

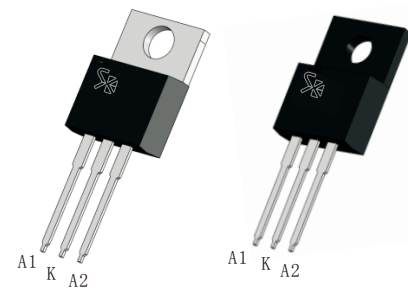
16.0 A Switchmode Power Rectifiers

Features

- Ultra fast 35 and 60 Nanosecond Recovery times
- High temperature glass passivated junction
- High voltage capability to 600 volts
- Low leakage specified @ 150°C case temperature
- Current derating @ both case and ambient temperatures

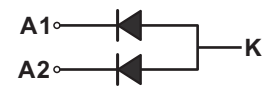
Mechanical data

- Case: TO-220AB
- Approx. Weight: 1.9g (0.067oz)
- Case: ITO-220AB
- Approx. Weight: 2.1g (0.07oz)
- Terminals: Lead solderable per MIL-STD-202, Method 208



TO-220

TO-220F



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified

| PARAMETER | TO-220 | MUR1620AT | MUR1640AT | MUR1660AT | Units |
|---|-----------------|------------|------------|------------|--------------------|
| | TO-220F | MUR1620FAT | MUR1640FAT | MUR1660FAT | |
| Maximum Recurrent Peak Reverse Voltage | V_{RRM} | 200 | 400 | 600 | V |
| Maximum RMS voltage | V_{RMS} | 140 | 280 | 420 | V |
| Maximum DC blocking Voltage | V_{DC} | 200 | 400 | 600 | V |
| Maximum Average Forward Rectified Current @ $T_c=150^\circ\text{C}$ per leg per device | $I_{F(AV)}$ | 8.0 16 | | | A |
| Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method) | I_{FSM} | 100 | | | A |
| Instantaneous forward voltage at 8A per leg | V_F | 0.975 | 1.3 | 1.5 | V |
| Maximum instantaneous reverse current at rated DC blocking voltage $T_a=25^\circ\text{C}$ $T_a=125^\circ\text{C}$ | I_R | 5 250 | 10 500 | | μA |
| Maximum Reverse Recovery Time NOTE 1 | t_{rr} | 25 | 50 | | ns |
| Maximum Thermal Resistance Junction To Case | $R_{\theta JC}$ | 4 | | | $^\circ\text{C/W}$ |
| Operation Junction Temperature and Storage Temperature | T_j, T_{stg} | -65 ~ +175 | | | $^\circ\text{C}$ |

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

Fig.1 TYPICAL FORWARD CURRENT DERATING CURVE

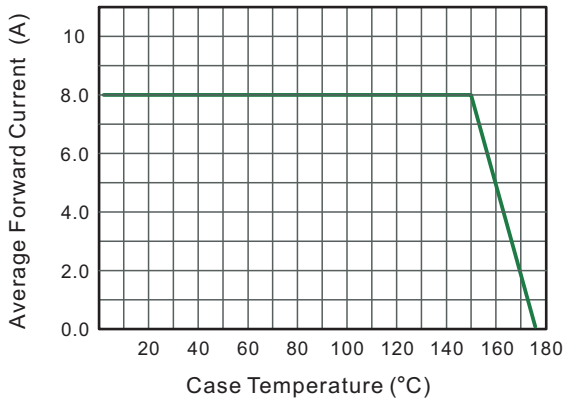


Fig.2 Typical Reverse Characteristics

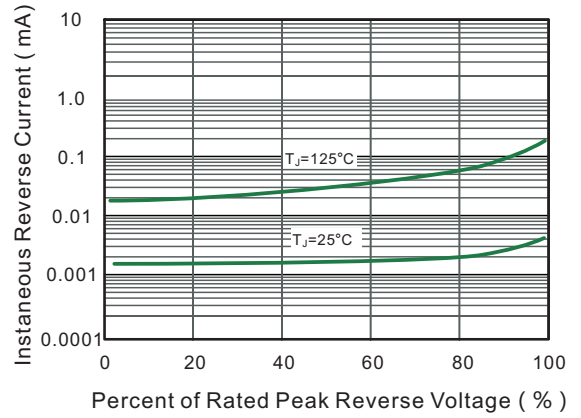


Fig.3 Typical Forward Characteristics PER LEG

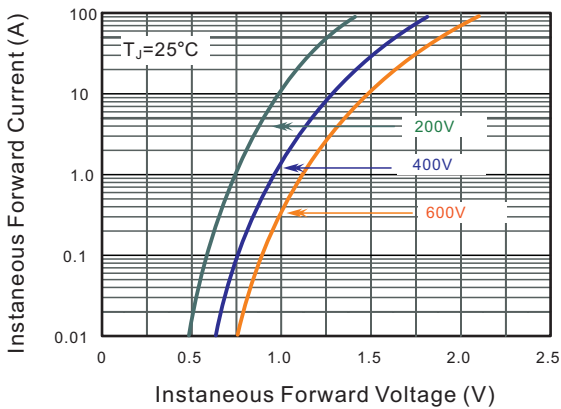
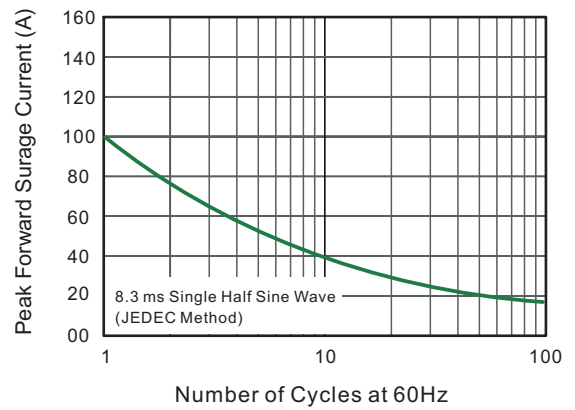


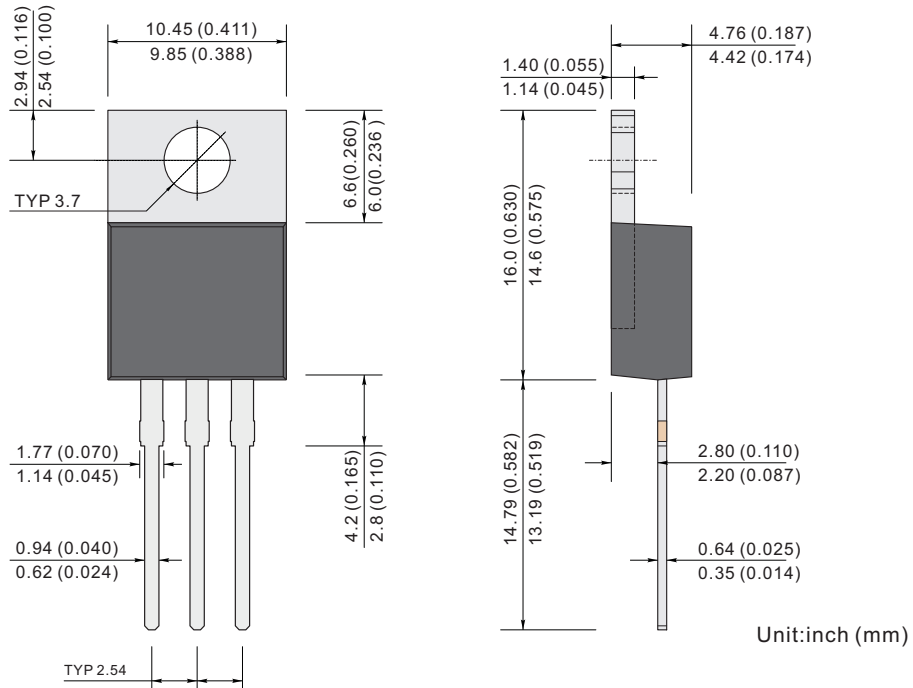
Fig.4 Maximum Non-Repetitive Peak Forward Surge Current



PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

TO-220



PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

TO-220F

