

# MUR2030FCT

## 20.0Amp Super Fast Recovery Rectifiers

### Features

- ◆ The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- ◆ Construction utilizes void-free molded plastic technique
- ◆ Low reverse leakage
- ◆ High forward surge current capability
- ◆ High temperature soldering guaranteed  
260°C/10 seconds at terminals

### Mechanical Data

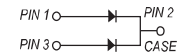
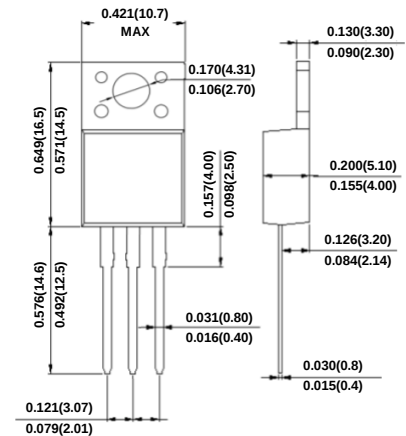
**Case :** Molded plastic body

**Terminals :** Solder plated, solderable per MIL-STD-750,Method 2026

**Polarity :** Polarity symbol marking on body

**Mounting Position :** Any

### ITO-220AB



Dimensions in inches and (millimeters)

### Maximum Ratings And Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified. Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.

| Parameter                                                                                                       | SYMBOLS    | MUR2030FCT   | UNITS              |
|-----------------------------------------------------------------------------------------------------------------|------------|--------------|--------------------|
| Maximum repetitive peak reverse voltage                                                                         | $V_{RRM}$  | 300          | V                  |
| Maximum RMS voltage                                                                                             | $V_{RMS}$  | 210          | V                  |
| Maximum DC blocking voltage                                                                                     | $V_{DC}$   | 300          | V                  |
| Maximum average forward rectified current at $T_c=110^\circ\text{C}$ per device per diode                       | $I_{(AV)}$ | 20.0<br>10.0 | A                  |
| Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load                              | $I_{FSM}$  | 200.0        | A                  |
| Maximum instantaneous forward voltage per diode at 10.0A                                                        | $V_F$      | 1.3          | V                  |
| Maximum DC reverse current<br>$T_A=25^\circ\text{C}$<br>at rated DC blocking voltage<br>$T_A=125^\circ\text{C}$ | $I_R$      | 5<br>500     | $\mu\text{A}$      |
| Maximum reverse recovery time                                                                                   | $T_{rr}$   | 35           | ns                 |
| Typical thermal resistance                                                                                      | $R_{qJC}$  | 1.5          | $^\circ\text{C/W}$ |
| Operating junction temperature range                                                                            | $T_J$      | -55 to +150  | $^\circ\text{C}$   |
| Storage temperature range                                                                                       | $T_{STG}$  | -55 to +150  | $^\circ\text{C}$   |

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

## Ratings And Characteristic Curves

FIG. 1- DERATING CURVE OUTPUT RECTIFIED CURRENT

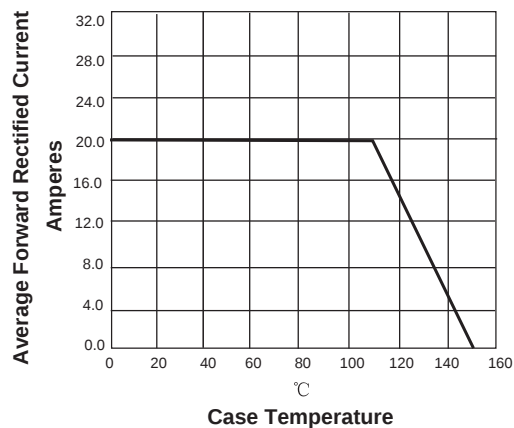


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG

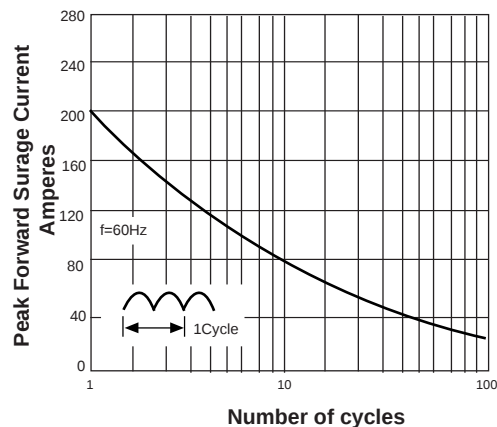


FIG. 3-TYPICAL FORWARD VOLTAGE CHARACTERISTICS

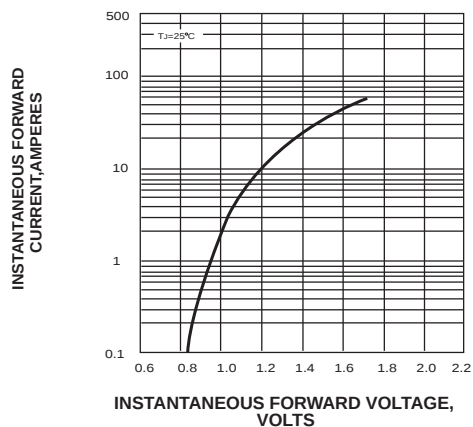


FIG. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS

