

Super Fast Rectifier

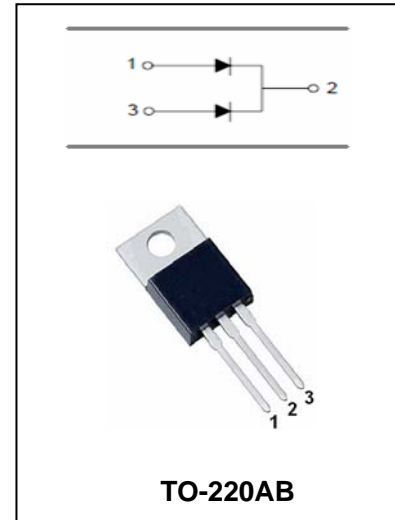
MUR2020CT-MUR2060CT

FEATURES

- Low Cost.
- Low Leakage.
- Low Forward Voltage Drop.
- High Current Capability.
- Easily Cleaned With Alcohol, Isopropanol and Similar Solvents.
- The Plastic Material Carries U/L Recognition 94V-0.



Lead-free



MAXIMUM RATING operating temperature range applies unless otherwise specified

| Symbol | Parameter | MUR 2020CT | MUR 2040CT | MUR 2060CT | Unit |
|---------------|--|-------------|------------|------------|-------------|
| V_{RRM} | Recurrnt Peak Reverse Voltage | 200 | 400 | 600 | V |
| V_{RMS} | RMS Voltage | 140 | 280 | 420 | V |
| V_{DC} | DC Blocking Voltage | 200 | 400 | 600 | V |
| $I_{F(AV)}$ | Average Forward Rectified Current @ $T_A=100^{\circ}C$ | 20 | | | A |
| I_{FSM} | Peak Forward Surge Current 8.3ms Single Half-Sine-wave Superimosed on Rated Load | 125 | | | A |
| $T_j T_{stg}$ | Operating Junction and Storage Tem-perature Range | -55 to +150 | | | $^{\circ}C$ |

ELECTRICAL CHARACTERISTICS @ $T_a=25^{\circ}C$ unless otherwise specified

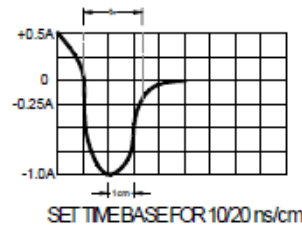
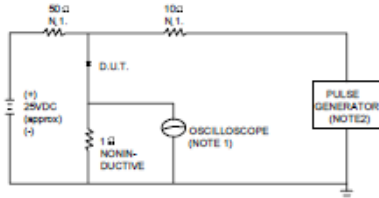
| Parameter | Symbol | Test conditions | MAX | | | UNIT |
|----------------------|----------|---|------------|------------|------------|---------|
| | | | MUR 2020CT | MUR 2040CT | MUR 2060CT | |
| Reverse Current | I_R | $V_R=V_{RRM}, T_A=25^{\circ}C$ $V_R=V_{RRM}, T_A=150^{\circ}C$ | 5.0 250 | 10 500 | | μA |
| Forward Voltage | V_F | $I_F=10A$ | 0.975 | 1.30 | 1.50 | V |
| Reverse Recover Time | t_{rr} | $I_F=0.5A, I_R=1A,$ $I_{rr}=0.25A$ | 25 | 50 | | ns |

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TYPICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

FIG.1 - TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTIC



NOTES: 1. RISE TIME = 7ns MAX INPUT IMPEDANCE = 1MΩ, 22pF.
2. RISE TIME = 10ns MAX. SOURCE IMPEDANCE = 50 Ω.

FIG.2 - TYPICAL FORWARD CHARACTERISTIC

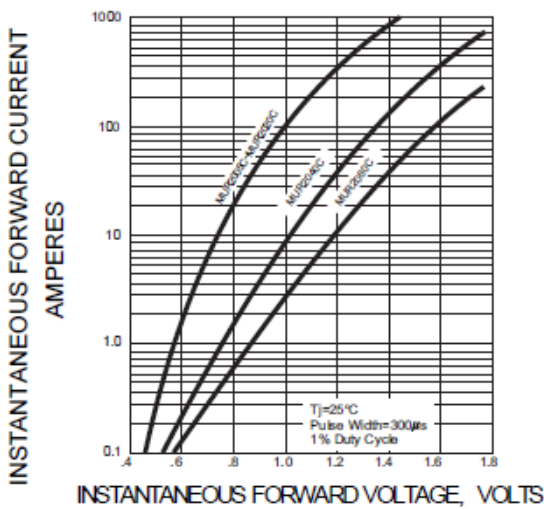


FIG.3 - PEAK FORWARD SURGE CURRENT

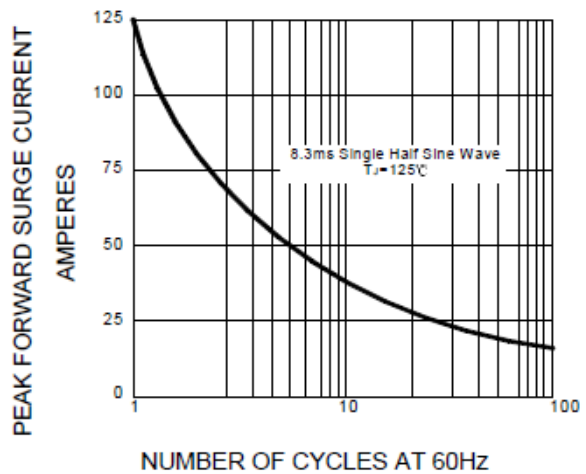
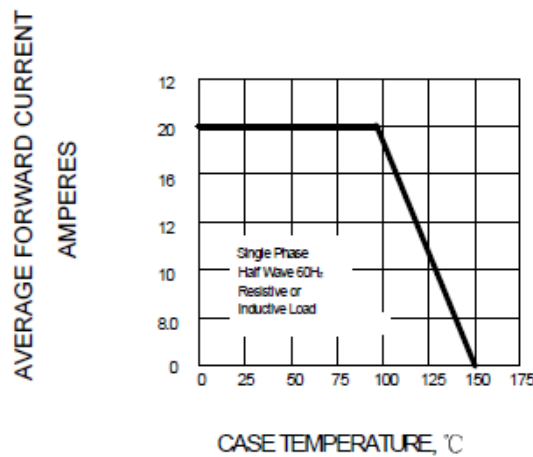


FIG.4-FORWARD DERATING CURVE





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PACKAGE OUTLINE

Plastic surface mounted package

TO-220AB

