

**DESCRIPTION**

The MUR1620CT ~ MUR1660CT are available in TO-220 Package

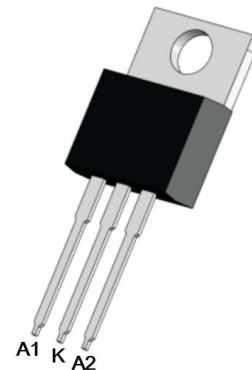
- Ultra fast 35 and 60 Nanosecond Recovery times
- High temperature glass passivated junction
- High voltage capability to 600 volts

**ORDERING INFORMATION**

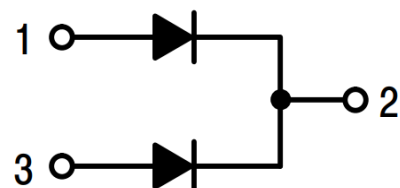
| Package Type                             | Part Number |
|--|-------------|
| TO-220F                                  | MUR1620CT   |
|  | MUR1640CT   |
|  | MUR1660CT   |
| SPQ                                      | 50pcs /Tube |
| AiT provides all RoHS Compliant Products |             |

**MECHANICAL DATA**

- Case: TO-220
- Terminals: Lead Solderable per MIL-STD-202, Method 208
- Finish: All External Surfaces Corrosion Resistant and Terminal Leads are Readily Solderable
- Lead Temperature for Soldering Purpose: 260°C Max. for 10Seconds
- Approx. Weight: 1.9 grams/0.067oz

**PIN DESCRIPTION**

| PIN | DESCRIPTION |
|-----|-------------|
| 1   | A1          |
| 2   | K           |
| 3   | A2          |





## ABSOLUTE MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified

| Parameter   | Symbol                            | MUR1620CTF    | MUR1640CTF | MUR1660CTF | Unit |
|---|-----------------------------------|---------------|------------|------------|------|
| Maximum Recurrent Peak Reverse Voltage  | V <sub>RRM</sub>                  | 200           | 400        | 600        | V    |
| Maximum RMS voltage   | V <sub>RMS</sub>                  | 140           | 280        | 420        | V    |
| Maximum DC blocking Voltage   | V <sub>DC</sub>                   | 200           | 400        | 600        | V    |
| Average Rectified Forward Current<br>per leg<br>Total Device, (Rectified V <sub>R</sub> ) T <sub>c</sub> =150°C<br>per device | I <sub>F(AV)</sub>                | 8.0<br><br>16 |            |            | A    |
| Peak Forward Surge Current,8.3ms<br>Single Half Sine-wave Superimposed<br>on Rated Load (JEDEC method)                        | I <sub>FSM</sub>                  | 100           |            |            | A    |
| Instantaneous Forward Voltage at 8A<br>per leg  | V <sub>F</sub>                    | 0.975         | 1.3        | 1.5        | V    |
| Maximum instantaneous reverse<br>Current at rated T <sub>A</sub> =25°C<br>DC blocking voltage T <sub>A</sub> =125°C           | I <sub>R</sub>                    | 5<br>250      | 10<br>500  |            | uA   |
| Maximum Reverse Recovery Time <sup>(1)</sup>  | trr                               | 25            | 50         |            | ns   |
| Maximum Thermal Resistance<br>Junction To Case  | R <sub>θJC</sub>                  | 4             |            |            | °C/W |
| Operation Junction Temperature and<br>Storage Temperature   | T <sub>j</sub> , T <sub>stg</sub> | -65~+175      |            |            | °C   |

(1) Reverse recovery test conditions  $I_F=0.5\text{A}$ ,  $I_R=1.0\text{A}$ ,  $I_{rr}=0.25\text{A}$

Stresses above may cause permanent damage to the device. These are stress ratings only and functional operation of the device at these or any other conditions beyond those indicated in the Electrical Characteristics are not implied. Exposure to absolute maximum rating conditions for extended periods may affect device reliability.



## TYPICAL CHARACTERISTICS

Fig 1. TYPICAL FORWARD CURRENT DERATING CURVE

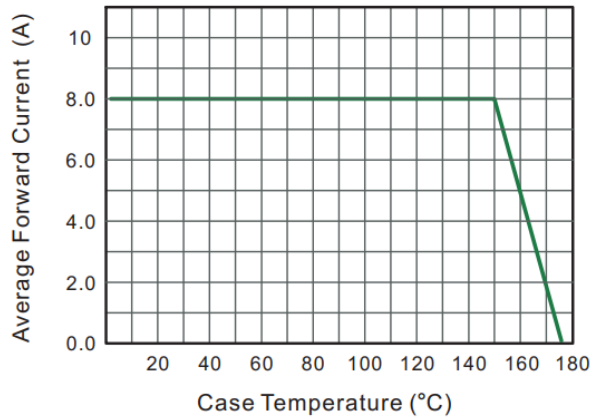


Fig 2. Typical Reverse Characteristics

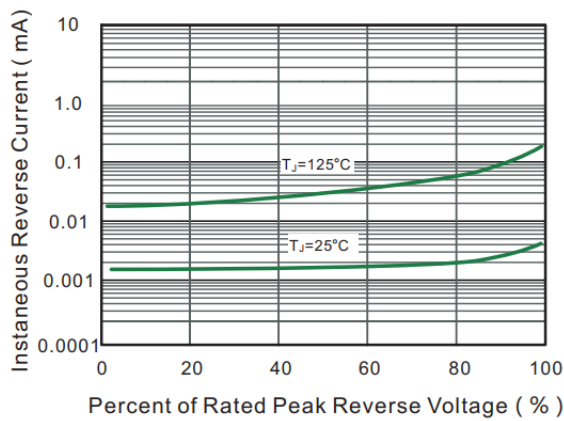


Fig 3. Typical Forward Characteristics PER LEG

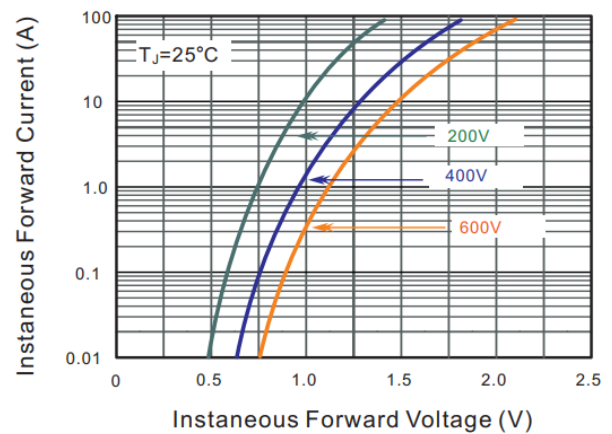
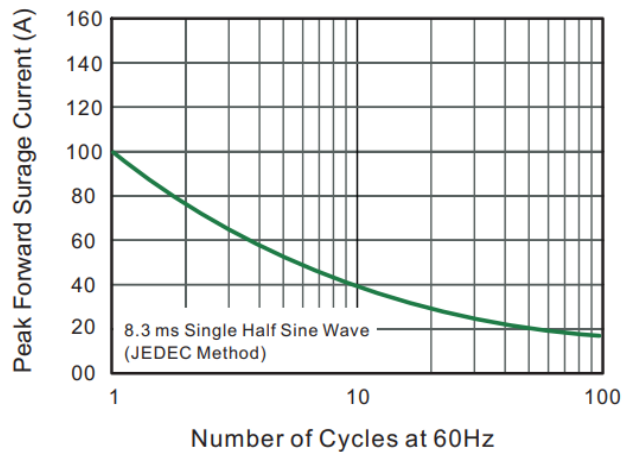


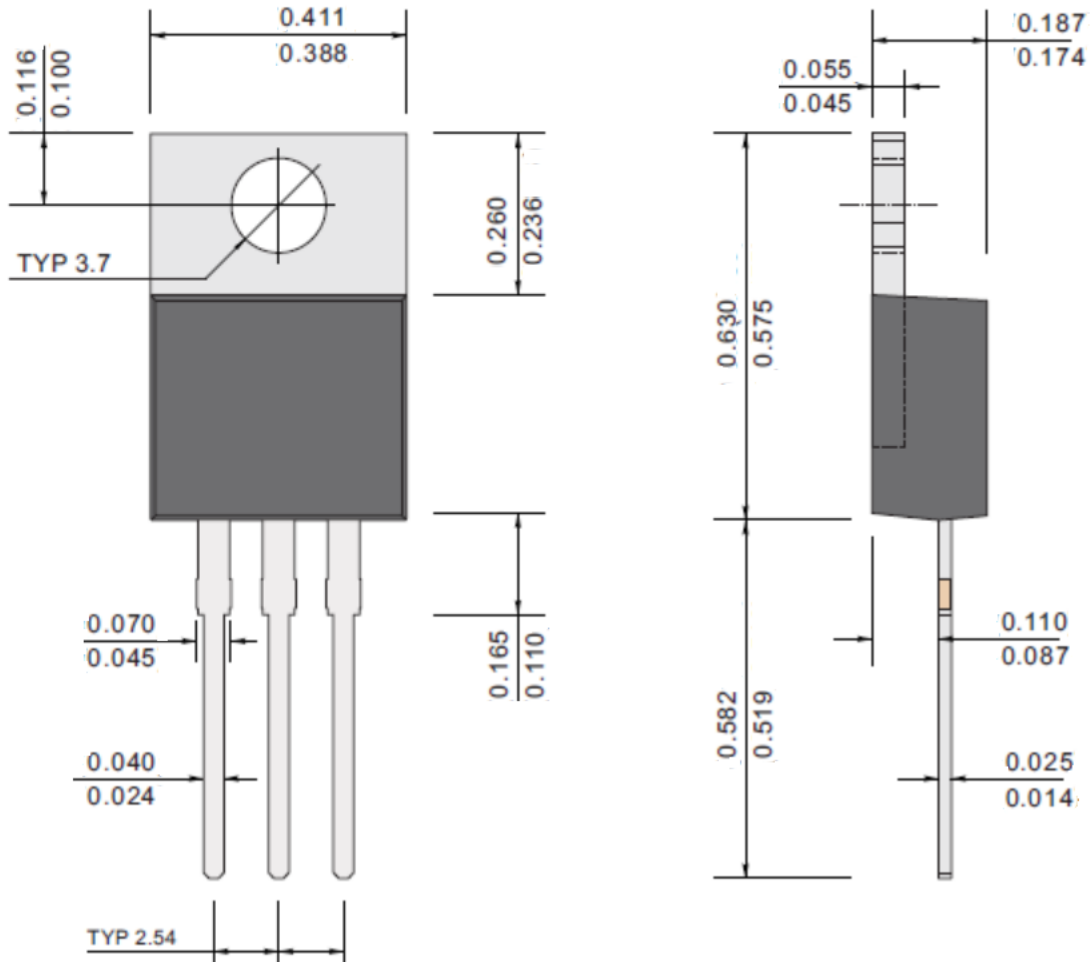
Fig 4. Maximum Non-Repetitive Peak Forward Surge Current





## PACKAGE INFORMATION

Dimension in TO-220 (Unit: mm)





## IMPORTANT NOTICE

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