



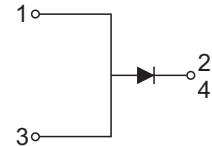
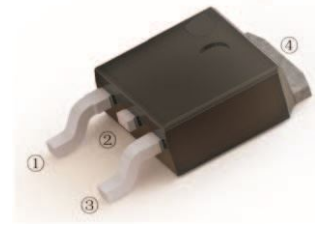
MBR640TE~MBR6200TE

Schottky Barrier Diode

Features

- High Surge Capability
- High Current Capability
- Low Forward Voltage Drop
- High temperature soldering guaranteed

TO-252



Maximum Ratings and Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

Parameter	Symbols	MBR640TE	MBR645TE	MBR660TE	MBR6100TE	MBR6150TE	MBR6200TE	Units
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	40	45	60	100	150	200	V
Maximum RMS Voltage	V_{RMS}	28	31.5	42	70	105	140	V
Maximum DC Blocking Voltage	V_{DC}	40	45	60	100	150	200	V
Maximum Average Forward Rectified Current	$I_{F(AV)}$	6.0						A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load	I_{FSM}	90						A
Maximum Instantaneous Forward Voltage at 5 A	V_F	0.65	0.70	0.85	0.90	0.92	V	
Maximum DC Reverse Current at Rated DC Blocking Voltage $T_J = 25^\circ\text{C}$ $T_J = 125^\circ\text{C}$	I_R	0.1 20			0.05 20			mA
Typical Junction Capacitance ^{Note1}	C_j	600	400				pF	
Typical Thermal Resistance ^{Note2}	$R_{\theta JA}$	35						°C/W
Junction Temperature	T_J	150				175		°C
Storage Temperature Range	T_{STG}	-55 to +150				-55 to +175		°C

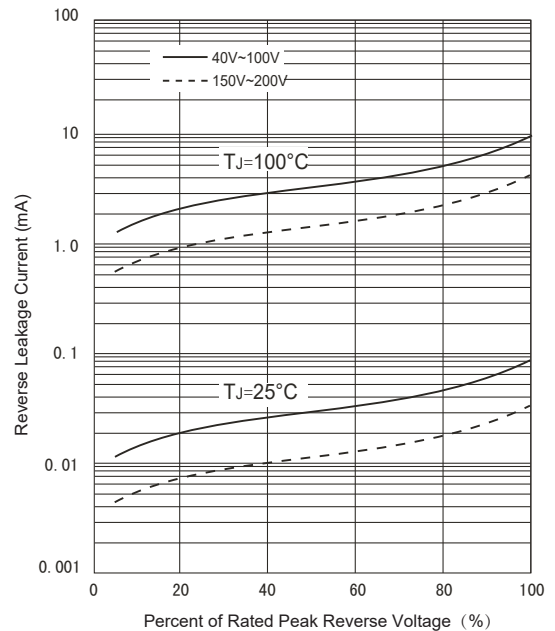
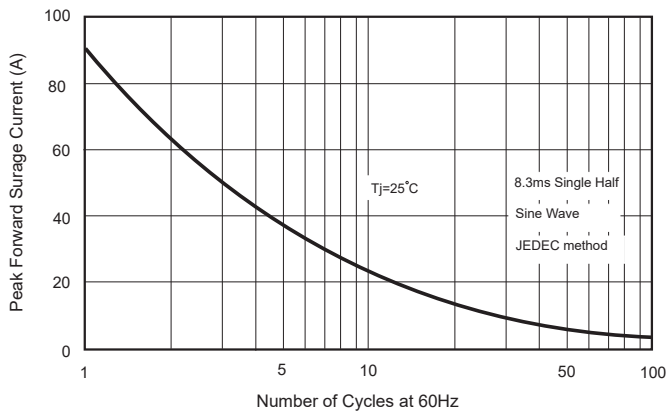
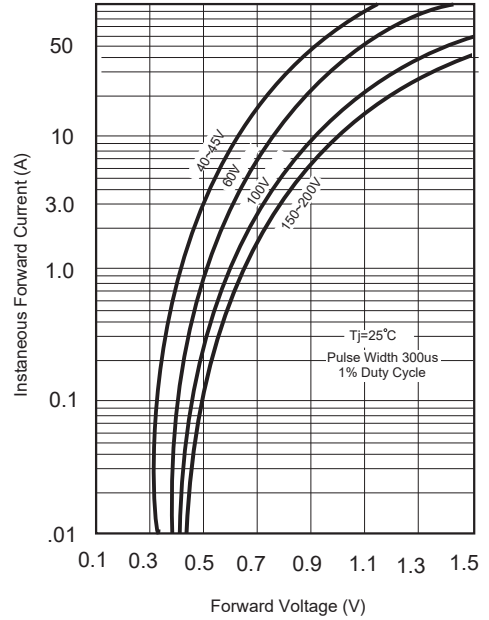
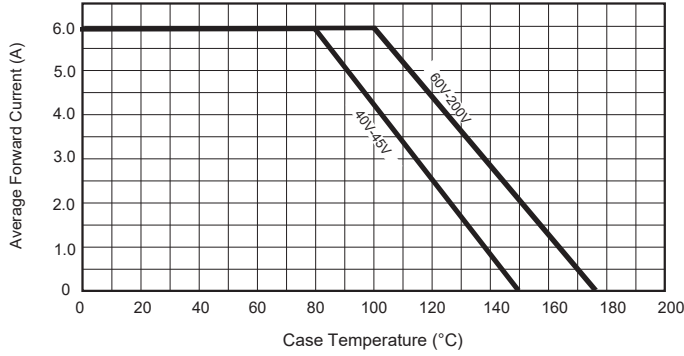
Note:

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





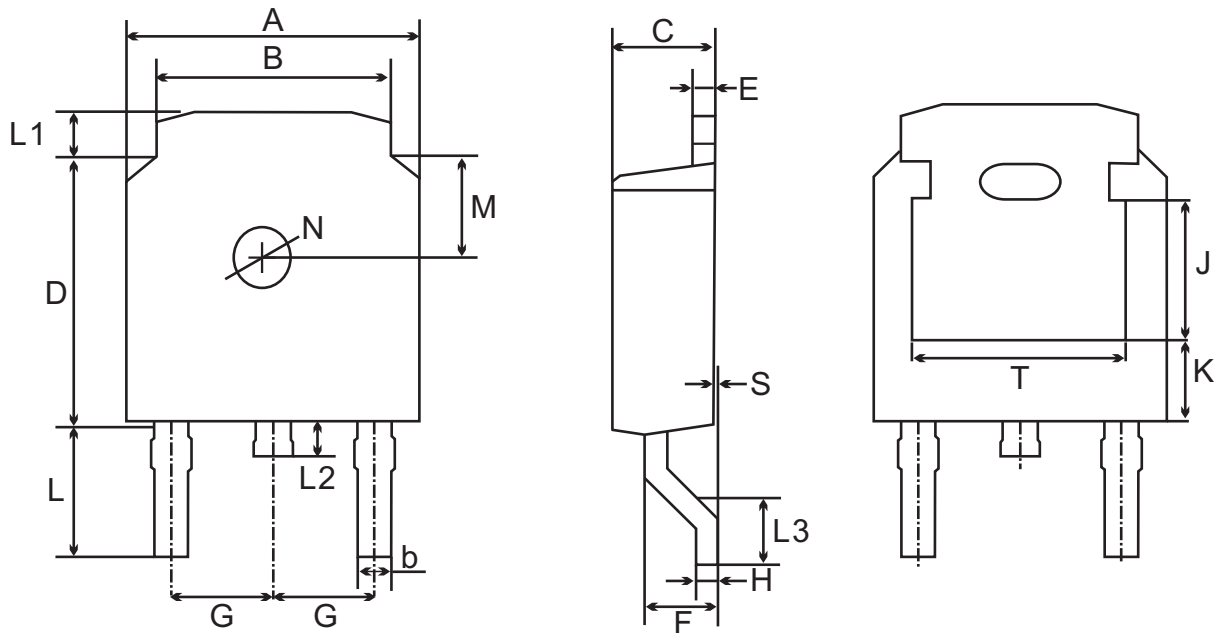
MBR640TE~MBR6200TE

Schottky Barrier Diode

Package Outline

TO-252

Dimensions in mm



UNIT		A	B	b	C	D	E	F	G	H	L	L1	L2	L3	S	M	N	J	K	T
mm	max	6.7	5.5	0.8	2.5	6.3	0.6	1.8	2.29 TYPICAL	0.55	3.1	1.2	1.0	1.75	0.1	1.8 TYPICAL	1.3 TYPICAL	3.16	1.80	4.83
	min	6.3	5.1	0.3	2.1	5.9	0.4	1.3		0.45	2.7	0.8	0.6	1.40	0.0			ref.	ref.	ref.
mil	max	264	217	31	98	248	24	71	90 TYPICAL	22	122	47	39	69	4	71 TYPICAL	51 TYPICAL	124	71	190
	min	248	201	12	83	232	16	51		18	106	31	24	55	0			ref.	ref.	ref.