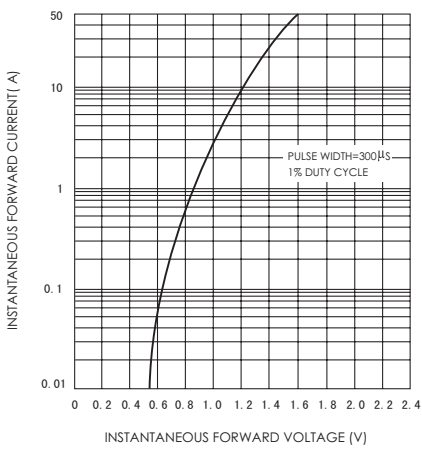


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

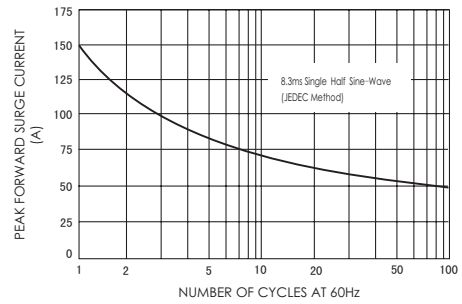


FIG.4-TYPICAL REVERSE CHARACTERISTICS

