MURE20120ACT
MURE20120ACF

15-Jun-2023

Epitaxial Superfast Recovery Rectifier

TO-220AC
MURE20120ACT

TO-220ACF
MURE20120ACF

PIN2  **PIN1**

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	MURE20120ACT	MURE20120ACF	Units
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	1200		V
Maximum RMS voltage	V_{RMS}	840		V
Maximum DC Blocking Voltage	V_{DC}	1200		V
Maximum Average Forward Rectified Current	$I_{(AV)}$	20		A
Reverse Recovery Time. IF=0.5A,IR=1A,IRR=0.25A	Trr	75		ns
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	250		A
I^2t rating for fusing (1ms< t < 10ms)	I^2t	259.3		A^2S
Maximum Forward Voltage at 5 A and 25℃	V_F	1.80		V
Maximum Forward Voltage at 20 A and 25℃		2.30		
Maximum DC Reverse Current @TA=25 °C at Rated DC Blocking Voltage @TA=125 °C	I_R	5 250		μA
Operating and Storage Temperature Range	Tj, Tstg	-55 ~ +150		°C
Typical thermal resistance (Note 1)	R_{thJC}	6.0		°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

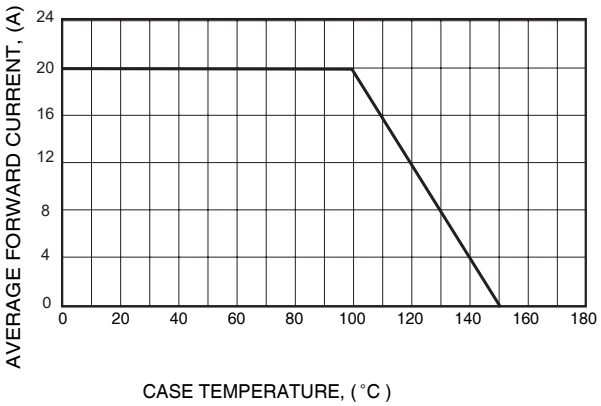


FIG. 2 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

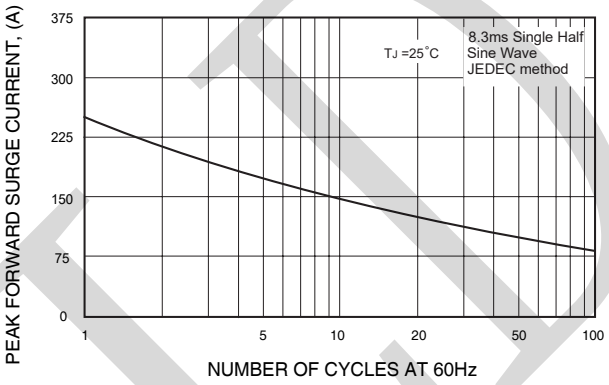


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

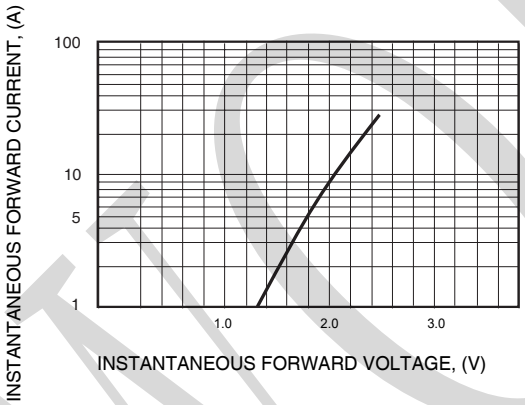
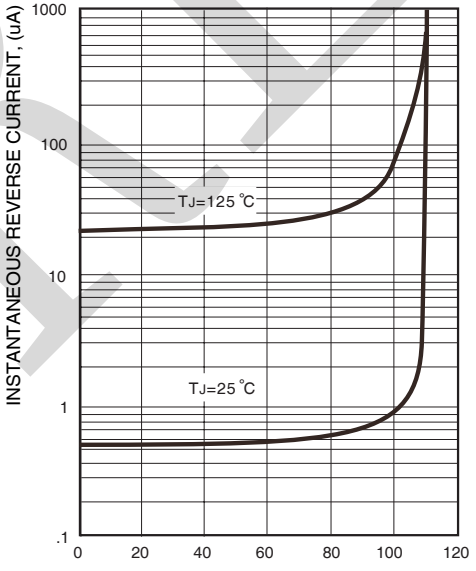
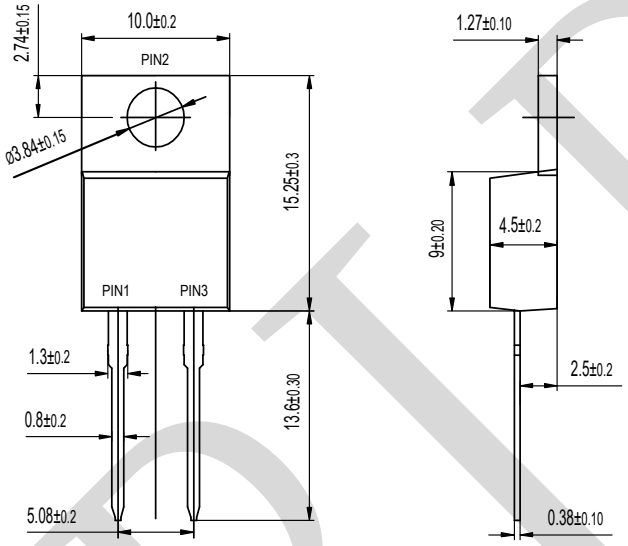


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

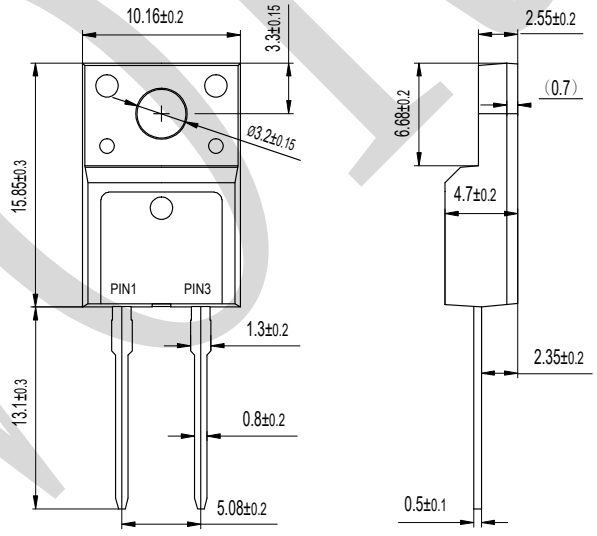


PACKAGE OUTLINE DIMENSIONS

Note:unit mm

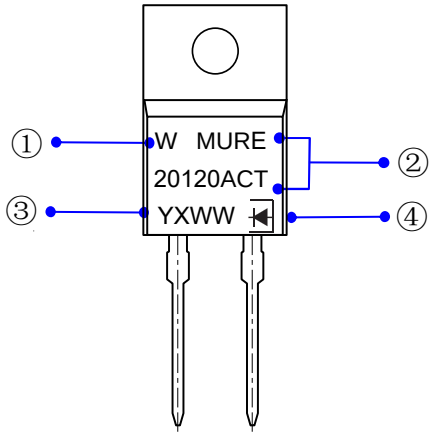


TO-220AC Dimensions in millimeters



TO-220ACF Dimensions in millimeters

Marking Information



①W : Company's trademark
②Product model : MURE20120ACT or MURE20120ACF
③PDC information：

Y X WW

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

④ Single wafer