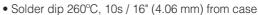


TO-220AC

Voltage Current 200 to 600 V 8.0 A

FEATURES

- Ultrafast recovery time for high efficiency
- Low power losses
- Low forward voltage drop
- High forward surge current capability





 Meets MSL level 1, per J-STD-020, LF maximum peak of 260° C

Pb

RoHS

MECHANICAL DATA

- Case: TO-220AC. Epoxy meets UL 94V-0 flammability rating.
- Polarity: As marked on the body.
- Mounting Torque: 5 in-lbs maximum.
- **Terminals:** Matte tin plated leads, solderable per MIL-STD-750 Method 2026, J-STD-002 and JESD22-B102. Consumer grade, meets JESD 201 class 1A whisker test.

TYPICAL APPLICATIONS

Used in high frequency rectifier of switching mode power supplies, inverters, freewheeling diodes, dc-to-dc converters, and other power switching application.

Maximun Ratings and Electrical Characteristics at 25°C

| | | MUR820 | MUR840 | MUR860 |
|--------------------|--|------------------|---------|--------|
| V_{RRM} | Peak Recurrent Peak Reverse Voltage (V) | 200 | 400 | 600 |
| V _{RMS} | Maximum RMS Voltage (V) | 140 | 280 420 | |
| V_{DC} | Maximum DC Blocking Voltage (V) | 200 | 400 | 600 |
| I _{F(AV)} | Maximum Average Forward Rectified Current 9.5mm Lead Lenght (See Fig. 1) | 8.0 A | | |
| I _{FSM} | Peak Forward Surge Current 8.3 ms. single Half Sine-wave Superimposed on Rated Load (JEDEC Method) | 100 A | | |
| T _{rr} | Maximum Reverse Recovery Time From I_F =0.5 A; I_R = 1 A; I_{RR} = 0.25 A | 25 ns | 50 ns | |
| Tj | Operating temperature range | − 65 to + 175 °C | | |
| T _{stg} | Storage temperature range | − 65 to + 175 °C | | |

Electrical Characteristics at Tamb = 25 °C

| V _F | Max. Instantaneous Forward Voltage @ 8.0 A (Note 2) | 0.975 V | 1.3 V | 1.7 V |
|--------------------|---|------------------|----------|-------|
| I _R | Max. DC Reverse Current at @ Tc = 25 °C Rated DC Blocking Voltage @ Tc = 150 °C | 5.0 μA 250 μA | | |
| R _{thj-C} | Typical Thermal Resistance (Note 1) | 3.0 °C/W | 2.0 °C/W | |

Note: 1. Mounted on Heatsink Size of 50.8 mm x 76.2 mm x 6.35 mm Al-Plate.

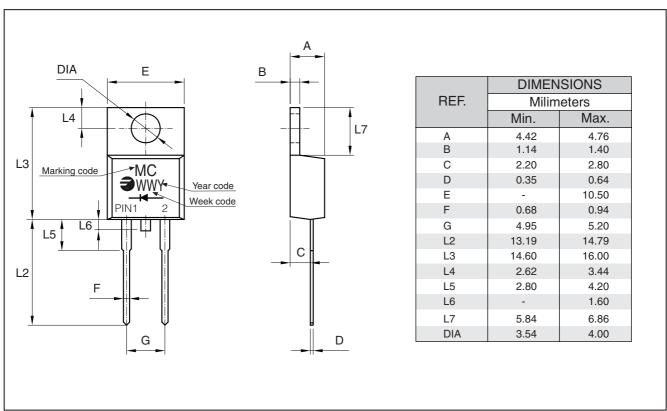
2. Pulse test: 300µs pulse width, 1% duty cycle.



Ordering information

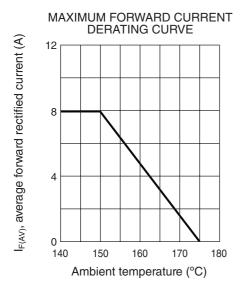
| PREFERRED P/N | PACKAGE CODE | DELIVERY MODE | BASE QUANTITY | UNIT WEIGHT (g) |
|---------------|--------------|---------------|---------------|-----------------|
| MUR820 00TUC | TU | TUBE | 2,000 | 1.90 |

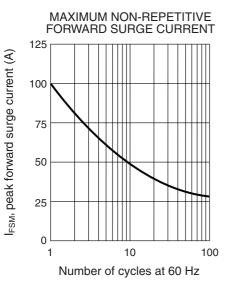
Package Outline Dimensions: (mm) TO-220AC

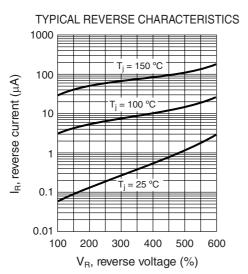


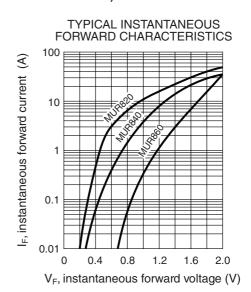


Ratings and Characteristics (Ta 25 °C unless otherwise noted)

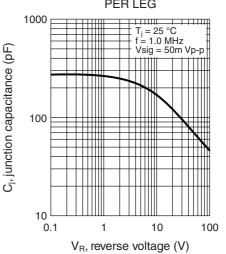














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Version: Sep-12 Page Number: 4/4