

Superfast Recovery Rectifier

TO-220AC
MUR1520ACT



TO-220ACF
MUR1520ACF



PIN1  PIN2

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	MUR1520ACT	MUR1520ACF	Units
Maximum Repetitive Peak Reverse Voltage	VRRM	200		V
Maximum RMS voltage	VRMS	140		V
Maximum DC Blocking Voltage	VDC	200		V
Maximum Average Forward Rectified Current	I(AV)	15.0		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)	IFSM	150		A
I ² t rating for fusing (1ms< t < 8.3 ms)	I ² t	93.3		A ² S
Maximum Forward Voltage at 7.5A and 25 °C	VF	0.95		V
Maximum DC Reverse Current @TA=25 °C at Rated DC Blocking Voltage @TA=125 °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	4.0	°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

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

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

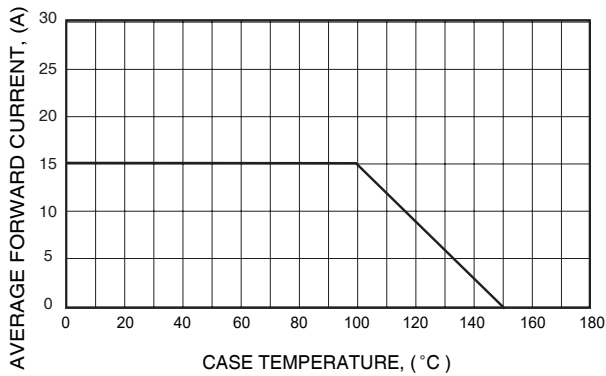


FIG. 2 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

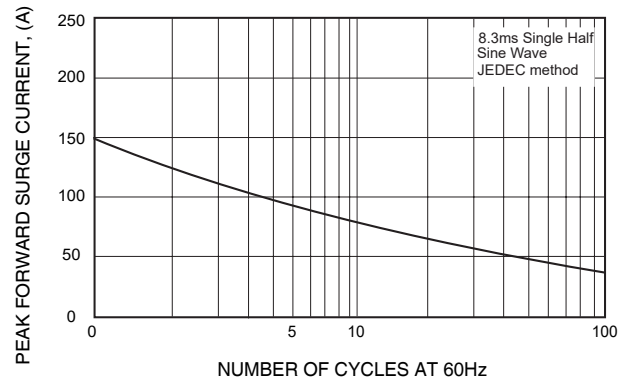


FIG. 3 - TYPICAL REVERSE CHARACTERISTICS

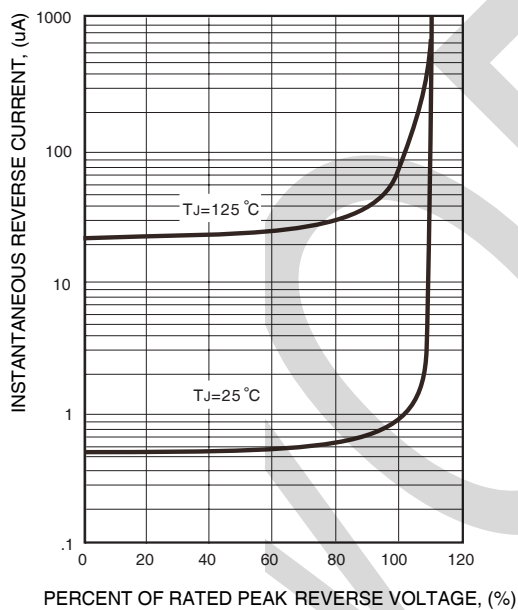
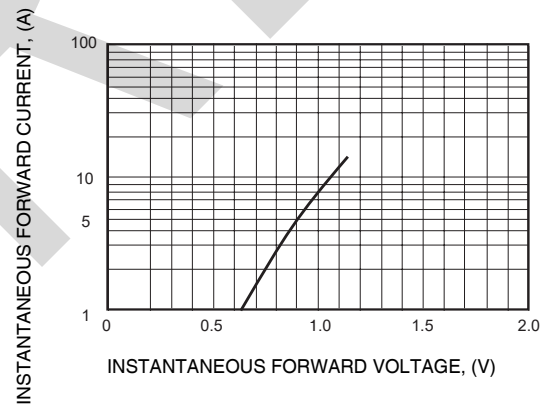
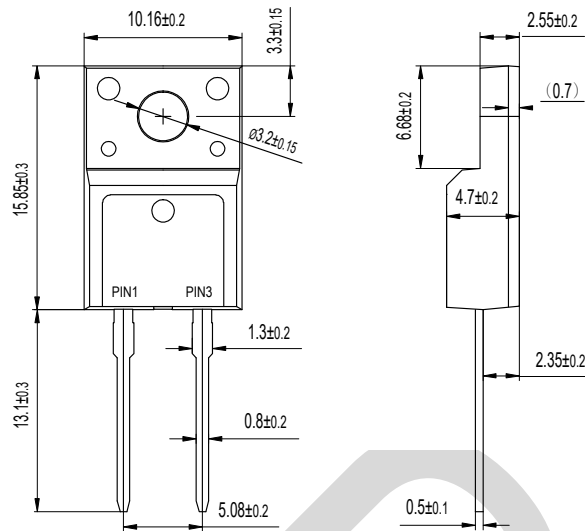


FIG. 4 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

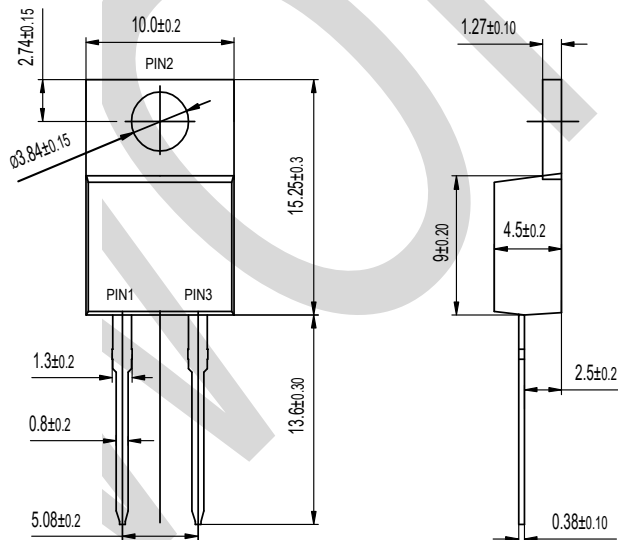


PACKAGE OUTLINE DIMENSIONS

Note:unit In(mm)

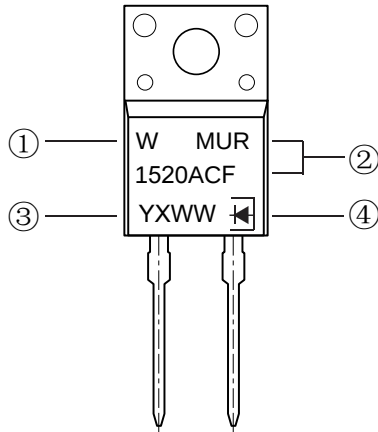


TO-220ACF Dimensions in millimeters



TO-220AC Dimensions in millimeters

Marking Information



- ①W : Company's trademark
②Product model : MUR1520ACT or MUR1520ACF
③PDC information:

Y X WW

WW:Week code(01 to 53)

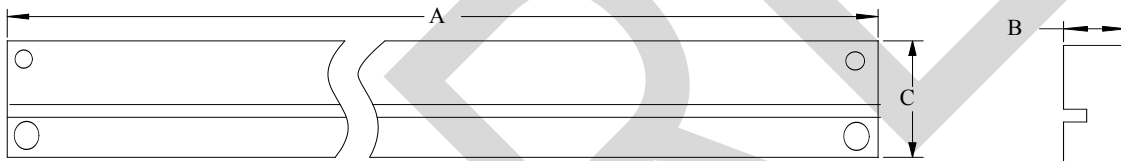
X:Internal identification code

Y:Year code(ex:0=2020)

④  Single wafer

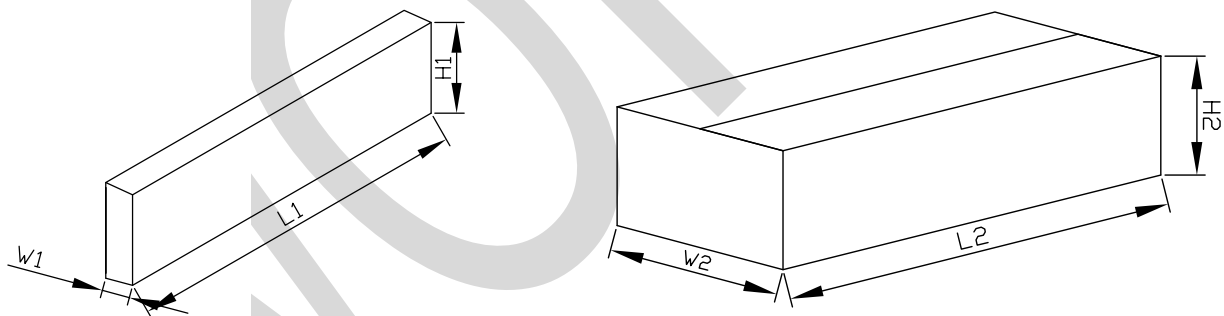
Packaging Information

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									