

Ultrafast Recovery Rectifier

MUR1660CT

FEATURES

- Ultrafast Recovery Time
- Low Forward Voltage
- Low Leakage Current
- 175°C Operating Junction Temperature
- High Temperature Glass Passivated Junction

MECHANICAL CHARACTERISTICS

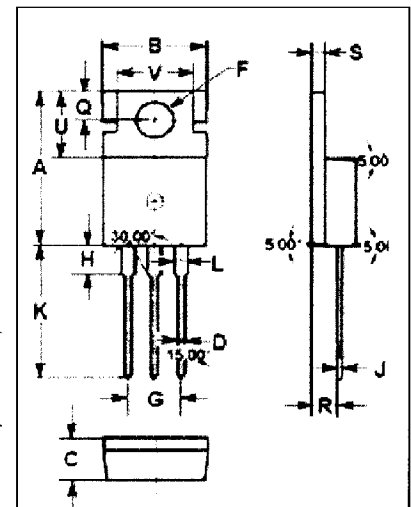
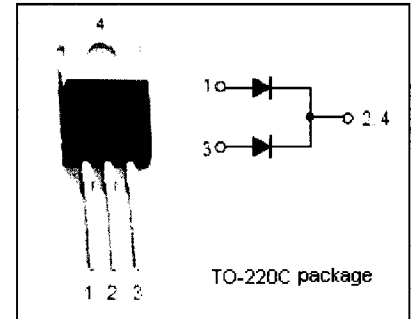
- Case: Epoxy, Molded
- Finish: All External Surfaces Corrosion Resistant and Terminal Leads are Readily Solderable
- Lead Temperature for Soldering Purposes: 260°C Max. for 10 Seconds

APPLICATIONS

- Designed for use in switching power supplies, inverters and as free wheeling diodes.

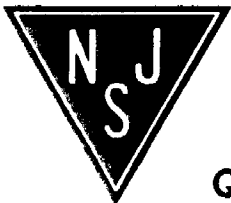
ABSOLUTE MAXIMUM RATINGS(T_a=25°C)

| SYMBOL | PARAMETER | VALUE | UNIT |
|--|--|---------|------|
| V _{RRM} V _{RWM} V _R | Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage | 600 | V |
| I _{F(AV)} | Average Rectified Forward Current Per Leg (Rated V _R) Total Device | 8 16 | A |
| I _{FM} | Peak Repetitive Forward Current (Rated V _R , Square Wave, 20kHz) Per Diode Leg | 16 | A |
| I _{FSM} | Nonrepetitive Peak Surge Current (Surge applied at rated load conditions half- wave, single phase, 60Hz) | 100 | A |
| T _J | Junction Temperature | -65~175 | °C |
| T _{stg} | Storage Temperature Range | -65~175 | °C |



| DIM | mm | |
|-----|-------|-------|
| | MIN | MAX |
| A | 15.70 | 15.90 |
| B | 9.90 | 10.10 |
| C | 4.20 | 4.40 |
| D | 0.70 | 0.90 |
| F | 3.40 | 3.60 |
| G | 4.98 | 5.18 |
| H | 2.70 | 2.90 |
| J | 0.44 | 0.46 |
| K | 13.20 | 13.40 |
| L | 1.10 | 1.30 |
| Q | 2.70 | 2.90 |
| R | 2.50 | 2.70 |
| S | 1.29 | 1.31 |
| U | 6.45 | 6.65 |
| V | 8.66 | 8.86 |

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Ultrafast Recovery Rectifier**MUR1660CT****THERMAL CHARACTERISTICS**

| SYMBOL | PARAMETER | MAX | UNIT |
|---------------|--------------------------------------|-----|---------------|
| $R_{th\ j-c}$ | Thermal Resistance, Junction to Case | 2.0 | $^{\circ}C/W$ |

ELECTRICAL CHARACTERISTICS($T_a=25^{\circ}C$) (Pulse Test: Pulse Width=300 μ s, Duty Cycle \leq 2%)

| SYMBOL | PARAMETER | CONDITIONS | MAX | UNIT |
|----------|---------------------------------------|----------------------------------|------|---------|
| V_F | Maximum Instantaneous Forward Voltage | $I_F=8A$ | 1.68 | V |
| I_R | Maximum Instantaneous Reverse Current | $V_{RRM}=600V$ | 3 | μA |
| t_{rr} | Maximum Reverse Recovery Time | $I_F=0.5A, I_R=1A, I_{rr}=0.25A$ | 60 | ns |