

MURE15120ACT

MURE15120ACF

03-JUN-2020

Superfast Recovery Rectifier

MURE15120ACT
TO-220ACT



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PIN2  PIN1

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	MURE15120ACT	MURE15120ACF	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)	15.0		A
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	250		A
I ² t rating for fusing (1ms< t < 10ms)	I ² t	259.3		A ² S
Maximum Forward Voltage at 15A and 25 °C	VF	2.50		V
Maximum DC Reverse Current @TA=25 °C at Rated DC Blocking Voltage @TA=100 °C	IR	5 250		μA
Typical Junction Capacitance (Note1)	Cj	50		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/ft² 20x20 mm copper pad per pin with heatsink

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

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

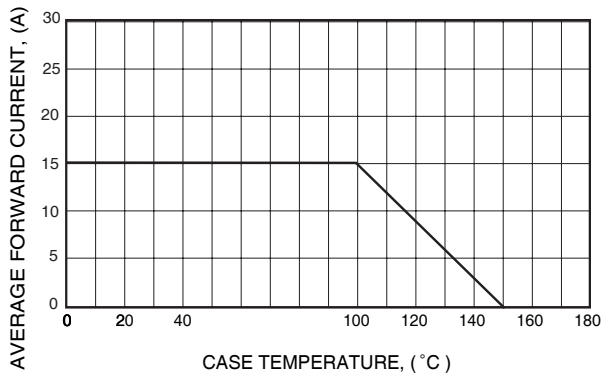


FIG. 2 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

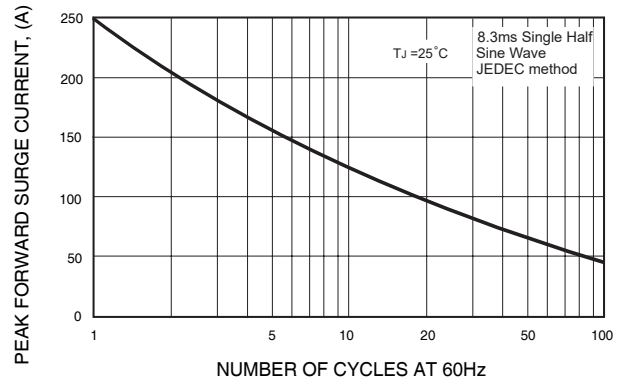


FIG. 3 - TYPICAL REVERSE CHARACTERISTICS

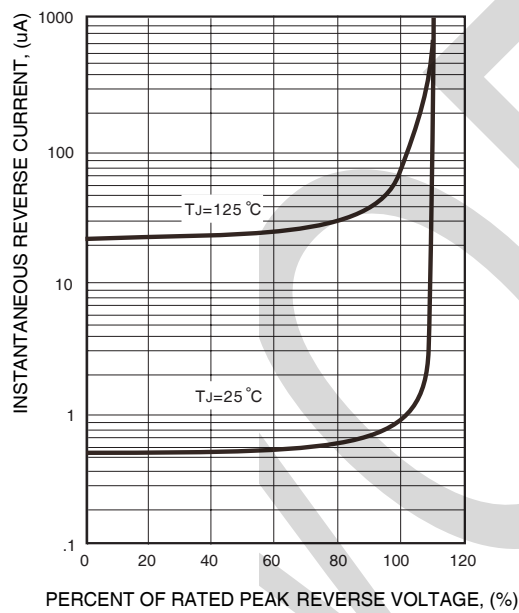
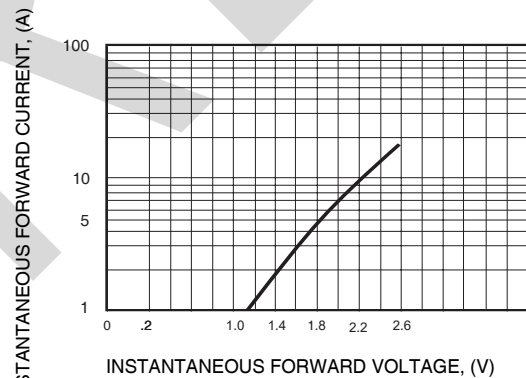


FIG. 4 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



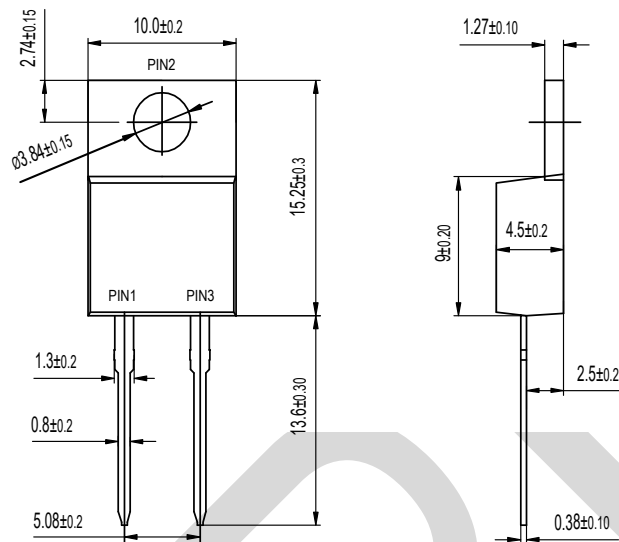
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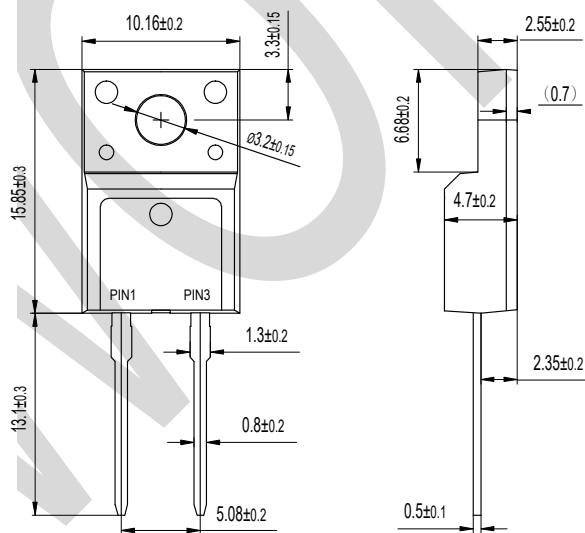
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PACKAGE OUTLINE DIMENSIONS

Note:unit In(mm)



TO-220ACT Dimensions in millimeters



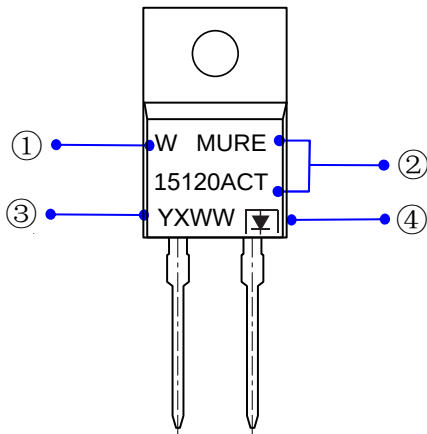
TO-220ACF Dimensions in millimeters

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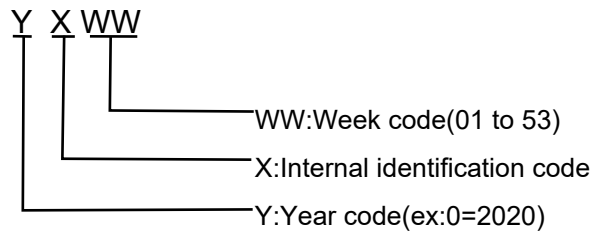
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Marking Information



- ①W : Company's trademark
②Product model : MURE15120ACT or MURE15120ACF

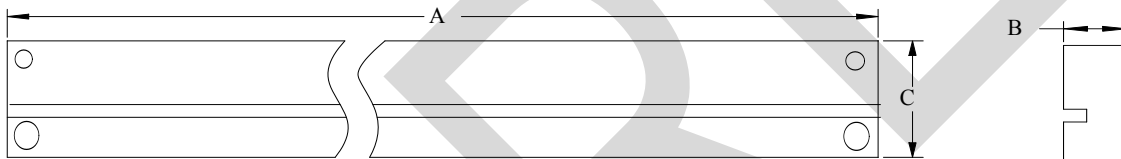
③PDC information:



- ④ Single wafer

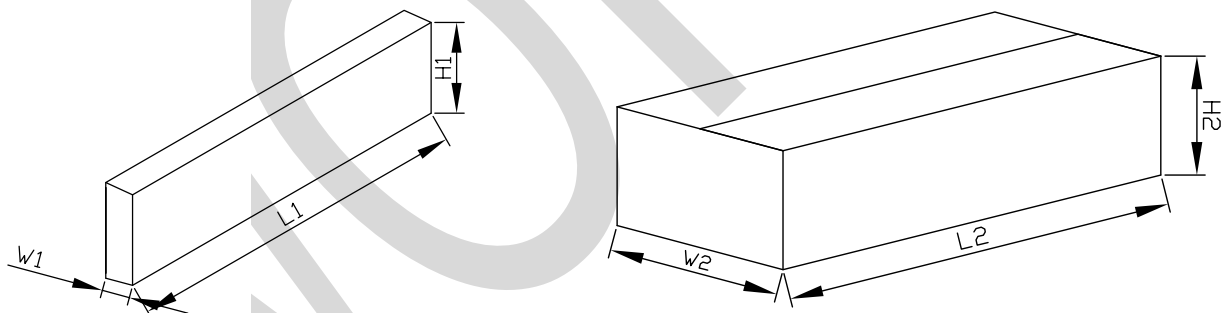
Packaging Information

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, 20 tube in total			5,000PCS/carton,5 boxes in total		
Note	Tolerance ≤20mm,±3mm; 21-100mm,±5mm; 101-500mm,±10mm									