

Ultra Fast Rectifier

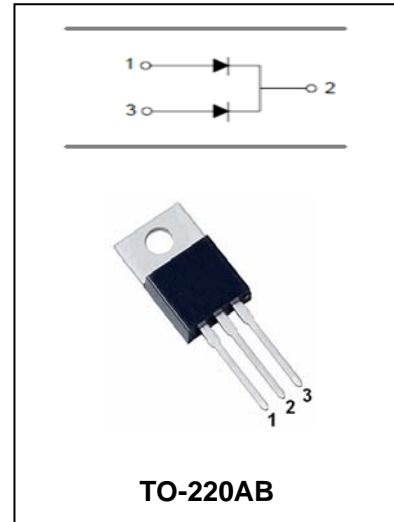
MUR1620CT-MUR1660CT

FEATURES

- Low Cost.
- Diffused Junction.
- Low Leakage.
- Low Forward Voltage Drop.
- High Current Capability.
- Easily Cleaned With Alcohol, Isopropanol and Similar Solvents.



Lead-free



MAXIMUM RATING operating temperature range applies unless otherwise specified

| Symbol | Parameter | MUR 1620CT | MUR 1630CT | MUR 1640CT | MUR 1660CT | Unit |
|-----------------|--|------------|------------|-------------|------------|--------------------|
| V_{RRM} | Recurrnt Peak Voltage | 200 | 300 | 400 | 600 | V |
| V_{RMS} | RMS Voltage | 140 | 210 | 280 | 420 | V |
| V_{DC} | DC Blocking Voltage | 200 | 300 | 400 | 600 | V |
| $I_{F(AV)}$ | Average Forward Rectified Current @ $T_A=100^\circ\text{C}$ Per leg Total device | | | 8.0 16 | | A |
| I_{FSM} | Peak Forward Surge Current 8.3ms Single Half-Sine-wave Superimosed on Rated Load | | | 100 | | A |
| $R_{\theta JC}$ | Typical Thermal Resistance Junction to Case | | | 2.0 | | $^\circ\text{C/W}$ |
| T_j T_{stg} | Operating Junction and Storage Temperature Range | | | -55 to +175 | | $^\circ\text{C}$ |



Ultra Fast Rectifier

MUR1620CT-MUR1660CT

ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

| Parameter | Symbol | Test conditions | MAX | | | UNIT |
|----------------------|------------------|---|----------------|-------------------------|--------------|---------|
| | | | MUR 1620CT | MUR1630CT- MUR1640CT | MUR 1660CT | |
| Reverse Current | I_R | $V_R=V_{RRM}, T_A=25^\circ C$ $V_R=V_{RRM}, T_A=150^\circ C$ | 5.0 250 | 10 500 | | μA |
| Forward Voltage | V_F (Note1) | $I_F=8A, T_A=25^\circ C$ $I_F=8A, T_A=150^\circ C$ | 0.975 0.895 | 1.30 1.00 | 1.50 1.20 | V |
| Reverse Recover Time | t_{rr} | $I_F=0.5A, I_R=1A,$ $I_{rr}=0.25A$ | 25 | 50 | | ns |

Note1: Pulse test:pulse width=300 μ s,duty cycl \leq 2.0%

TYPICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

FIG.1 –TYPICAL FORWARD CHARACTERISTIC

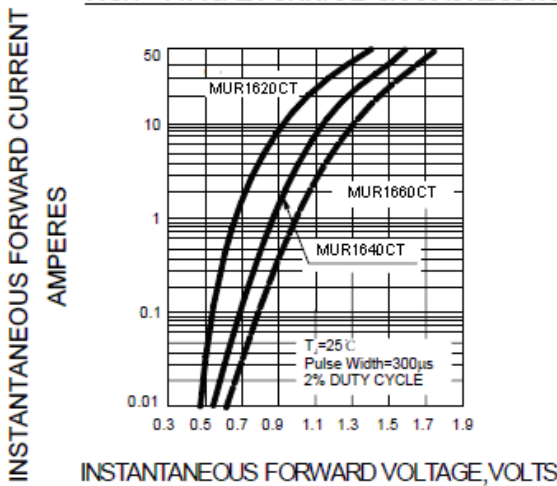


FIG.2 –TYPICAL REVERSE CHARACTERISTICS

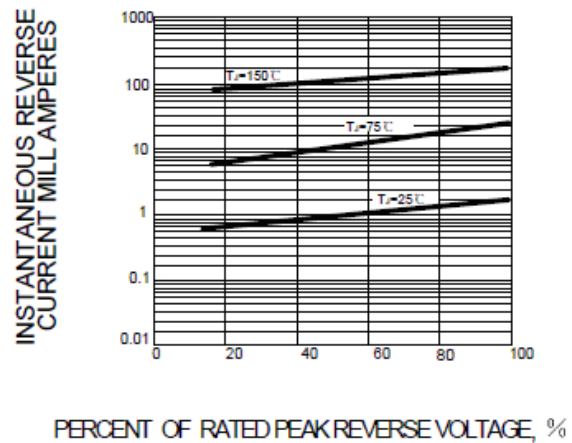


FIG.3 – PEAK FORWARD SURGE CURRENT

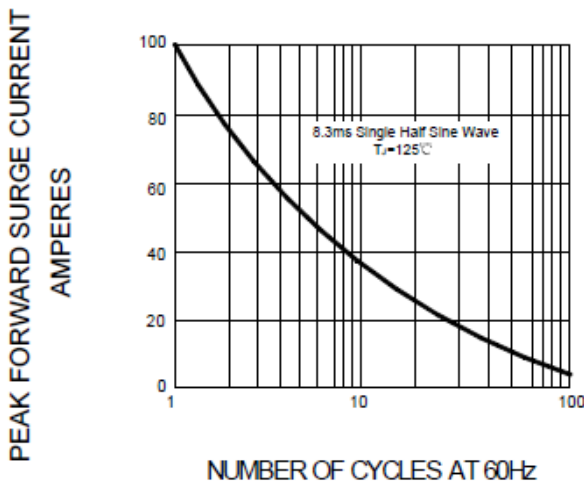
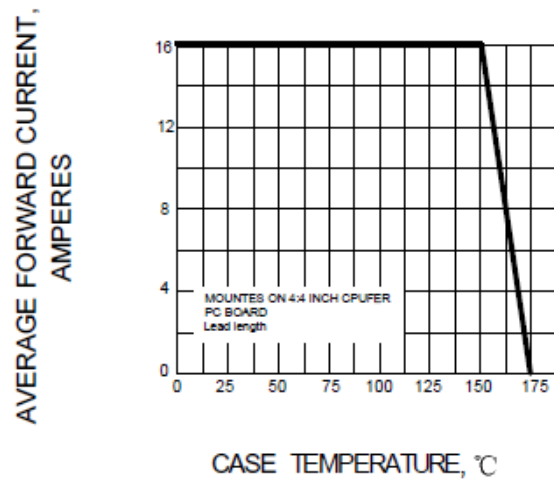


FIG.4 – FORWARD DERATING CURVE



Ultra Fast Rectifier

MUR1620CT-MUR1660CT

PACKAGE OUTLINE

Plastic surface mounted package

TO-220AB

