



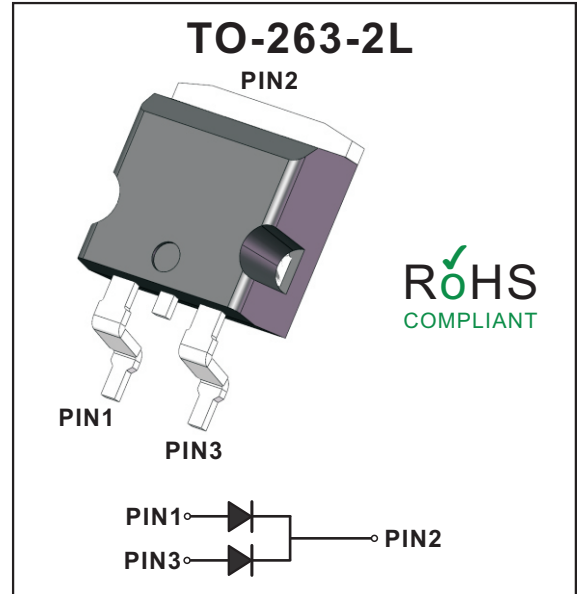
**Extreme Low Vf Schottky Barrier Rectifiers**  
**Reverse Voltage - 100 V**  
**Forward Current - 40 A**

**Features**

- High current capability
- Low forward voltage drop
- Low power loss, high efficiency
- High surge capability
- High temperature soldering guaranteed
- Mounting position: any

**Mechanical data**

- Case: TO-263-2L
- Approx Weight: 1.52g ( 0.053oz)
- Lead free finish, RoHS compliant
- Case Material: "Green" molding compound, UL flammability classification 94V-0, "Halogen-free".



**Packing Marking And Ordering Information**

Device Package	Device	Marking	Packing Type	QTY Per Reel	Inner box	Per Carton
TO-263-2L	MBRT40100GD	MBRT40100GD	Reel	800 Pcs	1,600 Pcs	8,000 Pcs

**Maximum Ratings And Electrical Characteristics**

Ratings At 25°C Ambient Temperature Unless Otherwise Specified

Parameter	Symbols	MBRT40100GD	Unit
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	100	V
Maximum RMS voltage	$V_{RMS}$	70	V
Maximum DC Blocking Voltage	$V_{DC}$	100	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
Operating Junction Temperature Range	$T_j$	-55 ~ +150	°C
Storage Temperature Range	$T_{stg}$	-55 ~ +150	°C

Parameter	Symbols	Test Conditions	Min	Typ	Max	Units
Breakdown voltage(per leg)	$V_{BR}$	$I_R=0.5mA$	100			V
Instantaneous forward voltage(per leg)	$V_F$	$I_F=20A, T_J=25^\circ C$		0.71	0.75	V
Reverse current(per leg)	$I_R$	$V_R=100, T_J=25^\circ C$			0.12	mA



Fig.1 Typical Forward Current Derating Curve

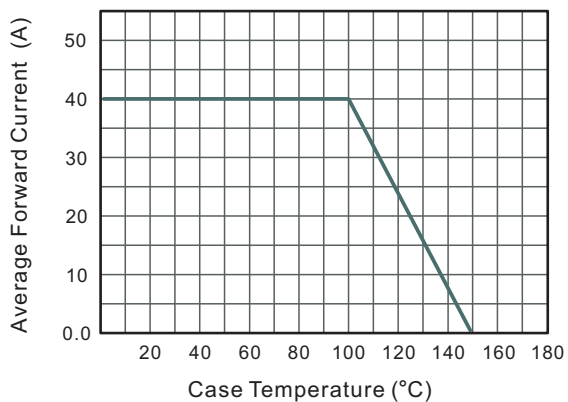


Fig.2 Typical Reverse Characteristics

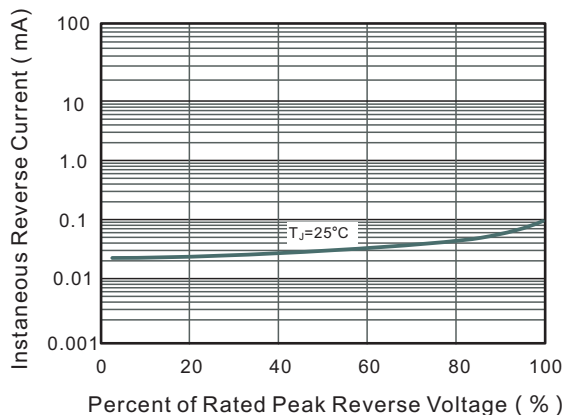


Fig.3 Typical Forward Characteristic(per leg)

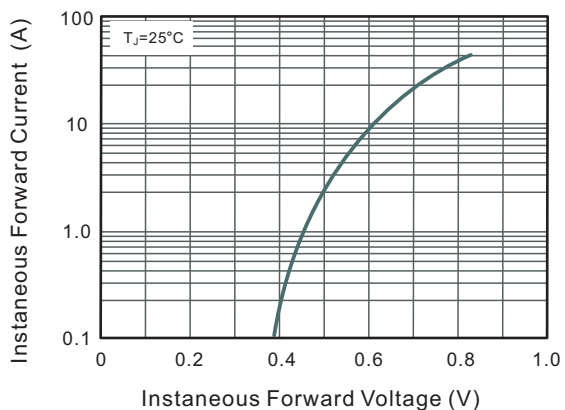
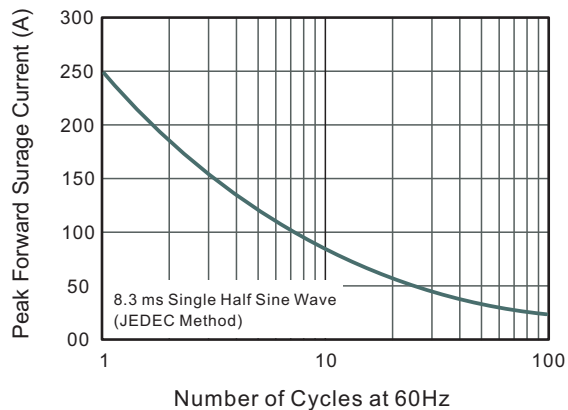


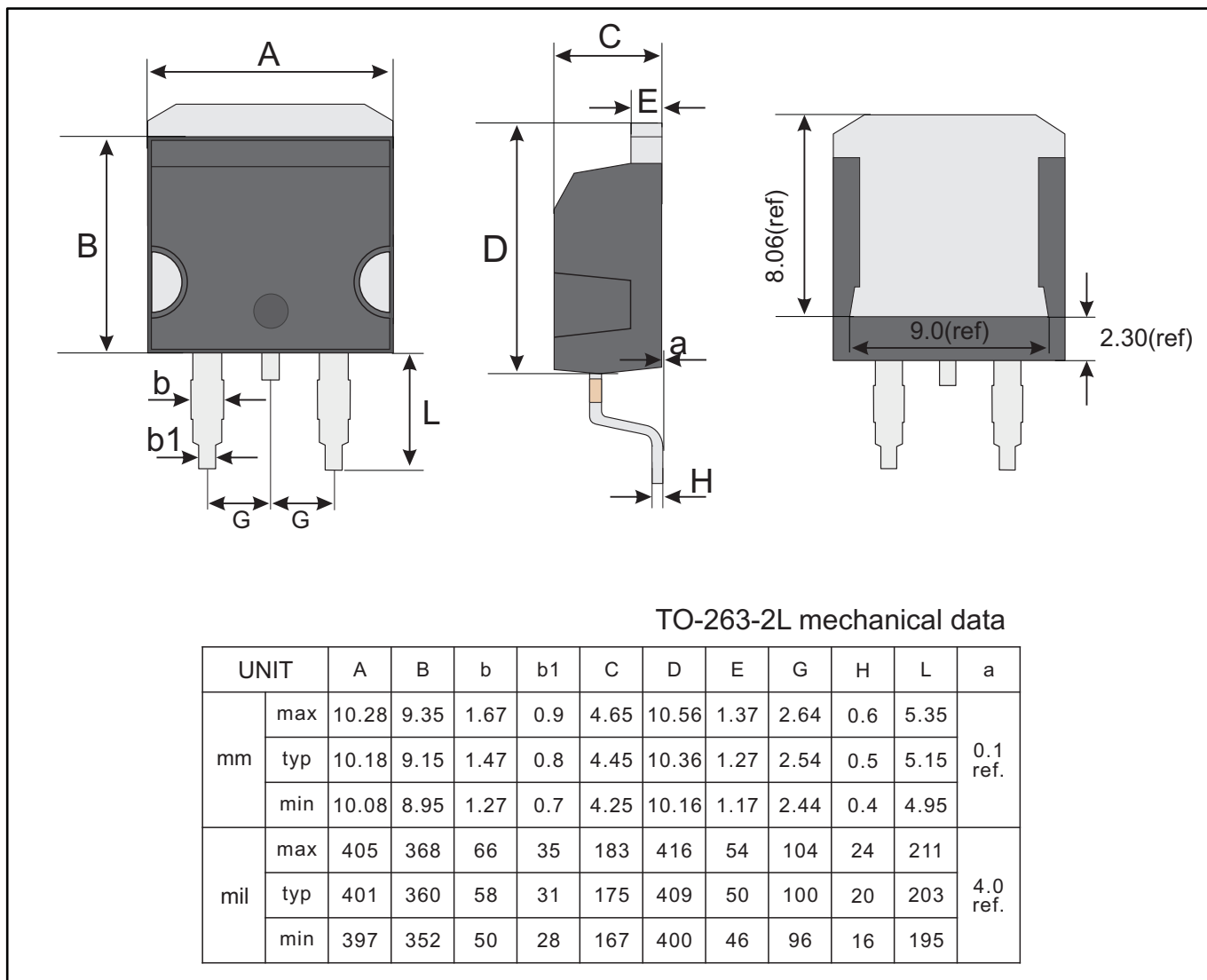
Fig.4 Maximum Non-Repetitive Peak Forward Surge Current



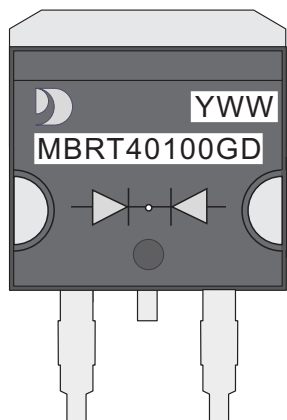


Package Outline  
Plastic surface mounted package; 2 leads

TO-263-2L



**Marking Diagram**



YWW: Date Code  
Y: Years(0~9)  
WW: Week  
MBRT40100GD: Product name  
(NOTE: The weekly code is based on the actual number of weeks in the calendar year.)



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