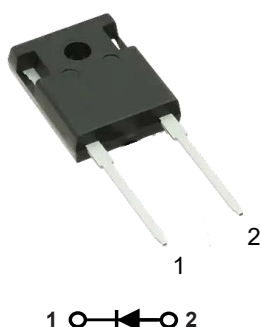


Epitaxial Superfast Recovery Rectifier

TO-247AC
Internal insulation
MURE40120APTI



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	MURE40120APTI	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)	40.0	A
Maximum Reverse Recovery Time IF=0.5A, IR=1A, IRR=0.25A	Trr	85	ns
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load (JEDEC Method)	IFSM	460	A
Max Forward Voltage at 5A and 25℃	VF	1.35	V
Max Forward Voltage at 20A and 25℃		1.75	
Maximum DC Reverse Current @TA=25℃ at Rated DC Blocking Voltage @TA=125℃	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	℃
Typical thermal resistance (Note 2)	RthJC	1.5	℃/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

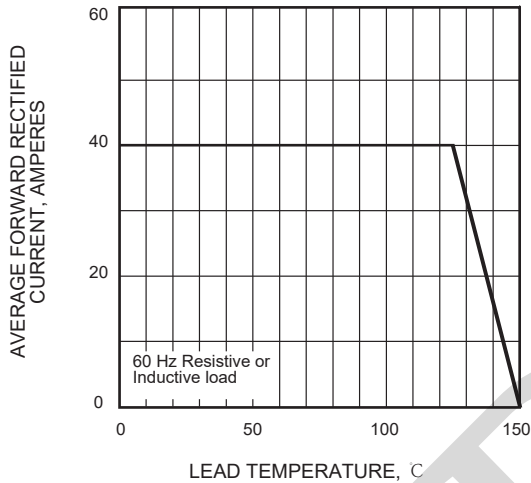


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

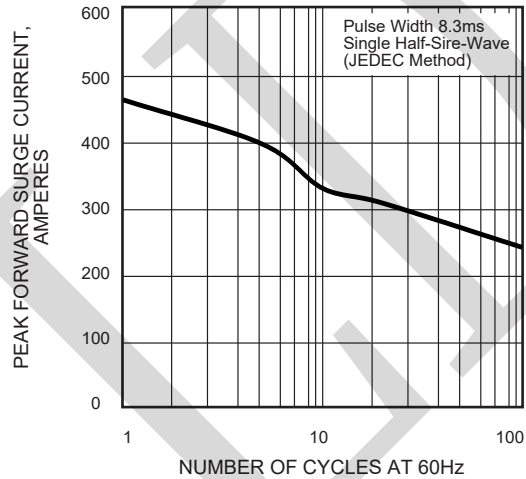


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

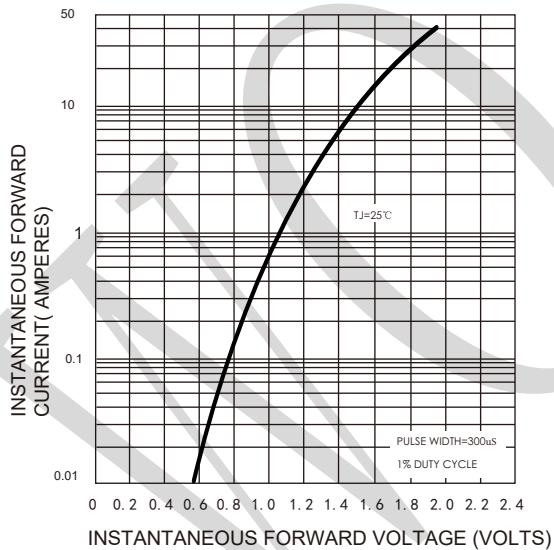
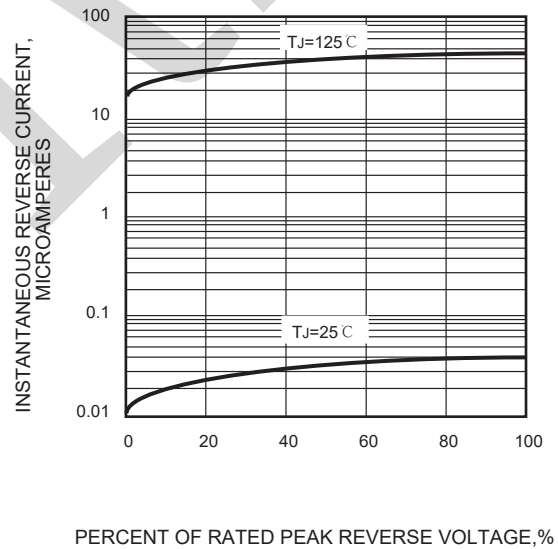


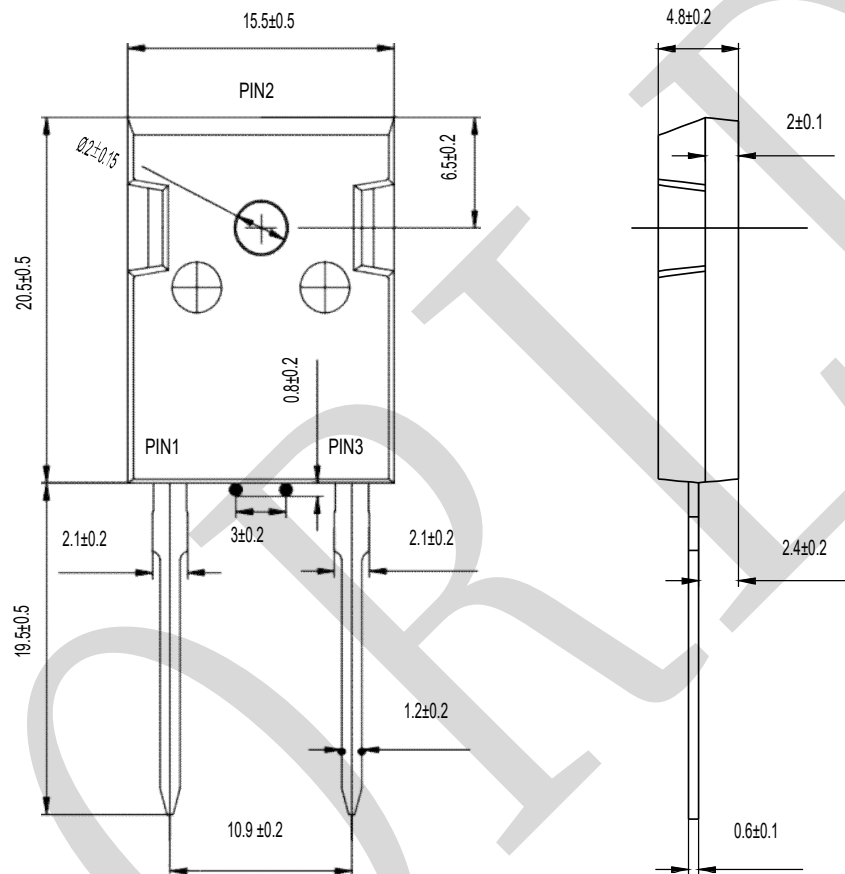
FIG.4 - TYPICAL REVERSE CHARACTERISTICS



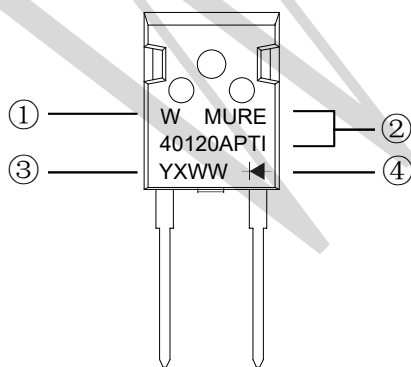
PACKAGE OUTLINE DIMENSIONS

Note:unit: mm

TO-247AC



Marking Information



- ① W : Company's trademark
- ② Product model : MURE40120APTI
- 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