



Fast Recovery Epi Diodes

Reverse Voltage - 200~600 Volts

Forward Current - 60 Amperes

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
- pprox. 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	MUR6020WD	MUR6040WD	MUR6060WD	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	$I_{F(AV)}$		30 60		A
Peak Forward Surge Current,8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)(Per leg)	I_{FSM}		300		A
Max Instantaneous Forward Voltage at 30 A (Per leg)	V_F	1.3	1.4	1.7	V
Maximum DC Reverse Current $T_J = 25^{\circ}C$ at Rated DC Reverse Voltage $T_J = 125^{\circ}C$	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 $I_F=0.5A, I_R=1.0A, I_{rr}=0.25A$

TO-247-3L

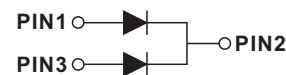
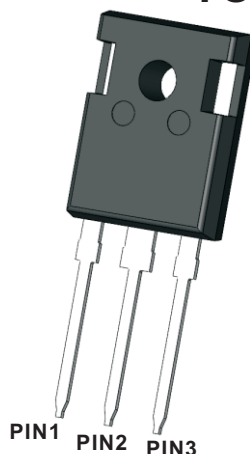




Fig.1 Forward Current Derating Curve

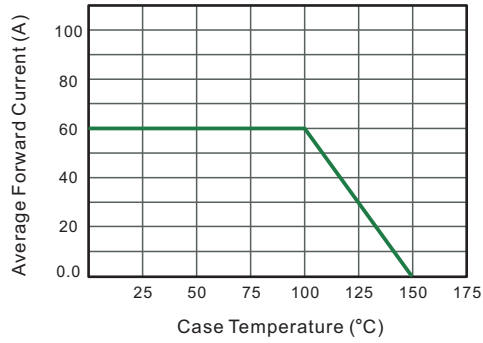


Fig.2 Typical Instantaneous Reverse Characteristics

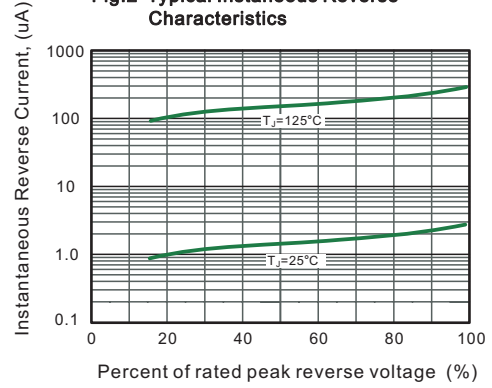


Fig.3 Typical Forward Characteristic

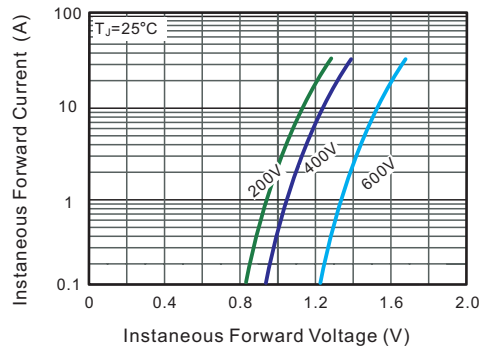
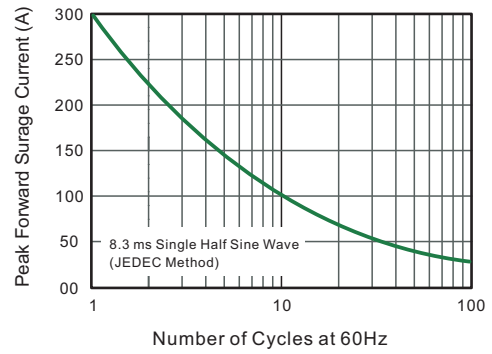


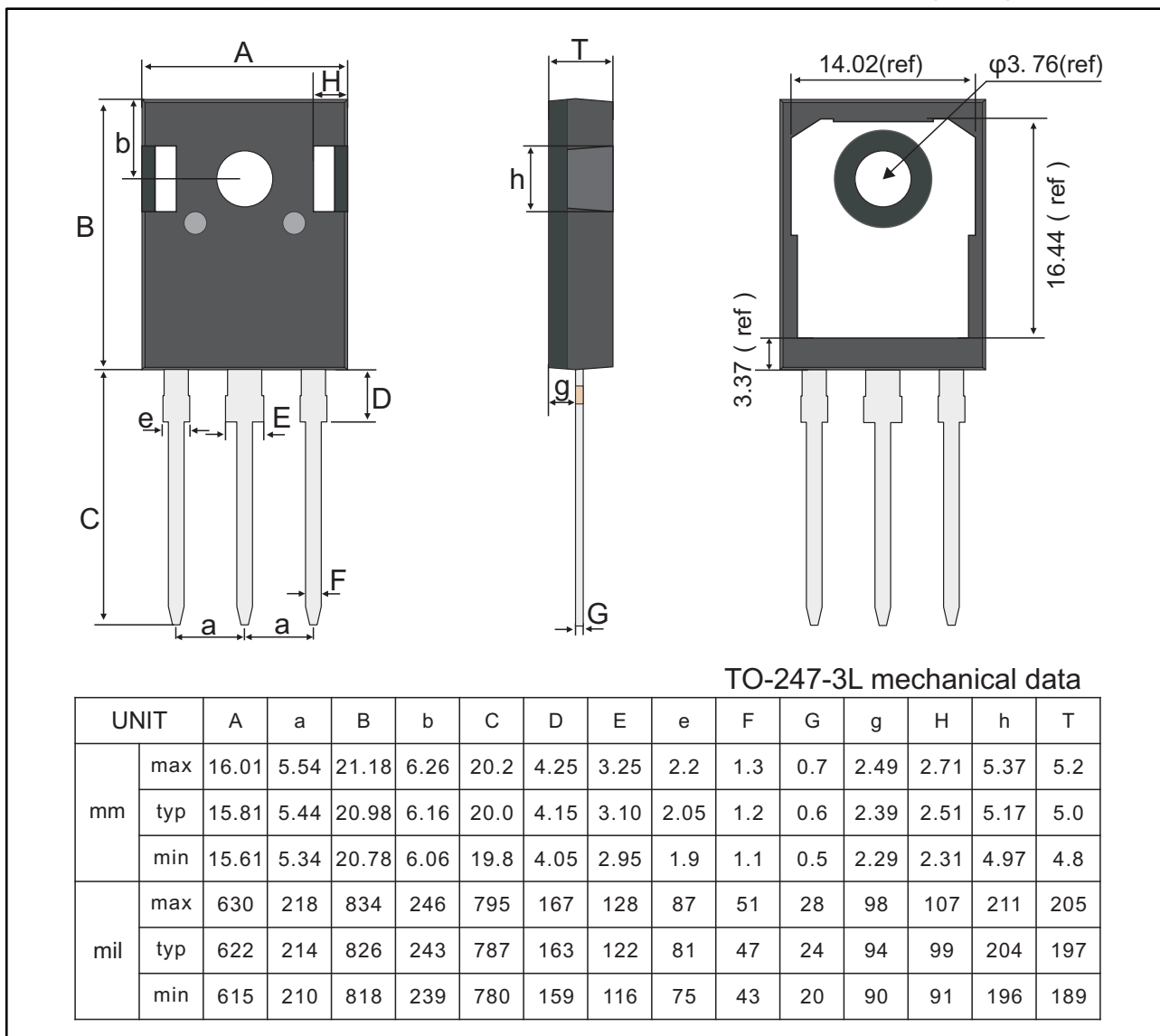
Fig.4 Maximum Non-Repetitive Peak Forward Surge Current



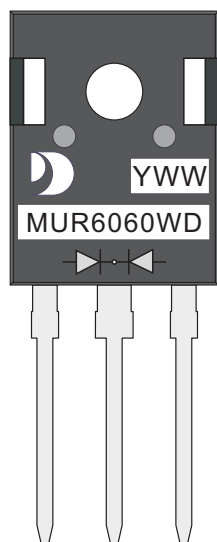


Package Outline
Through Hole Package ; 3 leads

TO-247-3L



Marking Diagram



YWW: Date Code
Y: Years(0~9)
WW: Week
MUR6060WD: Product name
(NOTE: The weekly code is based on the actual number of weeks in the calendar year.)



Important Notice and Disclaimer

Jingdao Microelectronics reserves the right to make changes to this document and its products and specifications at any time without notice. Customers should obtain and confirm the latest product information and specifications before final design, purchase or use.

Jingdao Microelectronics makes no warranty, representation or guarantee regarding the suitability of its products for any particular purpose, not does Jingdao Microelectronics assume any liability for application assistance or customer product design.

Jingdao Microelectronics does not warrant or accept any liability with products which are purchased or used for any unintended or unauthorized application.

No license is granted by implication or otherwise under any intellectual property rights of Jingdao Microelectronics.

Jingdao Microelectronics products are not authorized for use as critical components in life support devices or systems without express written approval of Jingdao Microelectronics.