



MUR2010CF THRU MUR2060CF

Efficient Fast Recovery Rectifier

Features

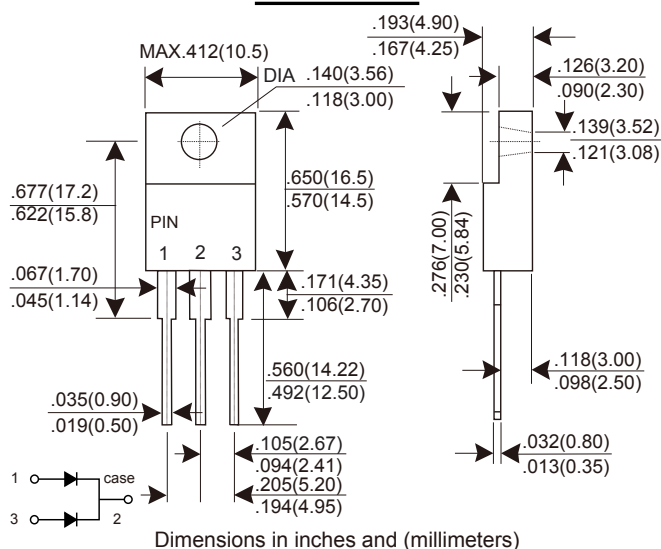
- * Fast switching for high efficiency
- * Low forward voltage drop
- * High current capability
- * Low reverse leakage current
- * High surge current capability

Mechanical Data

- * Case: Molded plastic, ITO-220AB
- * Epoxy: UL 94V-0 rate flame retardant
- * Terminals: Solderable per MIL-STD-202, method 208
- * Polarity: As marked
- * Mounting position: Any

Voltage Range 100 to 600 V
Current 20 Ampere

ITO-220AB



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

| PARAMETER | SYMBOL | MUR 2010CF | MUR 2015CF | MUR 2020CF | MUR 2040CF | MUR 2060CF | UNIT |
|--|-----------------|-------------|------------|------------|------------|------------|---------------------------|
| Maximum repetitive peak reverse voltage | V_{RRM} | 100 | 150 | 200 | 400 | 600 | V |
| Maximum RMS voltage | V_{RMS} | 70 | 105 | 140 | 280 | 420 | V |
| Maximum DC blocking voltage | V_{DC} | 100 | 150 | 200 | 400 | 600 | V |
| Maximum average forward rectified current @ $T_C=87.5^\circ\text{C}$ | $I_{F(AV)}$ | 20 | | | | | A |
| Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load | I_{FSM} | 125 | | | | | A |
| Maximum instantaneous forward voltage @ $I_F=10\text{A}$ | V_F | 0.975 | | 1.3 | | 1.5 | V |
| Maximum DC reverse current at rated DC blocking voltage @ $T_A=25^\circ\text{C}$ @ $T_A=125^\circ\text{C}$ | I_R | 10 500 | | | | | μA |
| Maximum reverse recovery time (Note 1) | t_{rr} | 25 | | | 50 | | ns |
| Typical thermal resistance from junction to case | $R_{\theta JC}$ | 2 | | | | | $^\circ\text{C}/\text{W}$ |
| Operating junction and storage temperature range | T_J, T_{STG} | -55 to +150 | | | | | $^\circ\text{C}$ |

NOTES : (1) Reverse recovery test conditions $I_F = 0.5\text{A}$, $I_R = 1.0\text{A}$, $I_{rr} = 0.25\text{A}$.

RATINGS AND CHARACTERISTICS CURVES MUR2010CF THRU MUR2060CF

Fig.1 - Forward Current Derating Curve

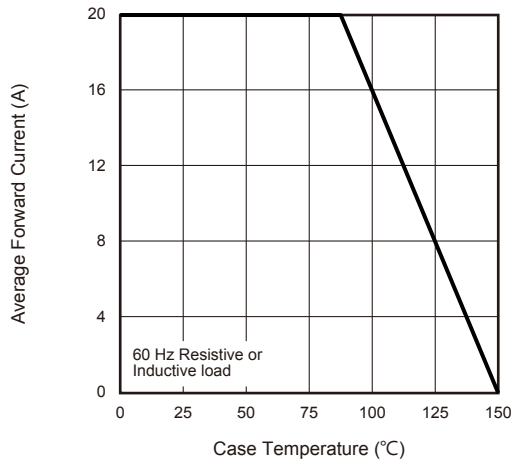


Fig.2 - Maximum Non-Repetitive Peak Forward Surge Current

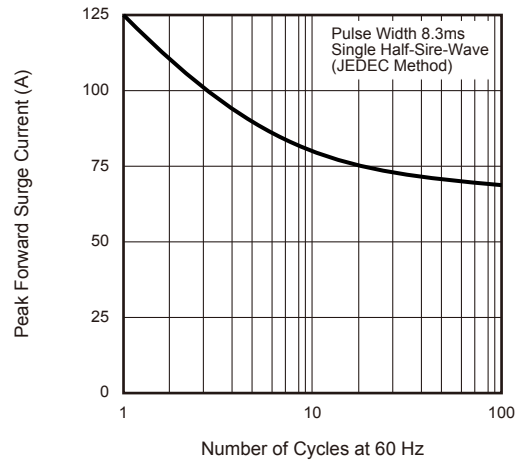


Fig.3 - Typical Instantaneous Forward Characteristics

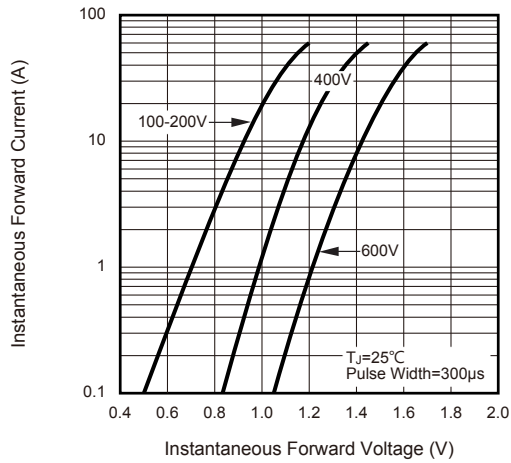


Fig.4 - Typical Reverse Leakage Characteristics

