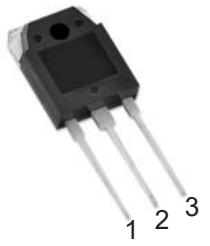
# MURE6030WB

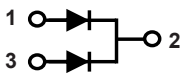
16-Jun-2021

## Epitaxial Superfast Recovery Rectifier

**TO-3P**

**MURE6030WB**




### 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 | MURE6030WB | | 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 | | $I_{(AV)}$ | 60.0 | | A |
| Reverse Recovery Time. IF=0.5A,IR=1A,IRR=0.25A | | Trr | 35 | | ns |
| Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load (JEDEC Method) | | $I_{FSM}$ | 560 | | A |
| Instantaneous Forward Voltage per Diode@TA=25 °C | | | Typ | Max | V |
| | IF=5A | $V_F$ | 0.78 | 0.82 | |
| | IF=30A | | 1.05 | 1.10 | |
| Maximum DC Reverse Current @TA=25 °C at Rated DC Blocking Voltage @TA=125 °C | | $I_R$ | 10<br>500 | | μA |
| Operating and Storage Temperature Range | | $T_j$, $T_{stg}$ | -55 ~ +150 | | °C |
| Typical thermal resistance (Note 1) | | RthJC | 1.5 | | °C/W |

Note: 1. Thermal resistance junction to case, lead and ambient in accordance with JESD-51.
Unit mounted on glass-epoxy substrate with 1oz/ft2_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

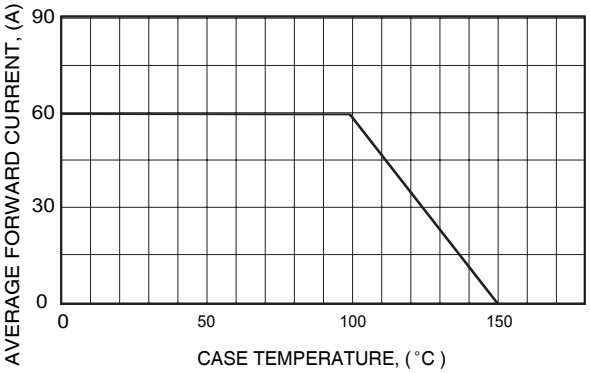



FIG. 2 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

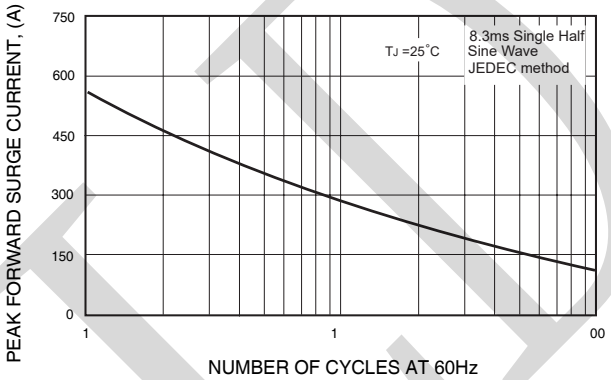



FIG. 3 - TYPICAL REVERSE CHARACTERISTICS

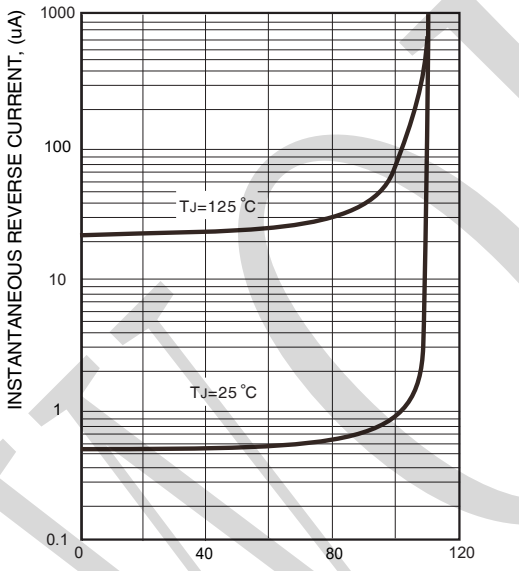
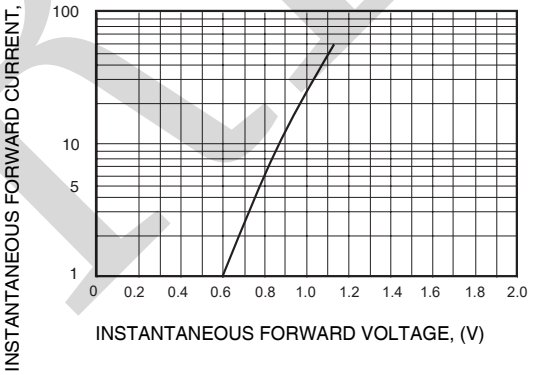


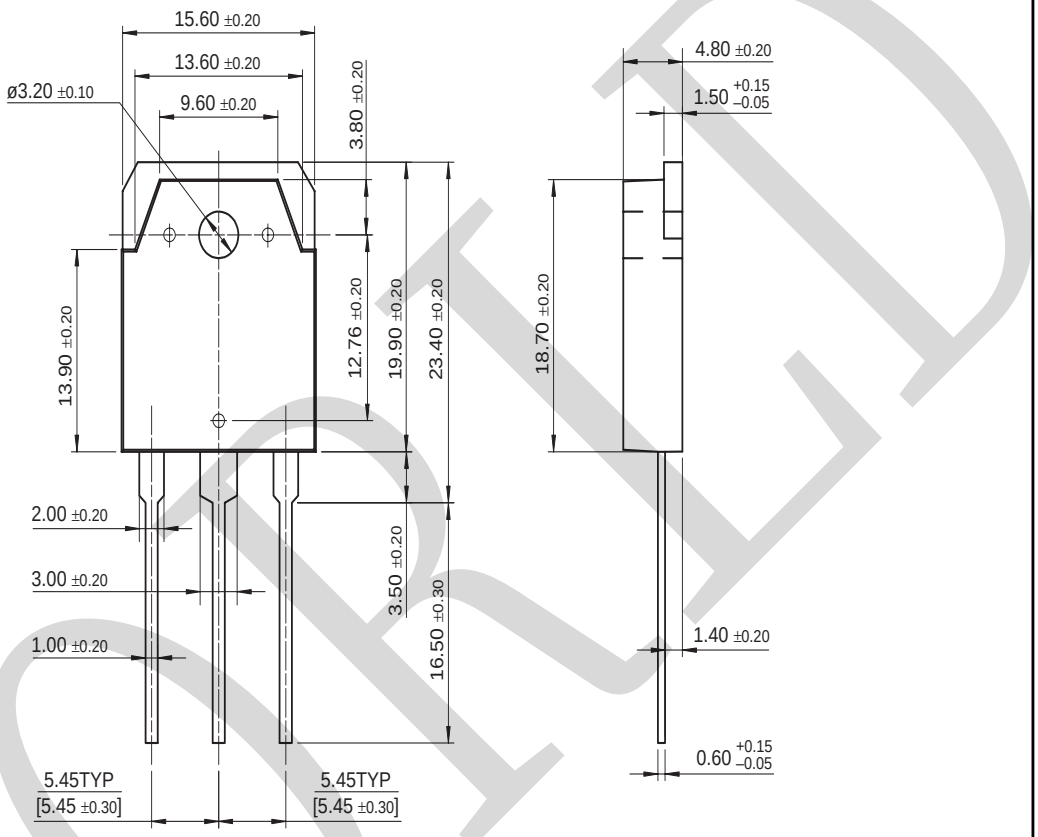

FIG. 4 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



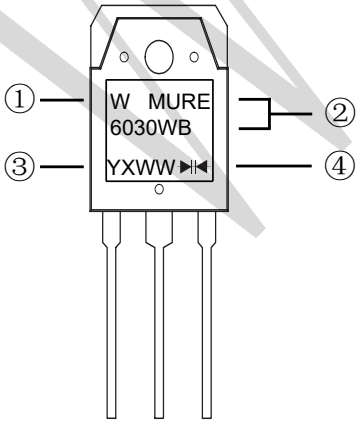
## PACKAGE OUTLINE DIMENSIONS

Note:unit: mm

TO-3P




## Marking Information




①W : Company's trademark

②Product model : MURE6030WB

③PDC information:

Y X WW

- WW:Week code(01 to 53)
- X:Internal identification code
- Y:Year code(ex:0=2020)

④ Double wafer