



Fast Recovery Epi Diodes
Reverse Voltage - 200~600 Volts
Forward Current - 40 Amperes

TO-247-3L

Features

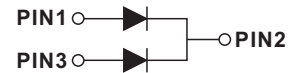
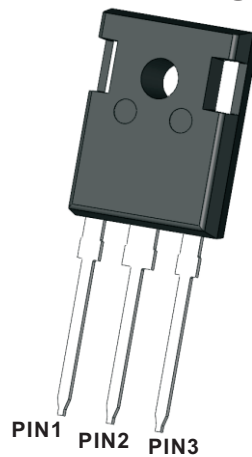
- High frequency operation
- High surge forward current capability
- High purity, high temperature epoxy encapsulation for enhanced mechanical strength and moisture resistance
- Guard ring for enhanced ruggedness and long term reliability
- Solder dip 275 °C max. 7s, per JESD 22-B106

Mechanical data

- Case: TO-247-3L
- Approx. Weight: 6.3g (0.22oz)
- Lead free finish, RoHS compliant
- Case Material: “Green” molding compound, UL flammability classification 94V-0, “Halogen-free”.

Maximum Ratings And Electrical Characteristics

Ratings At 25°C Ambient Temperature Unless Otherwise Specified



Parameter	Symble	MUR4020WD	MUR4040WD	MUR4060WD	Units
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	200	400	600	V
Maximum RMS voltage	V_{RMS}	140	280	420	V
Maximum DC Blocking Voltage	V_{DC}	200	400	600	V
Maximum Average Forward Rectified Current Per leg Per device	$I_{F(AV)}$		20 40		A
Peak Forward Surge Current,8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)(Per leg)	I_{FSM}		250		A
Max Instantaneous Forward Voltage at 20 A (Per leg)	V_F	1.0	1.3	1.6	V
Maximum DC Reverse Current $T_a = 25^{\circ}C$ at Rated DC Reverse Voltage $T_a = 125^{\circ}C$	I_R		10 500		uA
Maximum Reverse Recovery Time ⁽¹⁾	t_{rr}		35		ns
Typical Thermal Resistance	$R_{\theta JC}$		4		°C/W
Operating Junction Temperature Range	T_j		-55 ~ +150		°C
Storage Temperature Range	T_{stg}		-55 ~ +150		°C

NOTE 1:Reverse recovery test conditions $I_F=0.5A, I_R=1.0A, I_{rr}=0.25A$



Fig.1 Forward Current Derating Curve

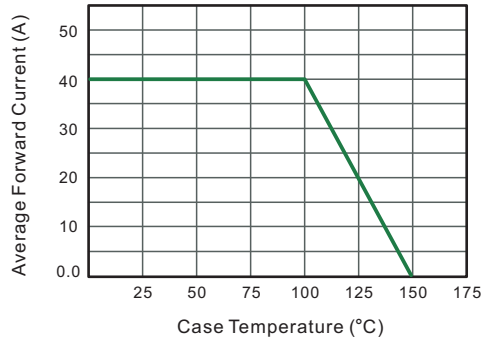


Fig.2 Typical Instantaneous Reverse Characteristics

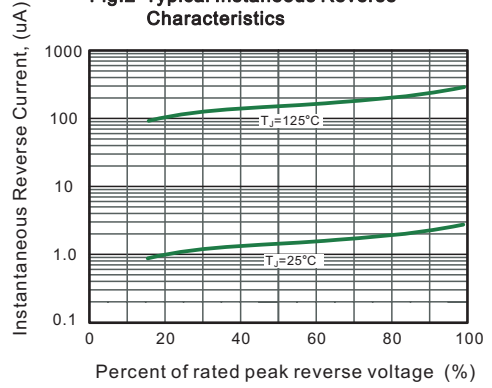


Fig.3 Typical Forward Characteristic

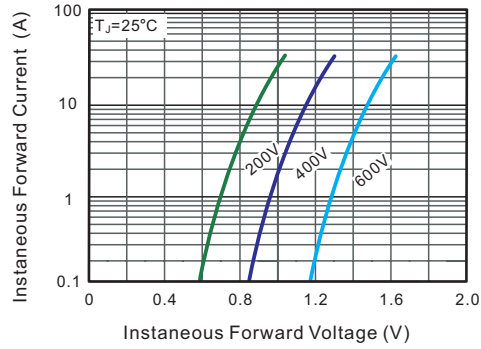
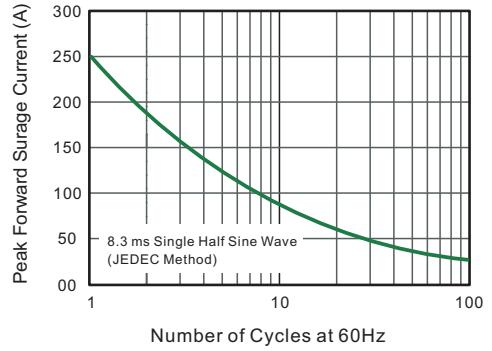


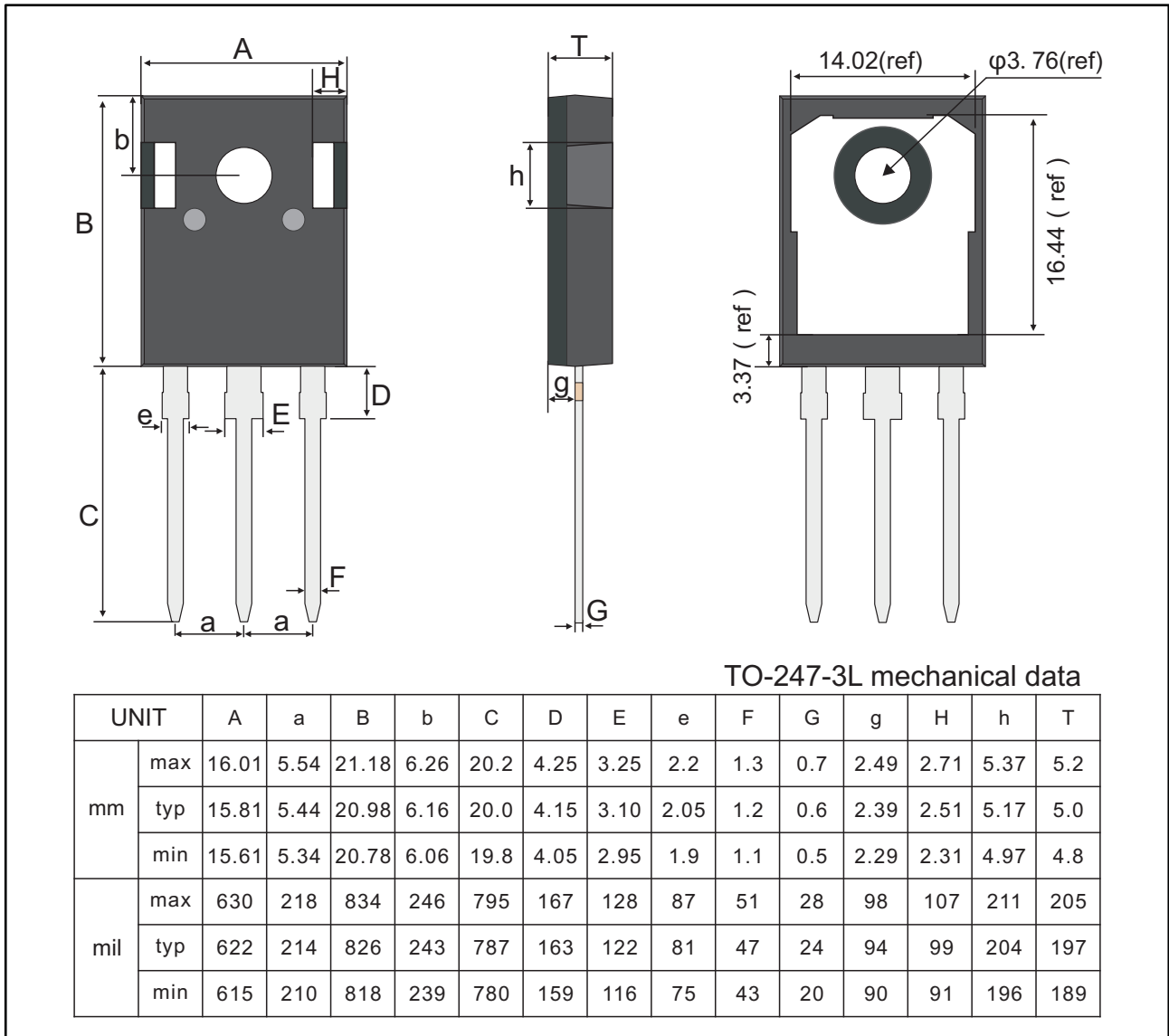
Fig.4 Maximum Non-Repetitive Peak Forward Surge Current



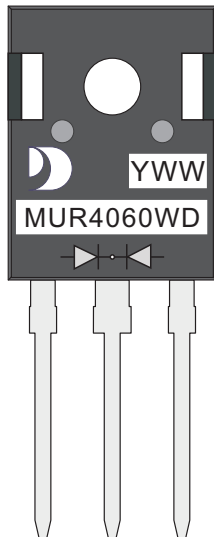


Package Outline
Through Hole Package ; 3 leads

TO-247-3L



Marking Diagram



YWW: Date Code
 Y: Years(0~9)
 WW: Week
 MUR4060WD: Product name
 (NOTE: The weekly code is based on the actual number of weeks in the calendar year.)



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