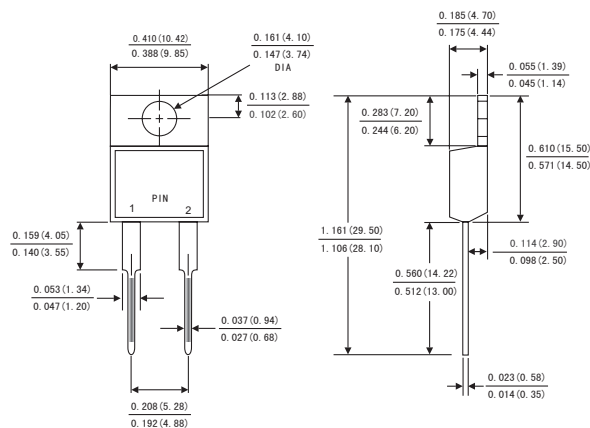


FEATURES

- 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-220AC



MECHANICAL DATA

- Case: JEDEC TO-220AC molded plastic body
- Terminals: Lead solderable per MIL-STD-750,method 2026
- Polarity: As marked
- Mounting Position: Any
- Weight: 0.08ounce, 2.24 gram

Dimensions in inches and (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 | MUR820 | MUR840 | MUR860 | Units |
|--|-----------------------|------------|--------|--------|-------|
| Maximum repetitive peak reverse voltage | V _{RRM} | 200 | 400 | 600 | Volts |
| Maximum RMS voltage | V _{RMS} | 140 | 280 | 420 | Volts |
| Maximum DC blocking voltage | V _{DC} | 200 | 400 | 600 | Volts |
| Maximum average forward rectified current(see Fig.1) | I(AV) | 8.0 | | | Amps |
| Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC method) | I _{FSM} | 90 | | | Amps |
| Maximum instantaneous forward voltage at 8.0 A(Note 1) | V _F | 0.975 | 1.3 | 1.7 | Volts |
| Maximum instantaneous reverse current at rated DC blocking voltage(Note 1) | T _a =25°C | 5 | | | uA |
| | T _a =125°C | 500 | | | |
| Maximum Reverse Recovery Time (Note 2) | T _{rr} | 35 | | | ns |
| Typical thermal resistance (Note 3) | R _{θJC} | 2.5 | | | °C/W |
| Operating junction temperature range | T _J | -55 to+150 | | | °C |
| Storage temperature range | T _{STG} | -55 to+150 | | | °C |

- Notes: 1. Pulse test: 300μs pulse width,1% duty cycle
 2. Reverse recovery test conditions I_r=0.5A,I_r=1.0A, I_{rr}=0.25A
 3. Thermal resistance from junction to case

RATINGS AND CHARACTERISTIC CURVES MUR820 THRU MUR860

FIG.1-FORWARD CURRENT DERATING CURVE

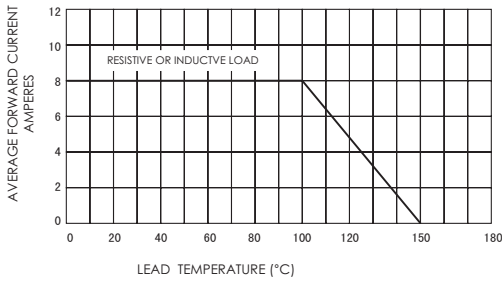


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

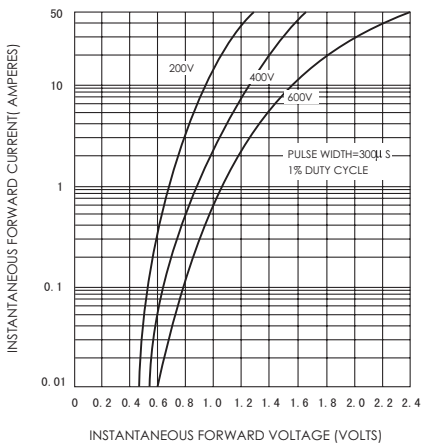


FIG.5-TYPICAL JUNCTION CAPACITANCE

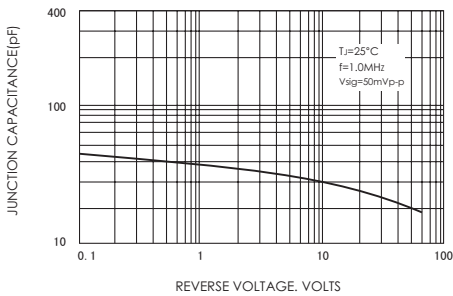


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

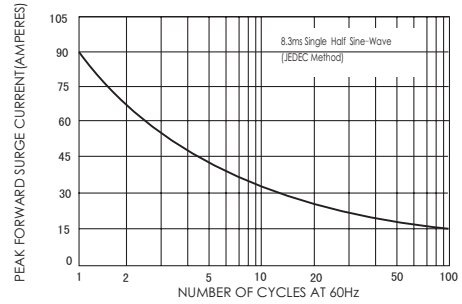


FIG.4-TYPICAL REVERSE CHARACTERISTICS

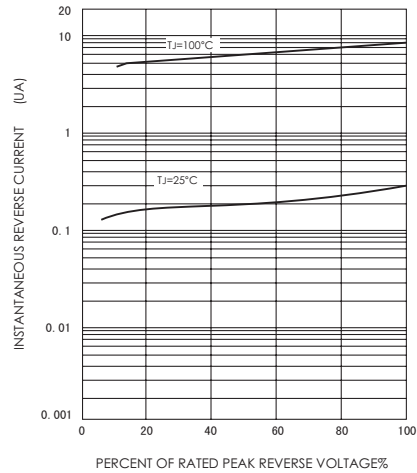


FIG.6-TYPICAL TRANSIENT THERMAL IMPEDANCE

