



Schottky Barrier Rectifiers
Reverse Voltage - 40 to 200 V
Forward Current - 30 A

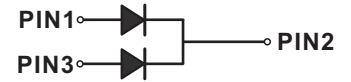
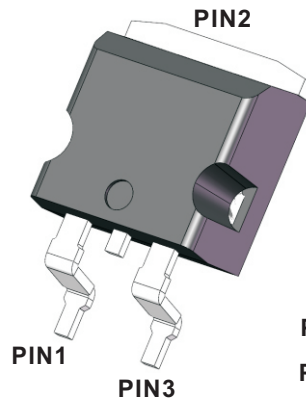
TO-263-2L

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	MBR30xxxGT	MBR30xxxGT	Reel	800 Pcs	1,600 Pcs	8,000 Pcs

Maximum Ratings And Electrical Characteristics

Ratings At 25°C Ambient Temperature Unless Otherwise Specified

Characteristics	Symbols	MBR3040GT	MBR3045GT	MBR3060GT	MBR30100GT	MBR30150GT	MBR30200GT	Units
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	40	45	60	100	150	200	V
Maximum RMS voltage	V_{RMS}	28	32	42	70	105	140	V
Maximum DC Blocking Voltage	V_{DC}	40	45	60	100	150	200	V
Maximum Average Forward Rectified Current per leg per device	$I_{F(AV)}$	15 30						A
Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method) per leg	I_{FSM}	200						A
I^2t Rating for Fusing $t \leq 8.3ms$	I^2t	166						A ² S
Max Instantaneous Forward Voltage at 15A(per leg)	V_F	0.75		0.80	0.88	0.92	0.95	V
Maximum DC Reverse Current at Rated DC Reverse Voltage $T_a = 25^\circ C$ $T_a = 100^\circ C$	I_R		0.1 10			0.05 5		mA
Typical Thermal Resistance	$R_{\theta JC}$	15						°C/W
Typical Junction Capacitance at $V_R=4V, f=1MHz$	C_j	500		400	300	200	150	pF
Operating Junction Temperature Range	T_j	-55 ~ +150				-55 ~ +175		°C
Storage Temperature Range	T_{stg}	-55 ~ +150				-55 ~ +175		°C



Fig.1 Typical Forward Current Derating Curve

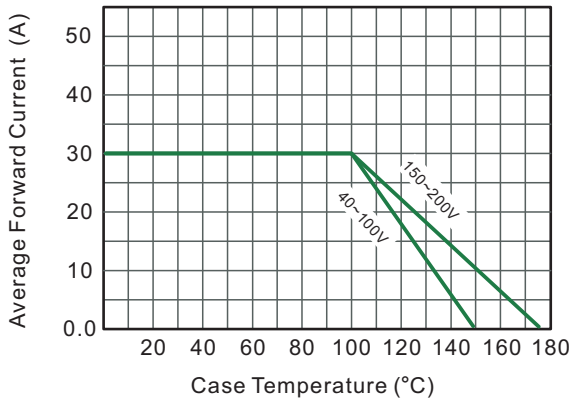


Fig.2 Typical Reverse Characteristics

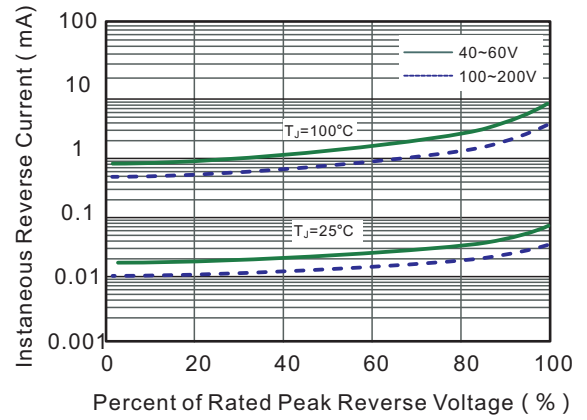


Fig.3 Typical Forward Characteristic(per leg)

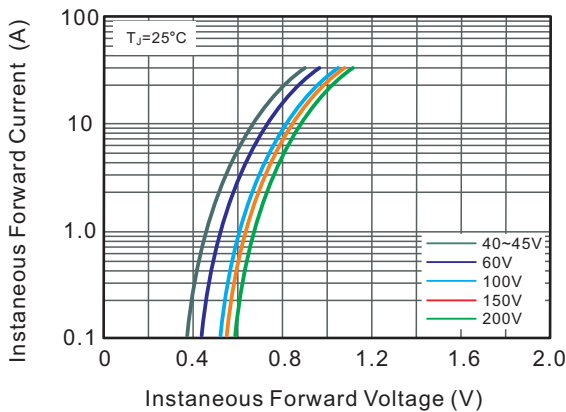


Fig.4 Maximum Non-Repetitive Peak Forward Surge Current

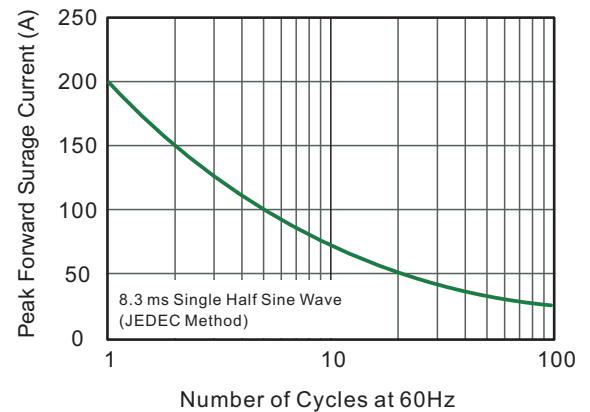


Fig.5 Typical Junction Capacitance

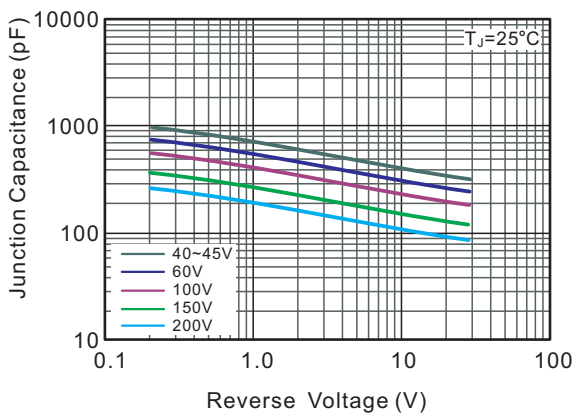
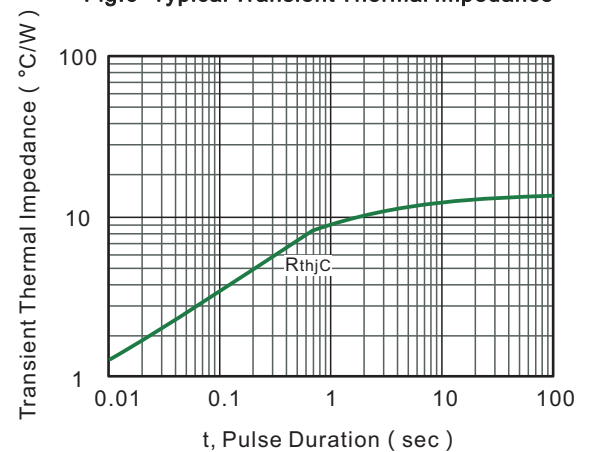


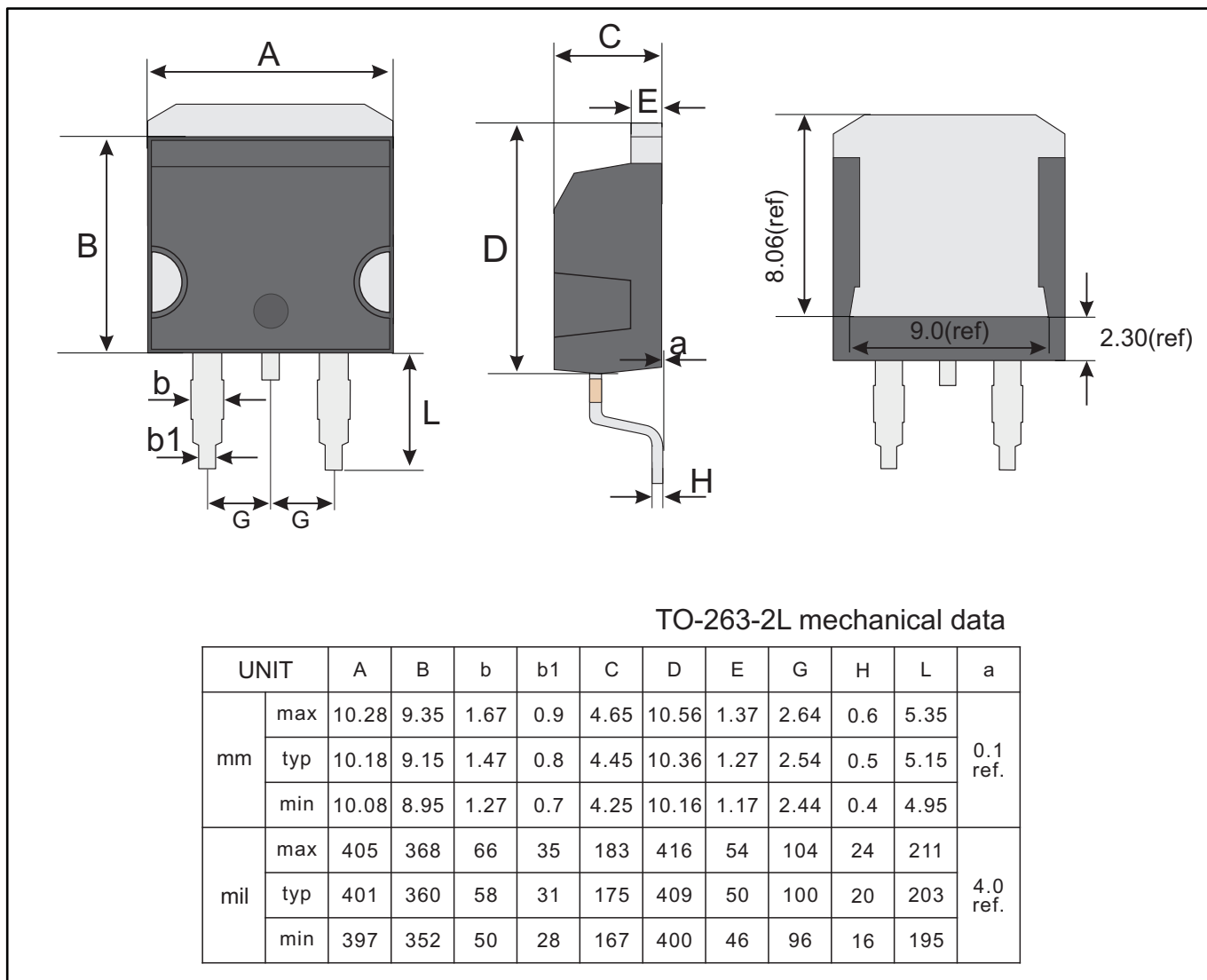
Fig.6- Typical Transient Thermal Impedance



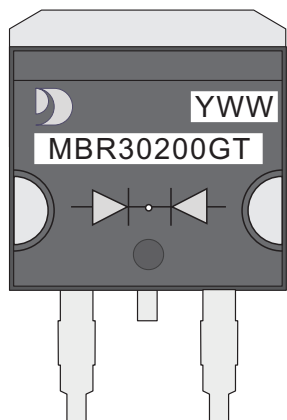


Package Outline
Plastic surface mounted package; 2 leads

TO-263-2L



Marking Diagram



YWW: Date Code
Y: Years(0~9)
WW: Week
MBR30200GT: Product name
(NOTE: The weekly code is based on the actual number of weeks in the calendar year.)



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