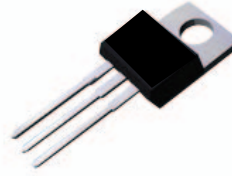


MUR2060CT/MUR2060FCT

Ultrafast Recovery Rectifiers
Reverse Voltage 600V Forward Current 20 A

Features

- FRED (Planar) wafer construction
- Ultrafast recovery time
- Low forward voltage drop, low power loss
- High efficiency
- Plastic package has underwriters Laboratory Flammability Classification 94V-0



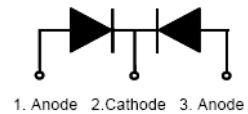
MUR2060CT
Package: TO-220-AB



MUR2060FCT
Package: ITO-220-AB

Mechanical Data

- Case: Epoxy, molded
- Weight: 1.9 grams (approximately)
- Finish: all external surfaces corrosion resistant and terminal leads readily solderable
- Lead temperature for soldering purposes: 260°C Max. for 10 sec
- 50 units per plastic tube



Schematic Diagram

Maximum Ratings & Electrical Characteristics

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

| Parameter | Test Conditions | | Symbol | Value | Unit |
|--|---|-------------------------|------------------------|-------------------------|--------------------|
| Maximum Repetitive Peak Reverse Voltage | | | V_{RRM} | 600 | V |
| Working Peak Reverse Voltage | | | V_{RWM} | 600 | V |
| Maximum DC Blocking Voltage | | | V_{DC} | 600 | V |
| Maximum Average Forward Rectified Current @ $T_c=105^\circ\text{C}$ | Total Device | | $I_F(AV)$ | 20 | A |
| | Per Diode | | | 10 | |
| Peak Forward Surge Current 8.3ms Single Half Sine-wave Superimposed on Rated Load per Diode | | | I_{FSM} | 125 | A |
| Voltage Rate of Change (rated V_R) | | | DV/dt | 10000 | V/ μs |
| Operating Junction Temperature Range | | | T_J | - 55 to+150 | $^\circ\text{C}$ |
| Storage Temperature Range | | | T_{STG} | - 55 to+150 | $^\circ\text{C}$ |
| Maximum Reverse Recover Time ($I_F=0.5A$, $I_R=1.0A$, $I_{rec}=0.25A$) | | | T_{rr} | 50 | ns |
| Maximum Instantaneous Forward Voltage per Leg | $I_F=10A$ | $T_c=25^\circ\text{C}$ | V_F | 1.60 | V |
| | $I_F=10A$ | $T_c=125^\circ\text{C}$ | | 1.50 | |
| Maximum Reverse Current per Leg at Working Peak Reverse Voltage | | | I_R | 10 | μA |
| | | | | 500 | μA |
| Thermal Characteristics $T_A=25^\circ\text{C}$ unless otherwise noted | | | | | |
| Symbol | Parameter | | Typ.(MUR2060CT) | Typ.(MUR2060FCT) | Unit |
| $R_{\theta JC}$ | Thermal Resistance, Junction to Case per Leg | | 2.0 | 4.0 | $^\circ\text{C/W}$ |
| $R_{\theta JA}$ | Thermal Resistance, Junction to Ambient per Leg | | 62.5 | 62.5 | $^\circ\text{C/W}$ |

Note: Pulse test:300us pulse width, duty cycle=2%

MUR2060CT/MUR2060FCT

Ultrafast Recovery Rectifiers
Reverse Voltage 600V Forward Current 20 A

Ratings and Characteristics Curves ($T_A = 25^\circ\text{C}$ unless otherwise noted)

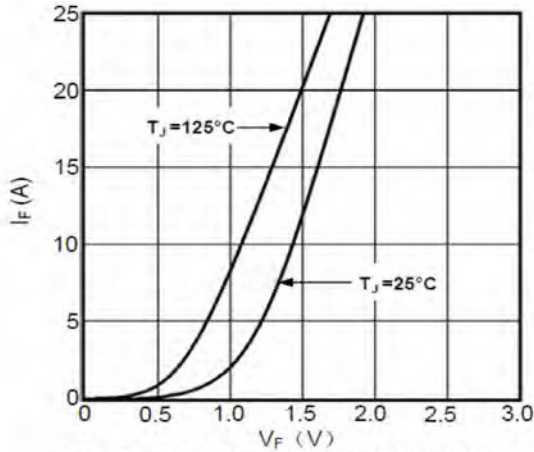


Fig1. Forward Voltage Drop vs Forward Current

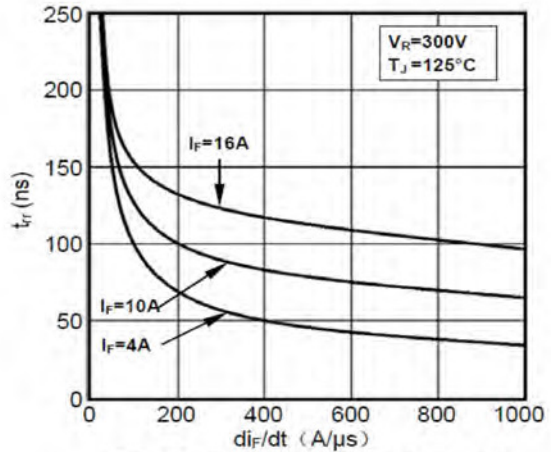


Fig2. Reverse Recovery Time vs di_F/dt

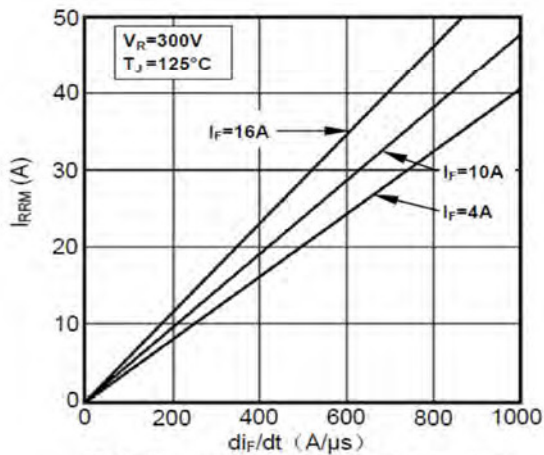


Fig3. Reverse Recovery Current vs di_F/dt

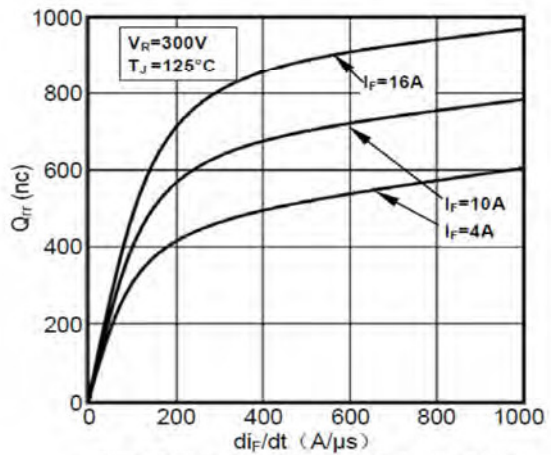


Fig4. Reverse Recovery Charge vs di_F/dt

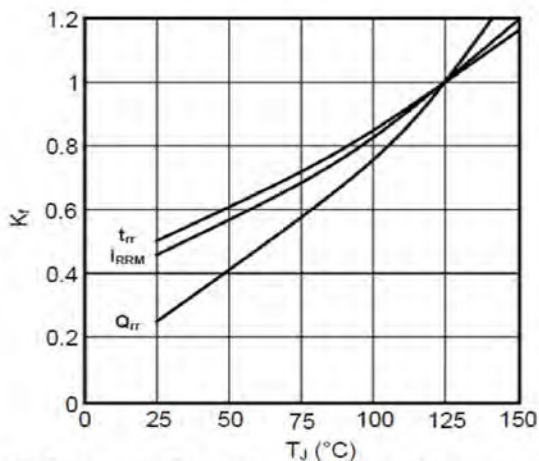


Fig5. Dynamic Parameters vs Junction Temperature

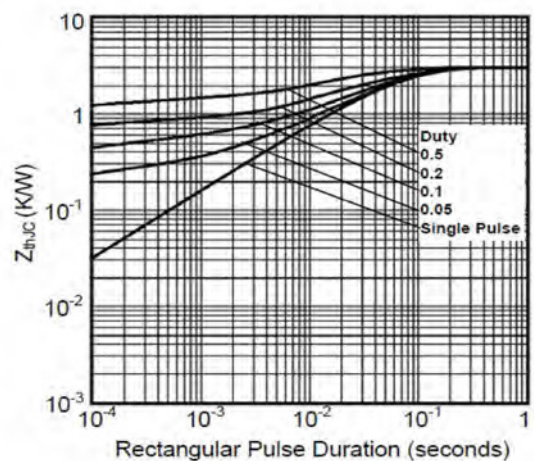
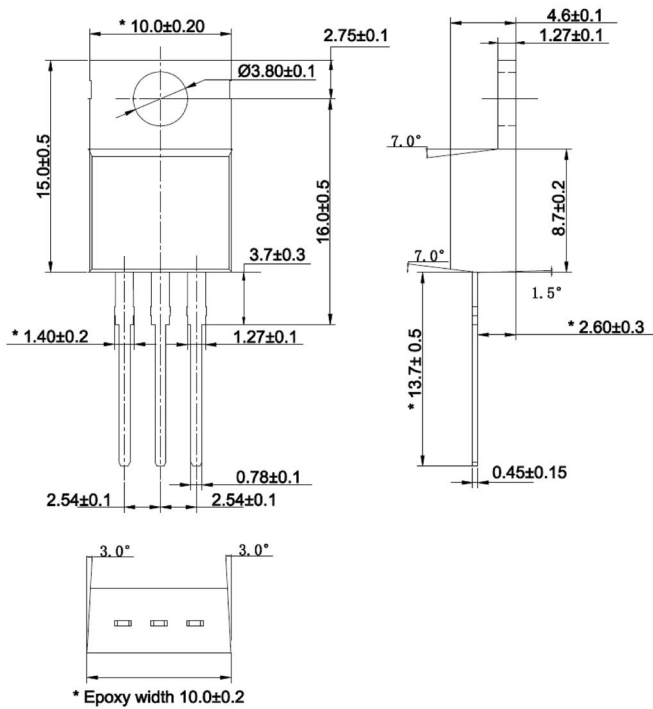


Fig6. Transient Thermal Impedance

Package Outline Dimensions

in millimeters

TO-220-AB



ITO-220-AB

