

MURE2040ACT

MURE2040ACF

18-Nov-2024

Epitaxial Superfast Recovery Rectifier

MURE2040ACT
TO-220ACT



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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	MURE2040ACT	MURE2040ACF	Units
Maximum Repetitive Peak Reverse Voltage	VRRM	400		V
Maximum RMS voltage	VRMS	280		V
Maximum DC Blocking Voltage	VDC	400		V
Maximum Average Forward Rectified Current	I(AV)	20.0		A
Reverse Recovery Time. I _F =1A, V _R =30V, di _F /dt=-200A/μs	Typ.	22		ns
	Max.	30		
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load (JEDEC Method)	IFSM	150		A
I ² t rating for fusing (1ms< t < 10ms)	I ² t	93.3		A ² S
Maximum Forward Voltage at 10A and 25 °C	VF	1.3		V
Maximum DC Reverse Current @TA=25 °C at Rated DC Blocking Voltage @TA=125 °C	IR	5 500		μA
Operating and Storage Temperature Range	T _J , T _{stg}	-55 ~ +150		°C
Typical thermal resistance (Note 1)	R _{thJC}	2.0	4.5	°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

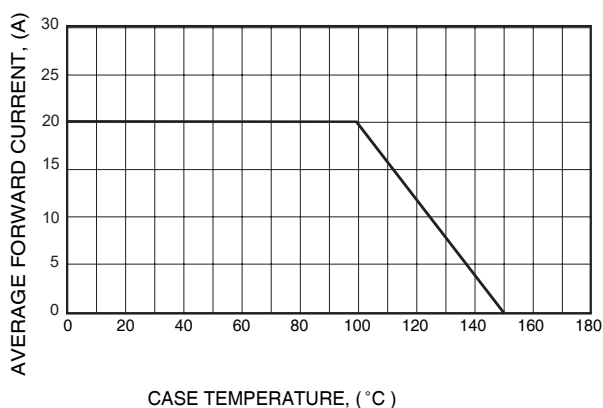


FIG. 2 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

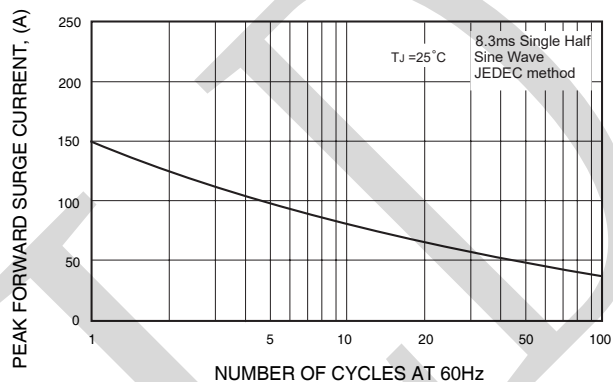


FIG. 3 - TYPICAL REVERSE CHARACTERISTICS

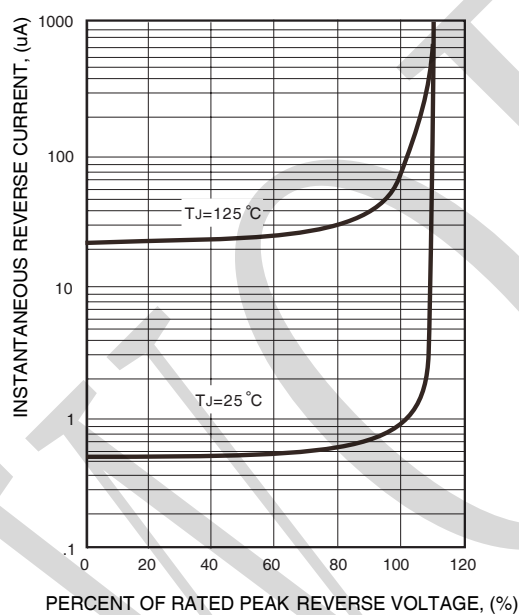
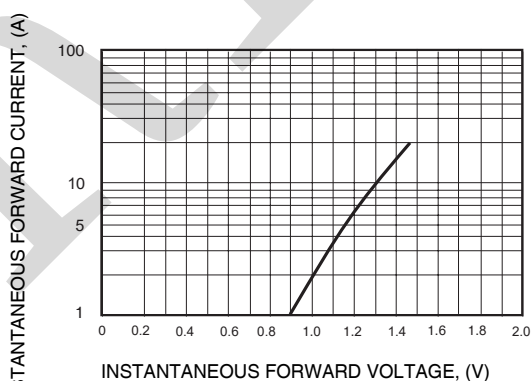
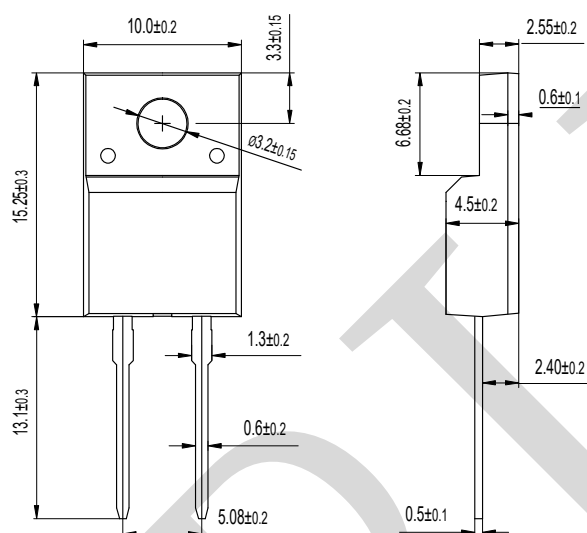


FIG. 4 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

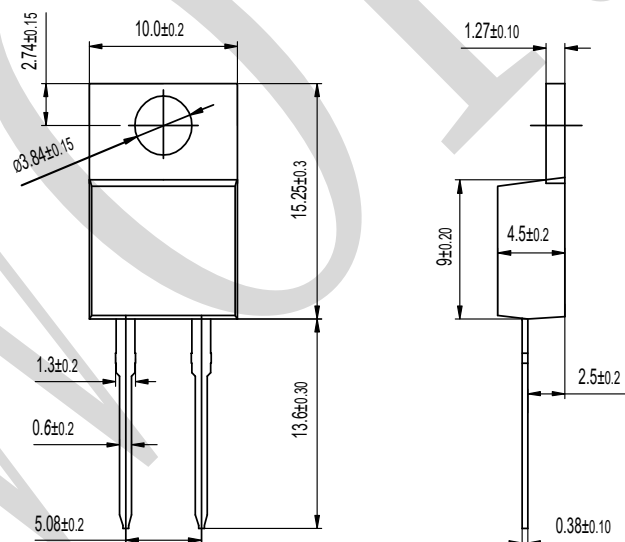


PACKAGE OUTLINE DIMENSIONS

Note:unit In(mm)



TO-220ACF Dimensions in millimeters



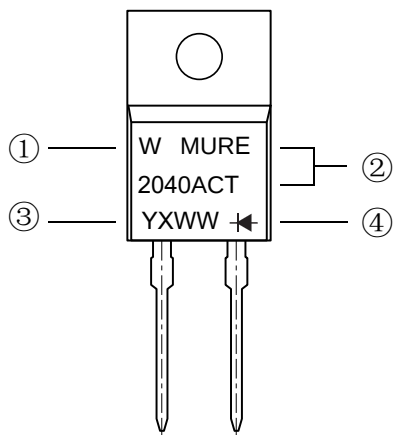
TO-220ACT Dimensions in millimeters

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Marking Information



- ① W : Company's trademark
- ② Product model : MURE2040ACT or MURE2040ACF
- 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