



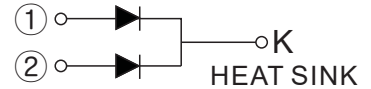
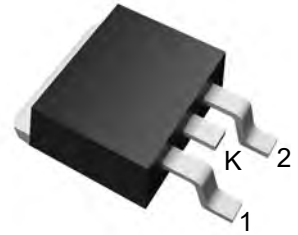
MBR3040TCW~MBR30200TCW

Schottky Barrier Diode

Features

- High Surge Capability
- High Current Capability
- Low Forward Voltage Drop
- Low Power Loss, High Efficiency

TO-263W



Maximum Ratings and Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

Parameter	Symbols	MBR3040TCW	MBR3045TCW	MBR3060TCW	MBR30100TCW	MBR30150TCW	MBR30200TCW	Units
Maximum Repetitive 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 diode per device	$I_{F(AV)}$	15 30						A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load(JEDEC method) per diode	I_{FSM}	200						A
Maximum Instantaneous Forward Voltage at 15 A DC Per leg	V_F	0.75	0.80	0.88	0.92	0.95		V
Maximum DC Reverse Current at Rated DC Blocking Voltage $T_A = 25^\circ\text{C}$ $T_A = 125^\circ\text{C}$	I_R	0.1 20			0.05 20			mA
Typical Junction Capacitance ^{Note1}	C_j	600	400					pF
Typical Thermal Resistance ^{Note2}	$R_{\theta JA}$	45						°C/W
Junction Temperature	T_J	150				175		°C
Storage Temperature Range	T_{STG}	-55 to +150				-55 to +175		°C

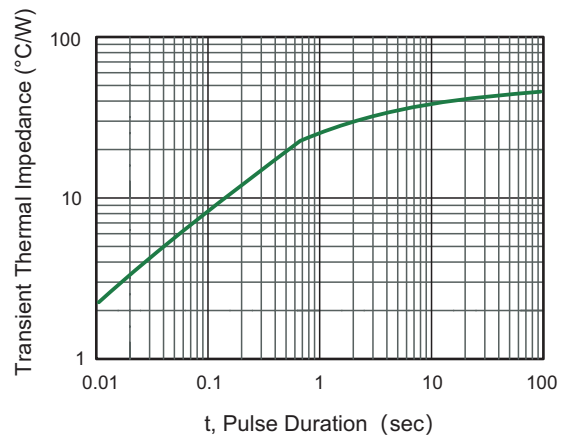
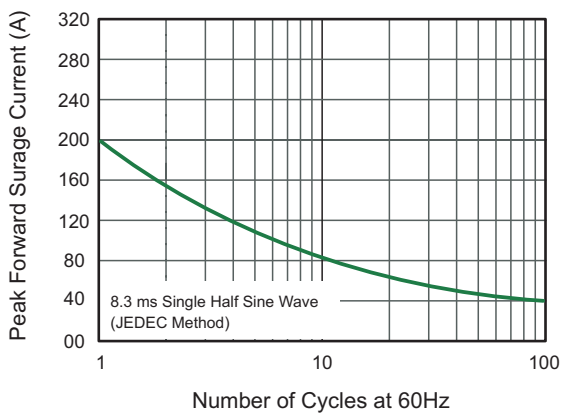
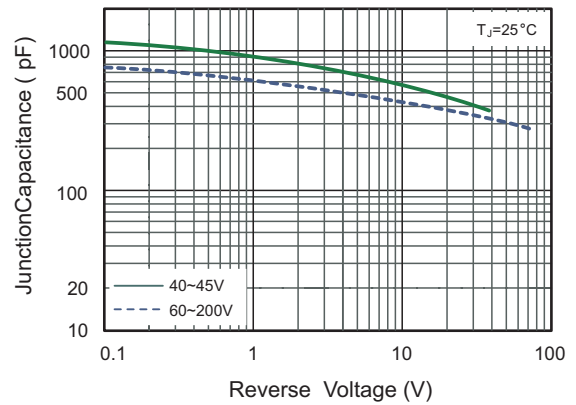
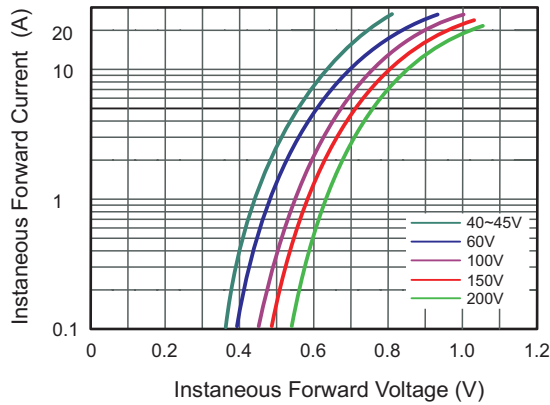
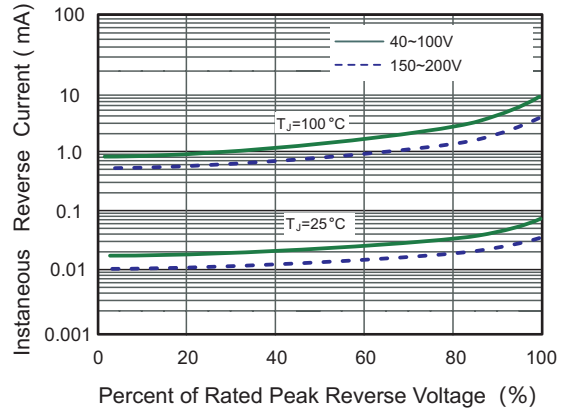
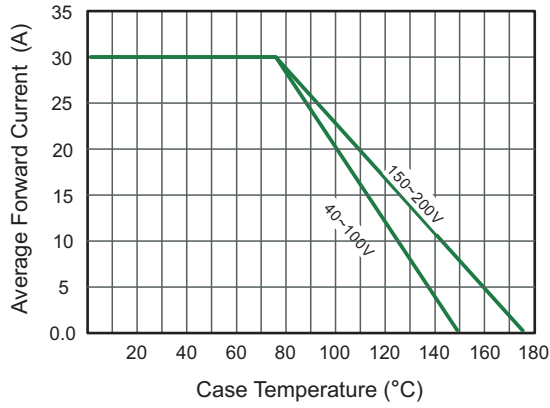
Note:

1. Measured at 1 MHz and applied reverse voltage of 4 V DC.
2. Mounted on 10cm x 10cm x 1mm copper pad area.



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Typical Characteristic Curves



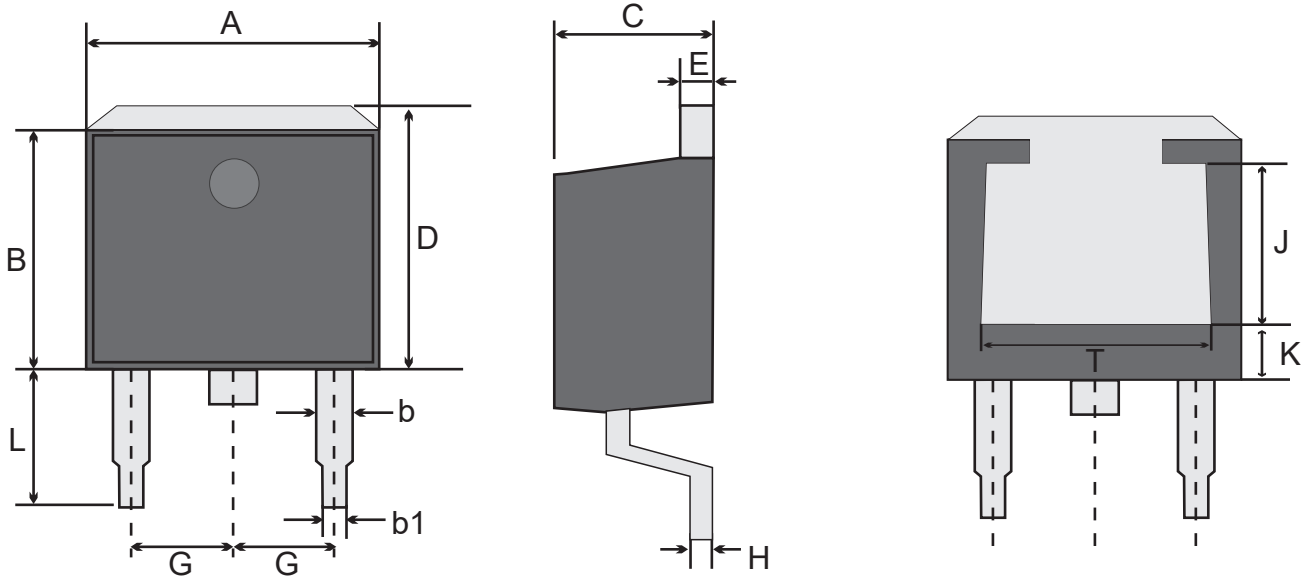


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Package Outline

TO-263W

Dimensions in mm



UNIT		A	B	b	b1	C	D	E	G	H	L	J	T	K
mm	max	10.4	9.1	1.4	0.9	4.8	10.6	1.40	2.75	0.7	6.0	4.65 ref.	7.70 ref.	3.22 ref.
	typ	9.94	8.6	1.2	0.8	4.53	9.8	1.27	2.5	0.38	5.5			
	min	9.8	8.5	1.0		4.4	9.6	1.20	2.35	0.3	5.0			
mil	max	409	357	55	35	189	418	55	108	26	236	1.83 ref.	303 ref.	126 ref.
	typ	391	338	47		178	386	50	98	15	216			
	min	387	335	39		173	378	47	92	11	197			