

Ultrafast Recovery Rectifier

MUR3060PT

FEATURES

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

MECHANICAL CHARACTERISTICS

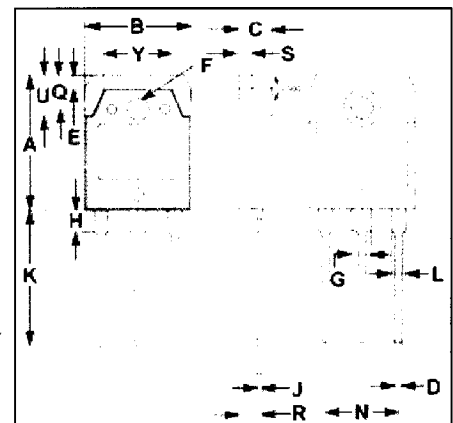
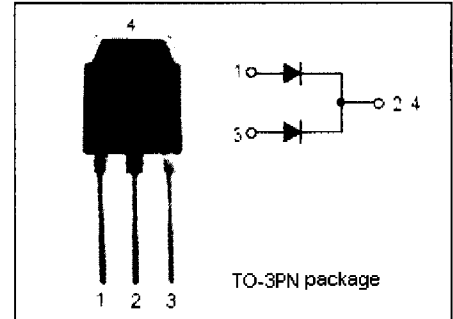
- Case: Epoxy, Molded
- Finish: All External Surfaces Corrosion Resistant and Terminal Leads are Readily Solderable
- Lead Temperature for Soldering Purposes: 260°C Max. for 10 Seconds

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} | Peak Repetitive Reverse Voltage | 600 | V |
| V _{RWM} | Working Peak Reverse Voltage | | |
| V _R | DC Blocking Voltage | | |
| I _{F(AV)} | Average Rectified Forward Current Per Leg (Rated V _R) Total Device | 15 30 | A |
| I _{FM} | Peak Repetitive Forward Current (Rated V _R , Square Wave, 20kHz) Per Diode Leg | 30 | A |
| I _{FSM} | Nonrepetitive Peak Surge Current (Surge applied at rated load conditions half-wave, single phase, 60Hz) | 150 | A |
| T _J | Junction Temperature | -65~175 | °C |
| T _{stg} | Storage Temperature Range | -65~175 | °C |



| DIM | mm | |
|-----|-------|-------|
| | MIN | MAX |
| A | 19.90 | 20.10 |
| B | 15.38 | 15.42 |
| C | 4.75 | 4.85 |
| D | 0.90 | 1.10 |
| E | 1.90 | 2.10 |
| F | 3.40 | 3.60 |
| G | 2.98 | 3.02 |
| H | 3.20 | 3.40 |
| J | 0.595 | 0.605 |
| K | 19.95 | 20.25 |
| L | 1.98 | 2.02 |
| N | 10.89 | 10.91 |
| Q | 4.95 | 5.05 |
| R | 3.35 | 3.45 |
| S | 1.995 | 2.005 |
| U | 5.90 | 6.10 |
| Y | 9.90 | 10.10 |



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Ultrafast Recovery Rectifier**MUR3060PT****THERMAL CHARACTERISTICS**

| SYMBOL | PARAMETER | MAX | UNIT |
|---------------|--------------------------------------|-----|---------------|
| $R_{th\ j-c}$ | Thermal Resistance, Junction to Case | 1.5 | $^{\circ}C/W$ |

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 | $I_F=15A$ | 1.68 | V |
| I_R | Maximum Instantaneous Reverse Current | $V_{RRM}=600V$ | 5 | μA |
| t_{rr} | Maximum Reverse Recovery Time | $I_F=0.5A, I_R=1A, I_{rr}=0.25A$ | 60 | ns |