



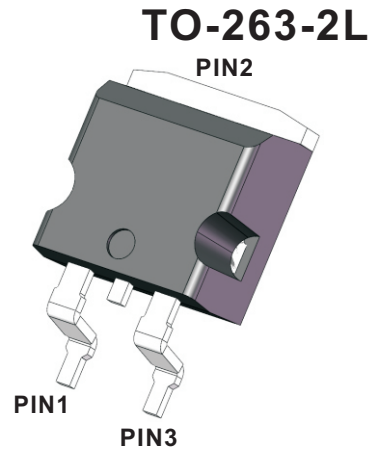
Fast Recovery EPI Diodes
Reverse Voltage - 200~600 Volts
Forward Current - 30 Amperes

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-263-2L
- Approx. Weight: 1.52g (0.053oz)
- Terminals: Lead solderable per MIL-STD-202, Method 208
- 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	Symbols	MUR3020GS	MUR3040GS	MUR3060GS	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	$I_{F(AV)}$	30			A
Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	300			A
Instantaneous forward voltage at 30 A	V_F	1.3	1.4	1.7	V
Maximum Reverse Recovery Time ⁽¹⁾	t_{rr}	35			ns
Maximum instantaneous reverse current at rated DC blocking voltage $T_j=25^{\circ}C$ $T_j=125^{\circ}C$	I_R	10 500			μA
Maximum Thermal Resistance Junction To Case	$R_{\theta JC}$	4			$^{\circ}C/W$
Operation Junction Temperature and Storage Temperature	T_j, T_{stg}	-55 ~ +150			$^{\circ}C$

NOTE 1: $I_F=0.5A, I_R=1A, I_{rr}=0.25A$



Fig.1 Typical Forward Current Derating Curve

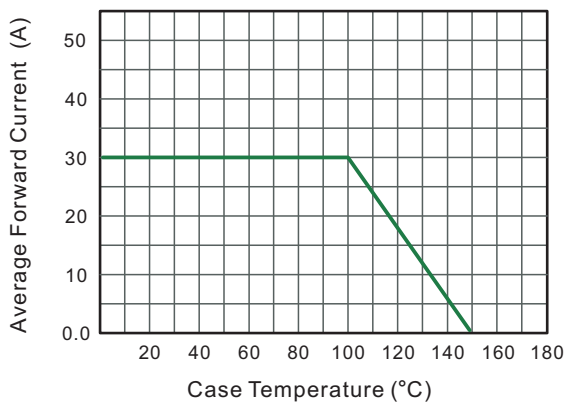


Fig.2 Typical Reverse Characteristics

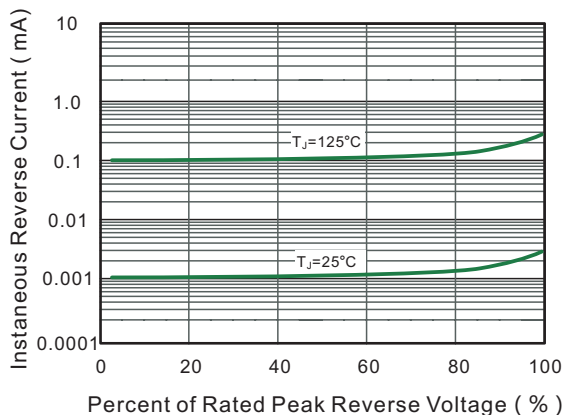


Fig.3 Typical Forward Characteristic

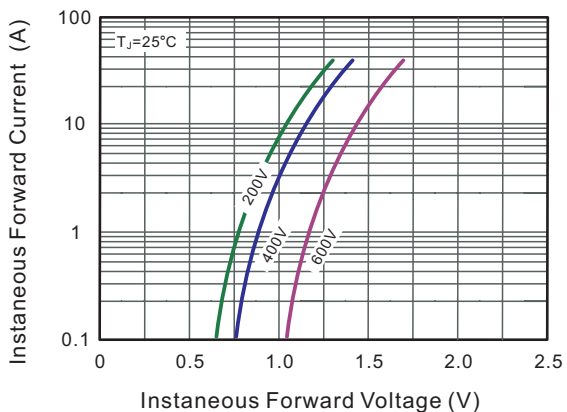
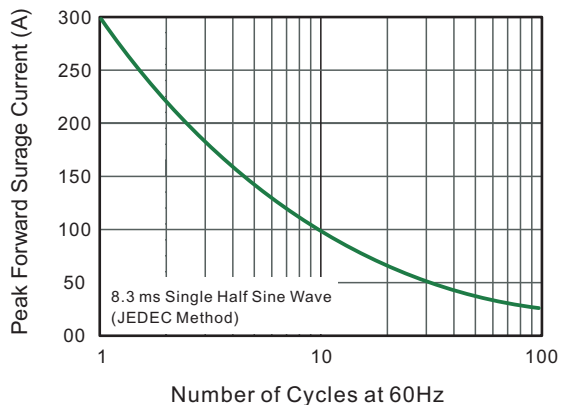


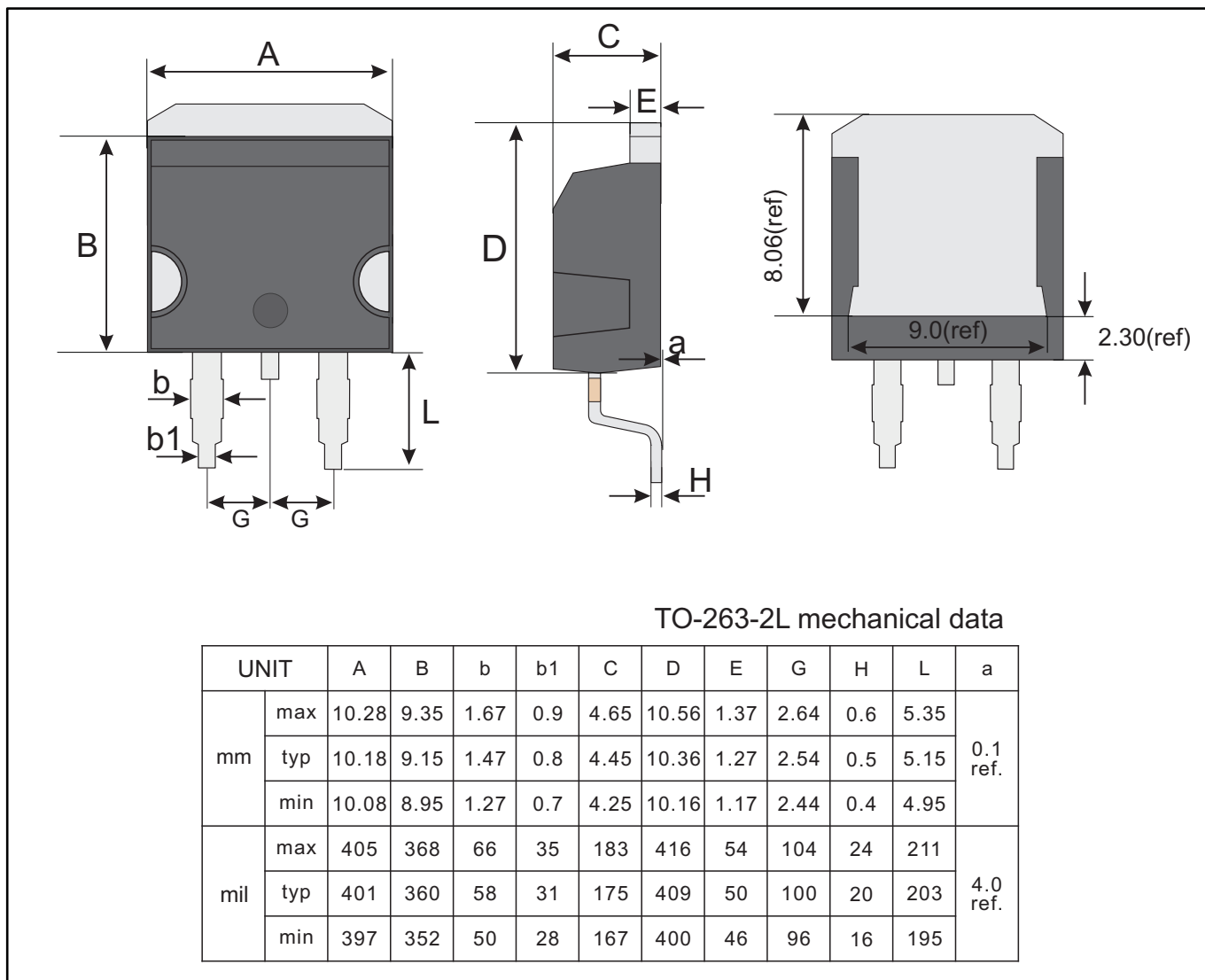
Fig.4 Maximum Non-Repetitive Peak Forward Surge Current



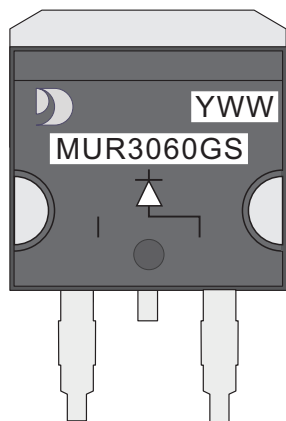


Package Outline
Plastic surface mounted package; 2 leads

TO-263-2L



Marking Diagram



YWW: Date Code
Y: Years(0~9)
WW: Week
MUR3060GS: Product name
(NOTE: The weekly code is based on the actual number of weeks in the calendar year.)



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