

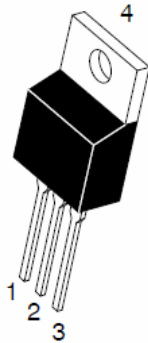
# MUR1640CT

# MUR1640CTF

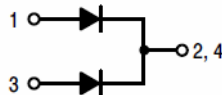
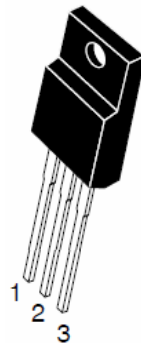
03-JUN-2019

## Superfast Recovery Rectifier

**TO-220AB**  
**MUR1640CT**



**ITO-220AB**  
**MUR1640CTF**



### Features

- Low forward voltage drop
- Low leakage
- High current capability
- Super fast switching speed
- High forward surge capability
- High reliability.

### Mechanical Data

- Epoxy: UL 94V-O rate flame retardant
- Lead: lead solderable per MIL-STD-202, method 208 guaranteed
- Polarity: Color band denotes cathode end
- Mounting position: Any
- Weight: 0.054ounce, 1.549gram

| Parameter                                                                                               | Symbols          | MUR1640CT  | MUR1640CTF | Units            |
|---------------------------------------------------------------------------------------------------------|------------------|------------|------------|------------------|
| Maximum Repetitive Peak Reverse Voltage                                                                 | VRRM             | 400        |            | V                |
| Maximum RMS voltage                                                                                     | VRMS             | 280        |            | V                |
| Maximum DC Blocking Voltage                                                                             | VDC              | 400        |            | V                |
| Maximum Average Forward Rectified Current                                                               | I(AV)            | 16.0       |            | A                |
| Reverse Recovery Time.<br>IF=0.5A, IR=1A, IRR=0.25A                                                     | Trr              | 35         |            | ns               |
| Peak Forward Surge Current 8.3 ms Single<br>Half Sine Wave Superimposed on Rated<br>Load (JEDEC Method) | IFSM             | 250        |            | A                |
| I <sup>2</sup> t rating for fusing ( 1ms< t < 8.3ms)                                                    | I <sup>2</sup> t | 259        |            | A <sup>2</sup> S |
| Maximum Forward Voltage at 8.0A and 25 °C                                                               | VF               | 1.35       |            | V                |
| Maximum DC Reverse Current @TA=25 °C<br>at Rated DC Blocking Voltage @TA=100 °C                         | IR               | 5<br>250   |            | μA               |
| Typical Junction Capacitance (Note1)                                                                    | Cj               | 85         |            | pF               |
| Operating and Storage Temperature Range                                                                 | Tj, Tstg         | -55 ~ +150 |            | °C               |
| Typical thermal resistance (Note 2)                                                                     | RthJC            | 2.5        | 3          | °C/W             |

Note: 1. Measured at 1MHz and applied reverse voltage of 4 VDC.

2. Thermal resistance junction to case, lead and ambient in accordance with JESD-51.

Unit mounted on glass-epoxy substrate with 1oz/ft<sup>2</sup> 20x20 mm copper pad per pin with heatsink

## RATINGS AND CHARACTERISTICS CURVES (TA = 25 °C unless otherwise noted)

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

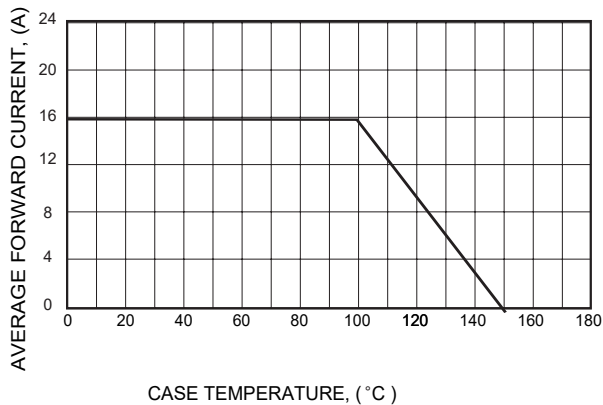


FIG. 2 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

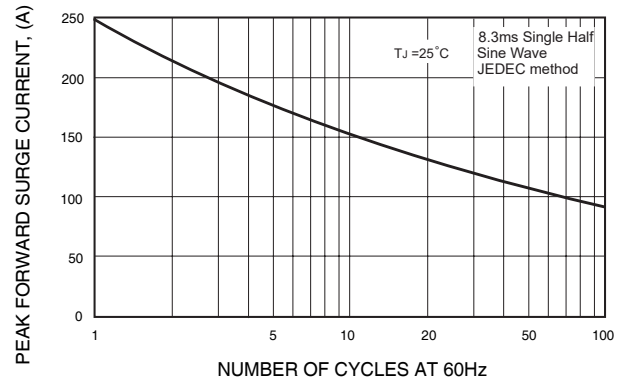


FIG. 3 - TYPICAL REVERSE CHARACTERISTICS

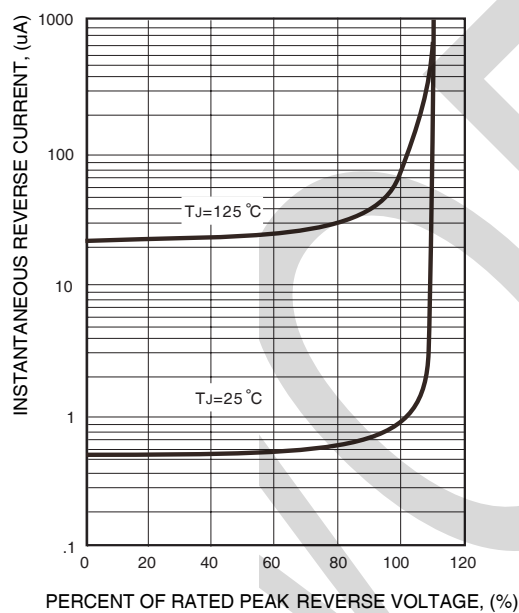
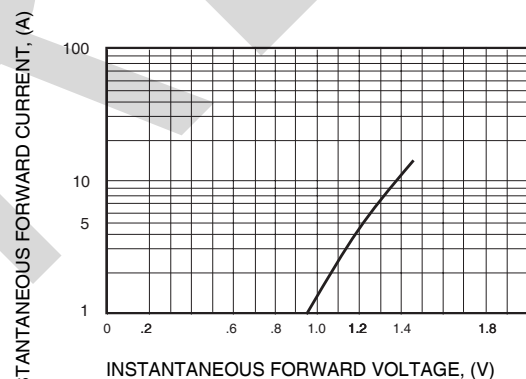


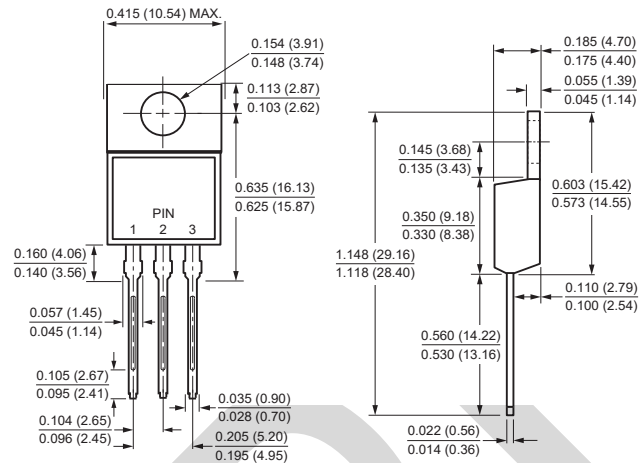
FIG. 4 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



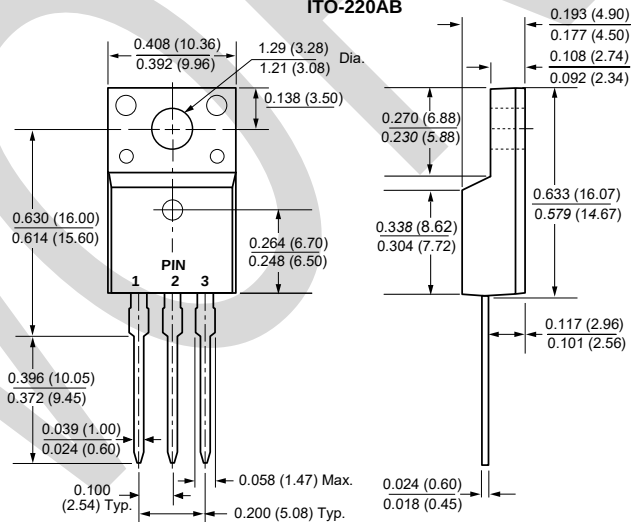
## PACKAGE OUTLINE DIMENSIONS

Note:unit In(mm)

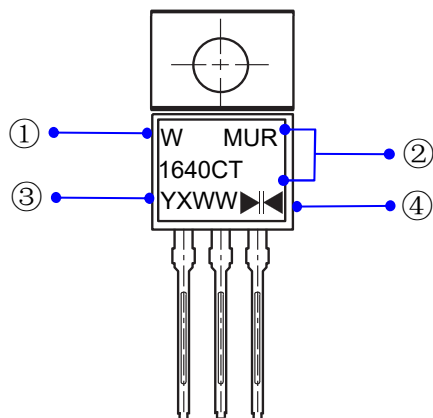
TO-220AB



ITO-220AB



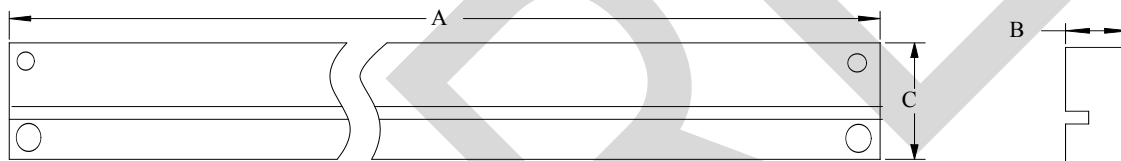
## Marking Information



- ①W : Company's trademark  
 ②Product model : MUR1640CT or MUR1640CTF  
 ③PDC information:  
 Y X WW  
 WW:Week code(01 to 53)  
 X:Internal identification code  
 Y:Year code(ex:0=2020)  
 ④  Double wafer

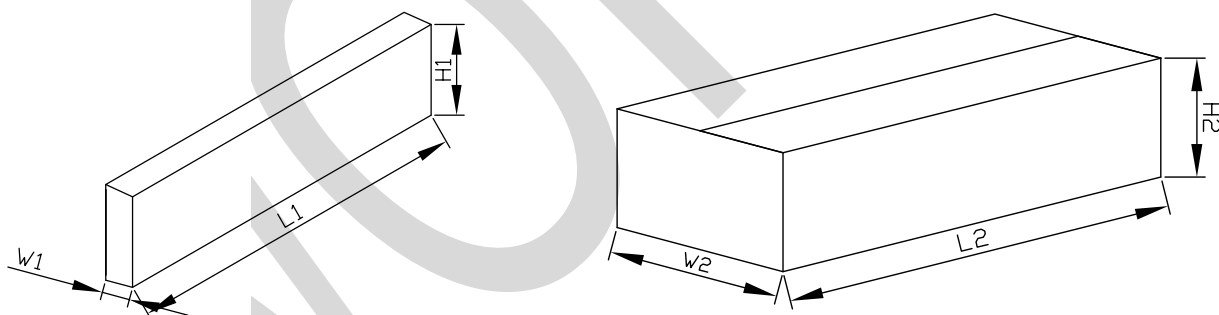
## Packaging Information

### 1.Tube Dimensions



### 2.Inside Box

### 3.Outside Box



## Packaging Information

| NO   | UNIT                                                          | Tube Dimensions |   |    | Inside Box                                    |    |     | Outside Box                      |     |     |
|------|---------------------------------------------------------------|-----------------|---|----|-----------------------------------------------|----|-----|----------------------------------|-----|-----|
| Size | mm                                                            | A               | B | C  | L1                                            | W1 | H1  | L2                               | W2  | H2  |
|      |                                                               | 530             | 7 | 33 | 570                                           | 46 | 150 | 590                              | 260 | 180 |
| QTY  | PCS                                                           | 50PCS/Tube      |   |    | Smallest package,1000PCS,<br>20 tube in total |    |     | 5,000PCS/carton,5 boxes in total |     |     |
| Note | Tolerance    ≤20mm,±3mm;    21-100mm,±5mm;    101-500mm,±10mm |                 |   |    |                                               |    |     |                                  |     |     |