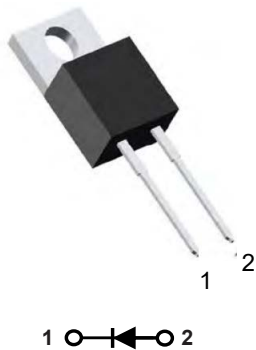


Epitaxial Superfast Recovery Rectifier

TO-220AC Internal insulation MURE10120ACTI



Features

- Internal insulation
- 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	MURE10120ACTI	Units
Maximum Repetitive Peak Reverse Voltage	VRRM	1200	V
Maximum RMS voltage	VRMS	840	V
Maximum DC Blocking Voltage	VDC	1200	V
Maximum Average Forward Rectified Current	I(AV)	10.0	A
Maximum Reverse Recovery Time IF=0.5A, IR=1A, IRR=0.25A	Trr	55	ns
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load (JEDEC Method)	IFSM	200	A
Max Forward Voltage at 2A and 25 °C	VF	1.65	V
Max Forward Voltage at 10A and 25 °C		2.35	
Maximum DC Reverse Current @TA=25 °C at Rated DC Blocking Voltage @TA=125 °C	IR	10 500	μA
Isolation voltage 50Hz @ R.M.S, t=0.5S, Iiso: 0.5mA(max)	VISO	2500	V
Operating and Storage Temperature Range	Tj, Tstg	-55 ~ +150	°C
Typical thermal resistance (Note 2)	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 - FORWARD CURRENT DERATING CURVE

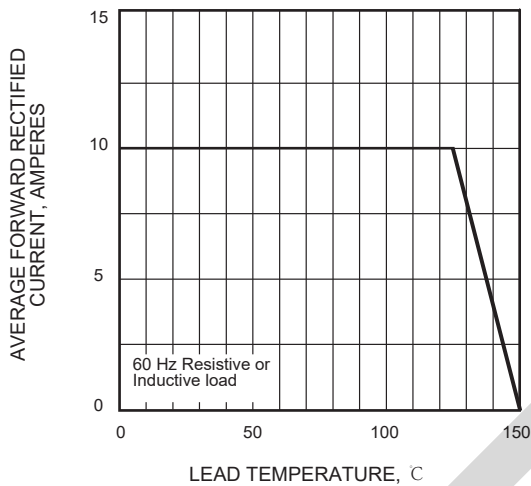


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

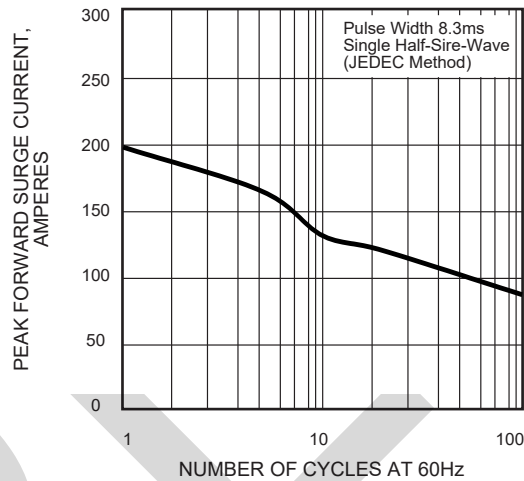


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

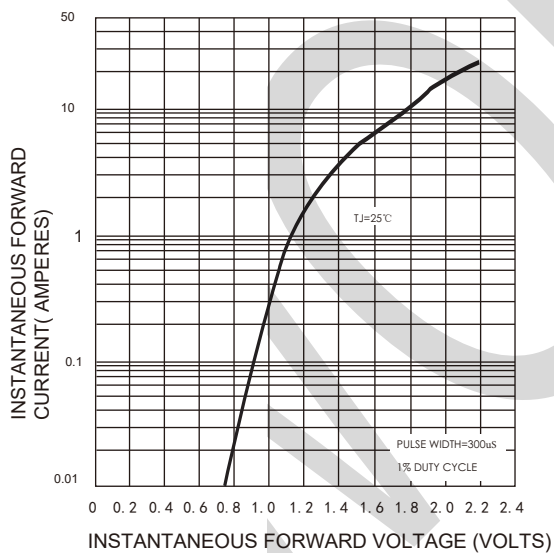
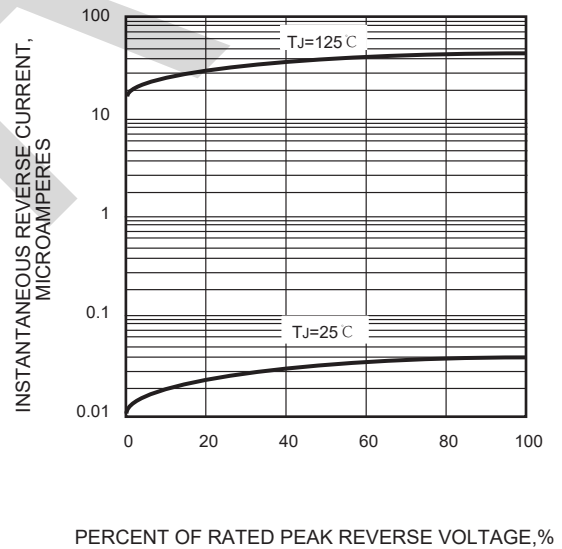


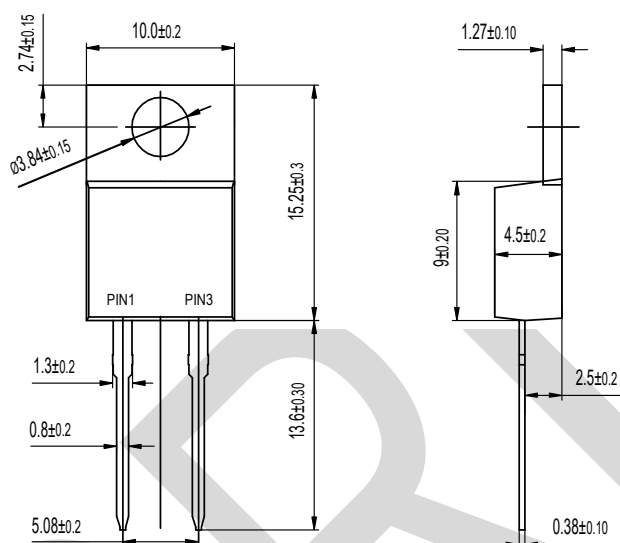
FIG.4 - TYPICAL REVERSE CHARACTERISTICS



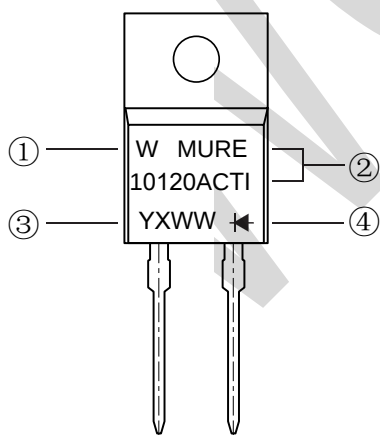
PACKAGE OUTLINE DIMENSIONS

Note:unit: mm

TO-220AC



Marking Information



- ① W : Company's trademark
- ② Product model : MURE10120ACTI

③ PDC information:

Y X WW

WW: Week code(01 to 53)

X: Internal identification code

Y: Year code(ex:0=2020)

④ — Single wafer