

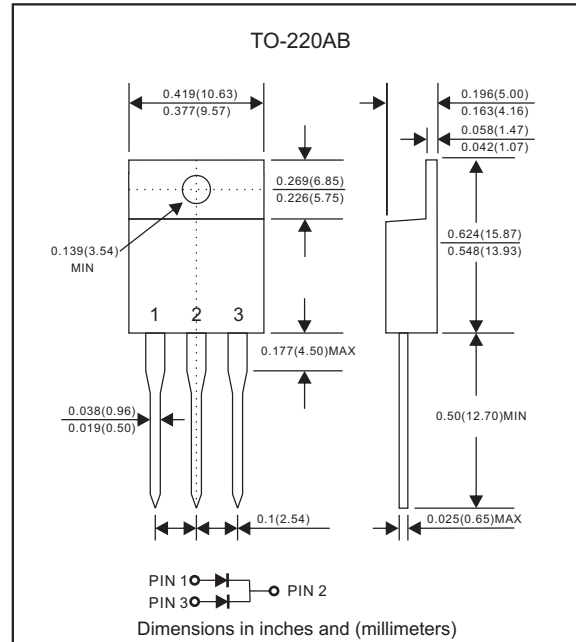
Features

- Dual rectifier construction, positive centetap, offer 8.0A Half wave and 16.0A full wave rectification.
- High surge current capability.
- Super fast recovery time for switching mode application.
- Low power loss.
- Glass passivated chip junctions.
- Lead-free parts meet environmental standards of MIL-STD-19500/228

Mechanical data

- Epoxy : UL94-V0 rated flame retardant
- Case : JEDEC TO-220AB molded plastic body over passivated chip
- Lead : Axial leads, solderable per MIL-STD-202, Method 208 guranteed
- Polarity: As marked
- Mounting Position : Any

Package outline



Maximum ratings (AT $T_A=25^{\circ}\text{C}$ unless otherwise noted)

| PARAMETER | SYMBOLS | MUR1620CT | MUR1640CT | MUR1660CT | UNIT |
|----------------------------------------------------------------------|-----------|-------------|-----------|-----------|--------------------|
| Maximum repetitive 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 | I_o | 16 | | | A |
| Peak forward surge current 8.3ms single half sine-wave(JEDEC method) | I_{FSM} | 110 | | | A |
| Operating junction temperature range | T_J | -55 to +150 | | | $^{\circ}\text{C}$ |
| Storage temperature range | T_{STG} | -65 to +175 | | | $^{\circ}\text{C}$ |

Electrical Characteristics (AT $T_A=25^{\circ}\text{C}$ unless otherwise noted)

| PARAMETER | SYMBOLS | MUR1620CT | MUR1640CT | MUR1660CT | UNIT |
|--------------------------------------------------------------------------------------------------------------------------|----------|------------|-----------|-----------|--------------------------------|
| Maximum forward voltage per leg at $I_F=8\text{A}$ | V_F | 0.98 | 1.30 | 1.70 | V |
| Maximum reverse recovery time per leg (Note 1) | t_{rr} | 25 | 50 | | ns |
| Maximum DC reverse current at $T_J=25^{\circ}\text{C}$ at rated DC blocking voltage per leg at $T_J=125^{\circ}\text{C}$ | I_R | 5.0 500 | | | μA μA |

Thermal Characteristics

| PARAMETER | SYMBOLS | MUR1620CT | MUR1640CT | MUR1660CT | UNIT |
|-----------------------------------------------------|-----------------|-----------|-----------|-----------|-----------------------------|
| Typical thermal resistance junction to case per leg | $R_{\theta JC}$ | 2.0 | | | $^{\circ}\text{C}/\text{W}$ |

Note 1: Reverse recovery time test condition, $I_F=0.5\text{A}$, $I_R=1.0\text{A}$, $I_{RR}=0.25\text{A}$

Rating and characteristic curves(MUR1620CT THRU MUR1660CT)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

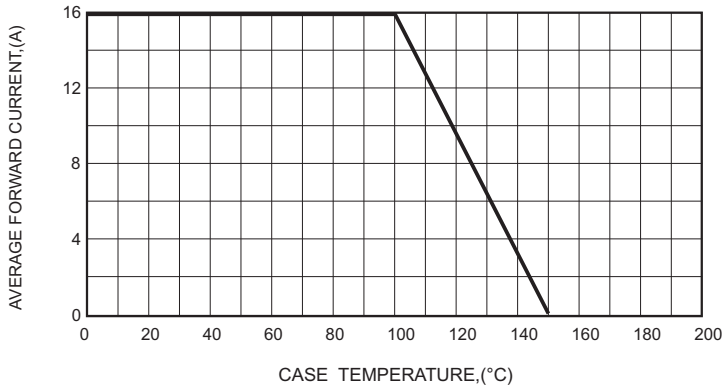


FIG.2-TYPICAL FORWARD CHARACTERISTICS

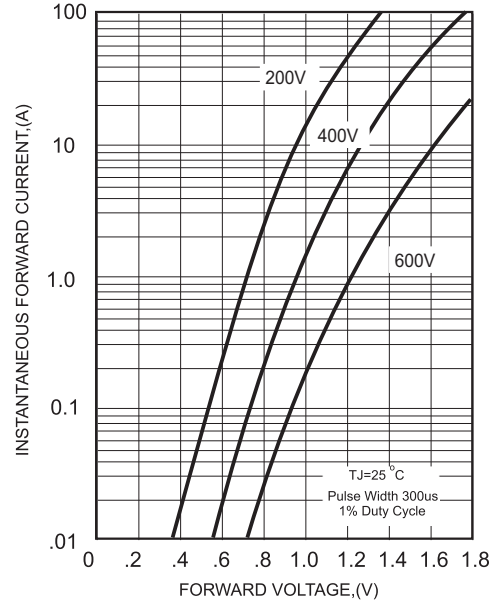


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

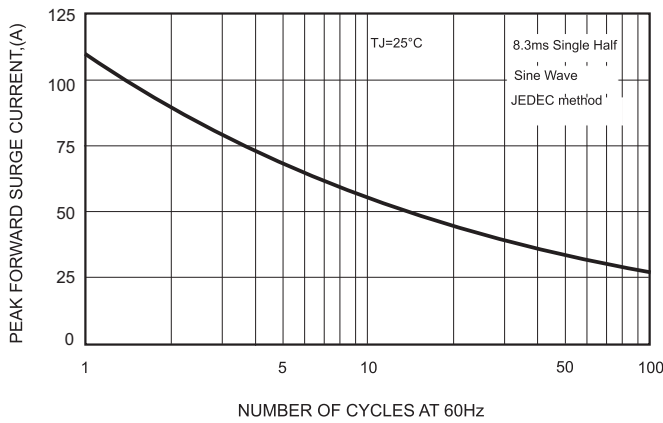


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

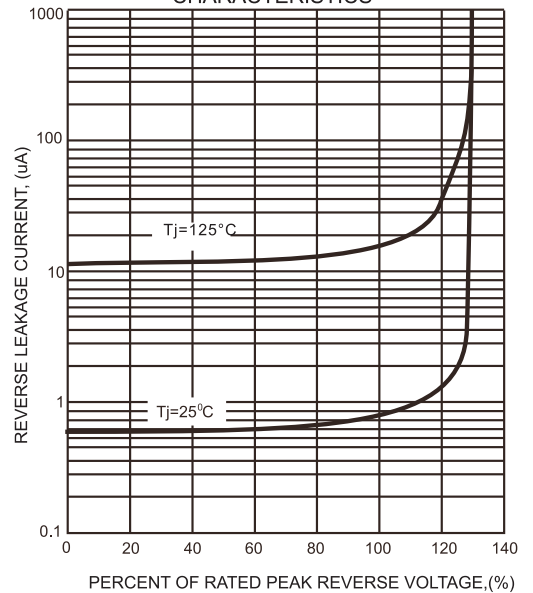
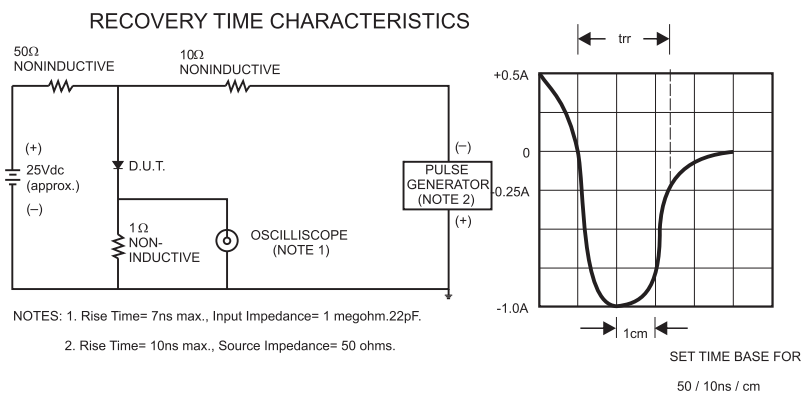
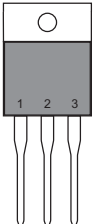
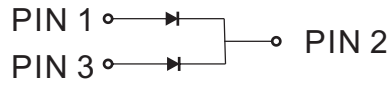


FIG.5- TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTICS



Pinning information

| Pin | Simplified outline | Symbol |
|------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Pin1 anode Pin2 cathode Pin3 anode |  |  |

Marking

| Type number | Marking code |
|-------------|--------------|
| MUR1620CT | MUR1620CT |
| MUR1640CT | MUR1640CT |
| MUR1660CT | MUR1660CT |