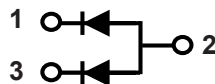
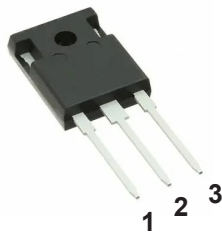


## Superfast Recovery Rectifier

**TO-247**  
**MUR4030PTR**



### Features

- Low forward voltage drop
- Low leakage current
- 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
- Mounting position: Any

| Parameter                                                                                               | Symbols  | MUR4030PTR | Units |
|---------------------------------------------------------------------------------------------------------|----------|------------|-------|
| Maximum Repetitive Peak Reverse Voltage                                                                 | VRRM     | 300        | V     |
| Maximum RMS voltage                                                                                     | VRMS     | 210        | V     |
| Maximum DC Blocking Voltage                                                                             | VDC      | 300        | V     |
| Maximum Average Forward Rectified Current                                                               | I(AV)    | 40.0       | A     |
| Maximum Reverse Recovery Time<br>IF=0.5A, IR=1A, IRR=0.25A                                              | Trr      | 50         | ns    |
| Peak Forward Surge Current 8.3 ms Single<br>Half Sine Wave Superimposed on Rated<br>Load (JEDEC Method) | IFSM     | 250        | A     |
| Max Forward Voltage at 5A and 25 °C                                                                     | VF       | 0.93       | V     |
| Max Forward Voltage at 20A and 25 °C                                                                    |          | 1.15       |       |
| Maximum DC Reverse Current @TA=25 °C<br>at Rated DC Blocking Voltage @TA=125 °C                         | IR       | 10<br>500  | μA    |
| Typical Junction Capacitance (Note1)                                                                    | Cj       | 85         | pF    |
| Operating and Storage Temperature Range                                                                 | Tj, Tstg | -55 ~ +150 | °C    |
| Typical thermal resistance (Note 2)                                                                     | RthJC    | 1.5        | °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 - FORWARD CURRENT DERATING CURVE

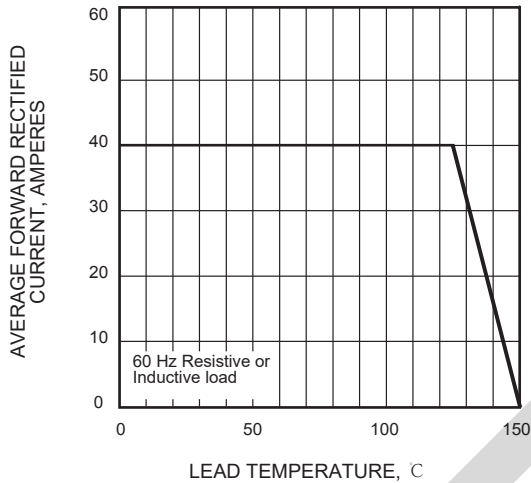


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

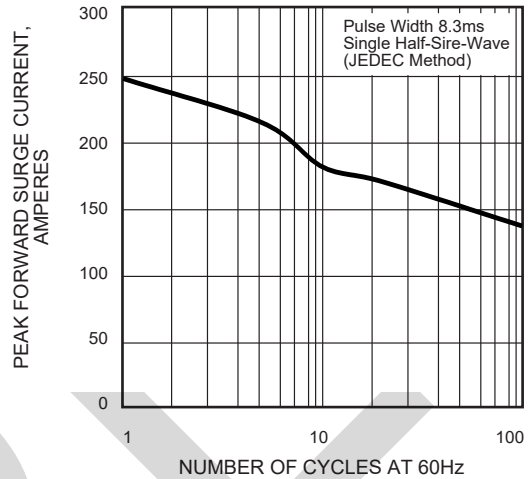


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

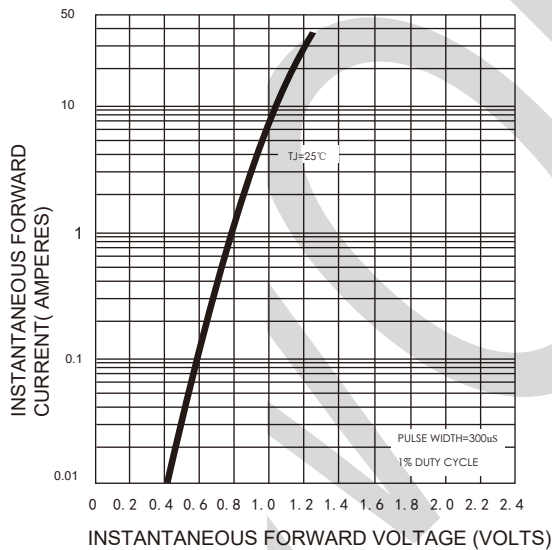
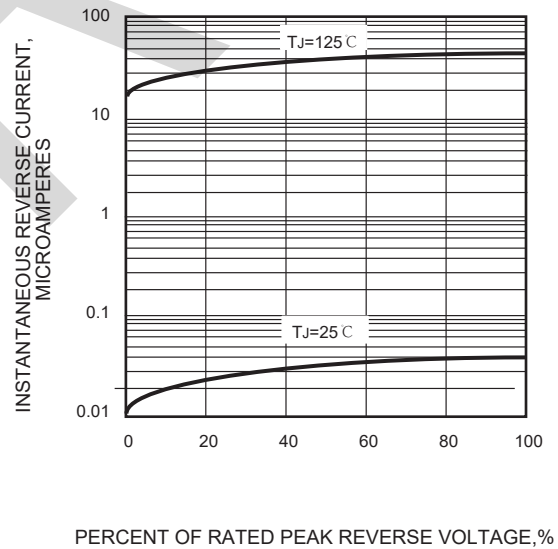


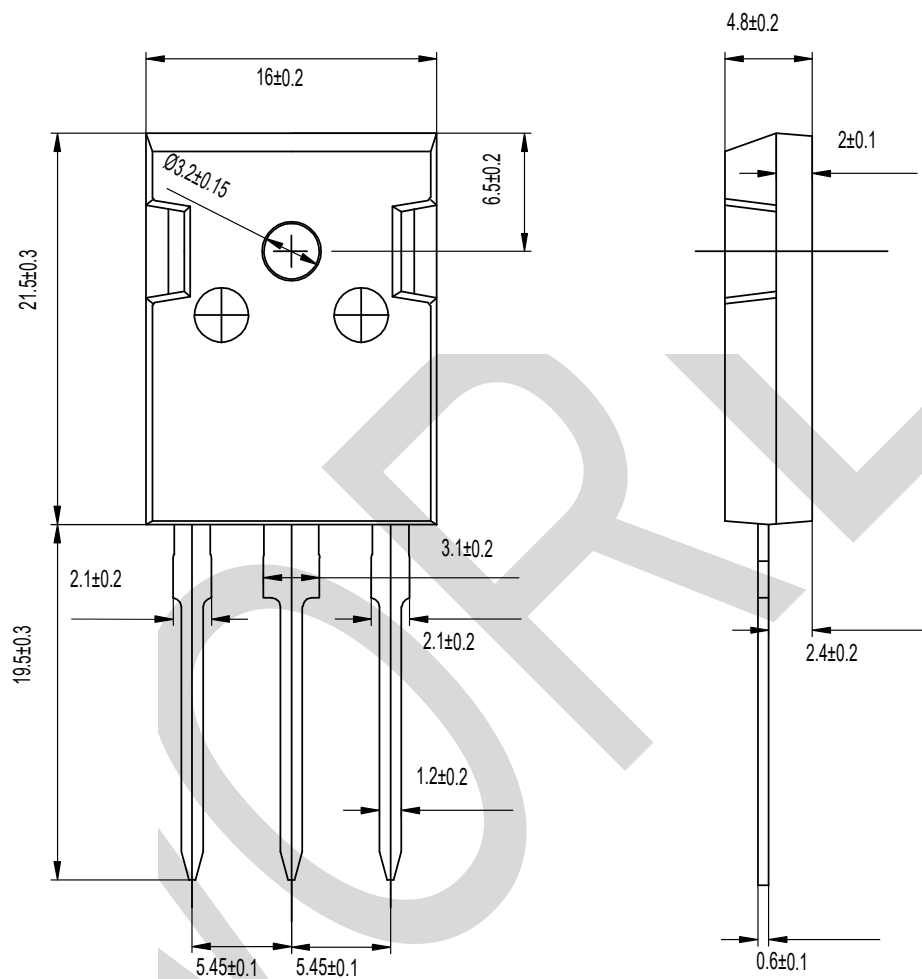
FIG.4 - TYPICAL REVERSE CHARACTERISTICS



## PACKAGE OUTLINE DIMENSIONS

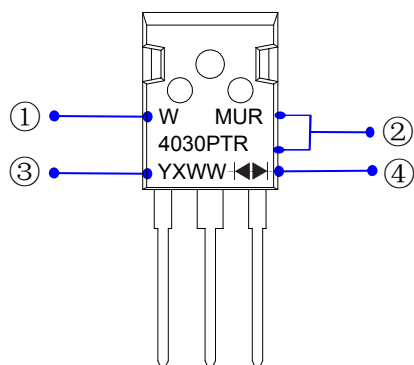
Note:unit: mm

### TO-247



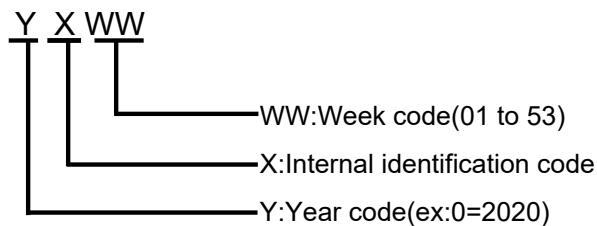
Dimensions in millimeters

## Marking Information



- ①W : Company's trademark  
②Product model : MUR4030PTR

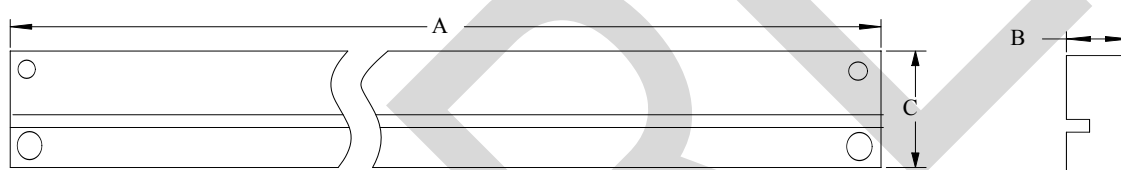
③PDC information:



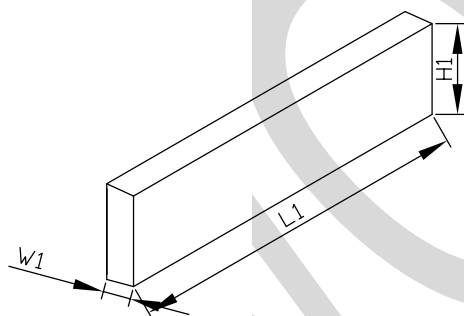
④ Double wafer

## Packaging Information

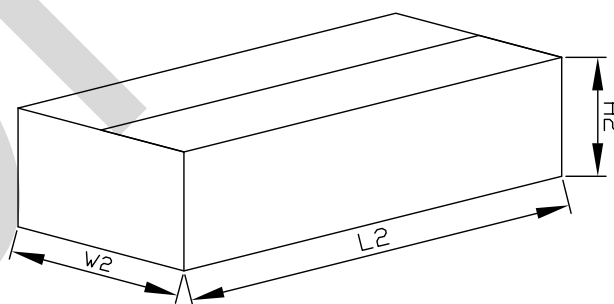
### 1. Tube Dimensions



### 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  |
|      |                                                               | 505             | 7 | 43 | 535                                          | 55 | 162 | 550                              | 245 | 180 |
| QTY  | PCS                                                           | 30PCS/Tube      |   |    | Smallest package,600PCS,<br>20 tube in total |    |     | 2,400PCS/carton,4 boxes in total |     |     |
| Note | Tolerance    ≤20mm,±3mm;    21-100mm,±5mm;    101-500mm,±10mm |                 |   |    |                                              |    |     |                                  |     |     |