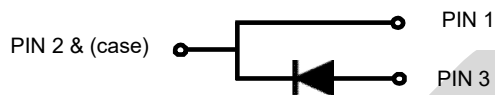


Superfast Recovery Rectifier

MURE40120APT TO-247



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	MURE40120APT	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
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)	IFSM	460	A
Max Forward Voltage at 20A and 25 °C	VF	1.85	V
Max Forward Voltage at 20A and 125 °C		1.65	
Maximum DC Reverse Current @TA=25 °C at Rated DC Blocking Voltage @TA=125 °C	IR	5 500	μA
Typical Junction Capacitance (Note1)	Cj	50	pF
Operating and Storage Temperature Range	Tj, Tstg	-55 ~ +150	°C
Typical thermal resistance (Note 2)	RthJC	1.5	°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

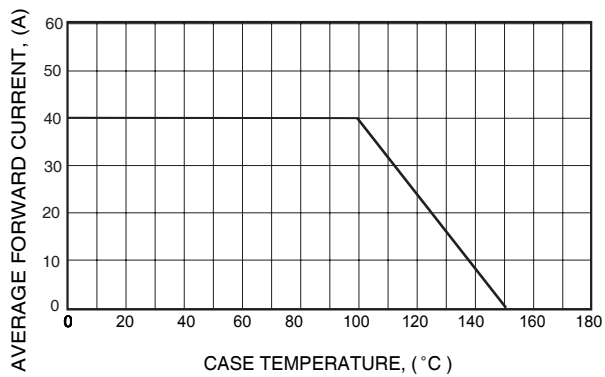


FIG. 2 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

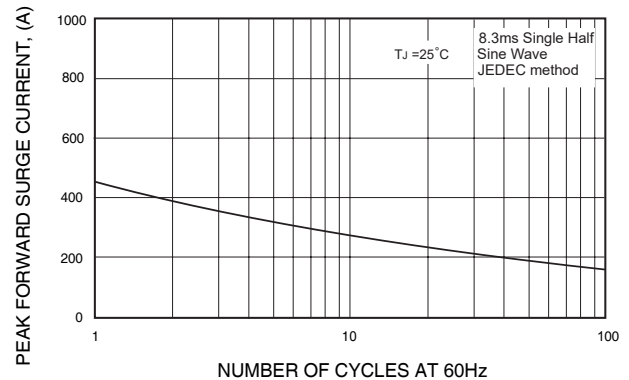


FIG. 3 - TYPICAL REVERSE CHARACTERISTICS

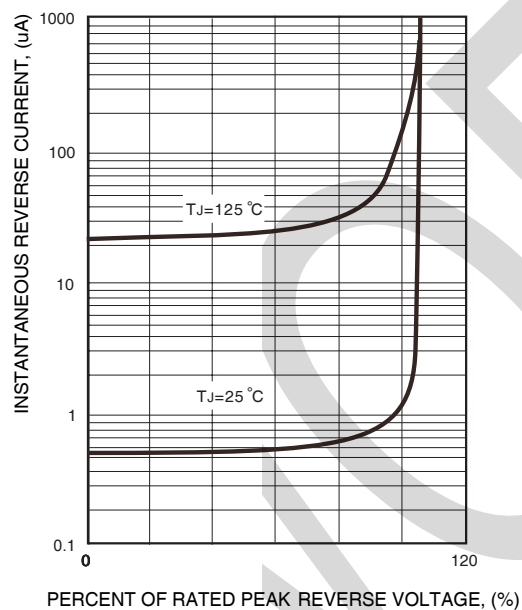
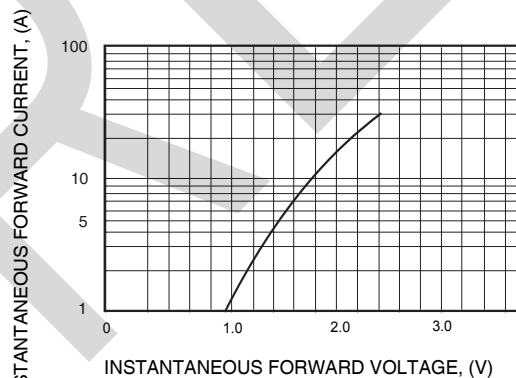


FIG. 4 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



PACKAGE OUTLINE DIMENSIONS

Note:unit mm

