

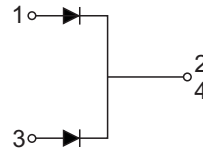
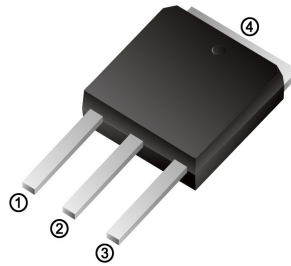


MBR2040xT THRU MBR20200xT **Surface Mount Schottky Rectifiers**

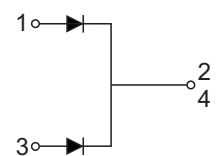
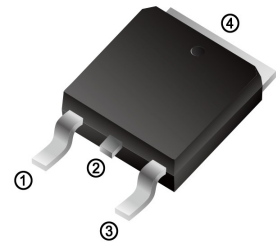
FEATURES

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

TO-251(I-PAK)



TO-252(D-PAK)



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

CHARACTERISTICS	TO-251	MBR2040VT	MBR2045VT	MBR2060VT	MBR20100VT	MBR20150VT	MBR20200VT	UNIT
	TO-252	MBR2040DT	MBR2045DT	MBR2060DT	MBR20100DT	MBR20150DT	MBR20200DT	
Maximum Recurrent Peak Reverse Voltage	VRRM	40	45	60	100	150	200	V
Maximum RMS Voltage	VRMS	28	31.5	42	70	105	140	V
Maximum DC Blocking Voltage	VDC	40	45	60	100	150	200	V
Maximum Average Forward Rectified Current	I(AV)	20.0						A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load (JEDEC Method)	IFSM	120						A
Maximum Forward Voltage at 10.0A DC per leg	VF	0.60		0.70	0.85	0.90	0.92	V
Maximum DC Reverse Current J=25°C at Rated DC Blocking Voltage J=125°C	IR	0.1 20						mA
Typical Junction Capacitance Per Element (Note1)	CJ	600		400				pF
Typical Thermal Resistance (Note2)	RθJA	45						°C/W
Operating Temperature Range	TJ	-55 to +150						°C
Storage Temperature Range	TSTG	-55 to +150						°C

NOTES: 1.Measured at 1.0MHz and applied reverse voltage of 4.0V DC.

2.Mounted on 10cm x 10cm x 1mm copper pad area

Characteristic Curves ($T_A=25^\circ\text{C}$ unless otherwise noted)

MBR2040xT THRU MBR20200xT

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

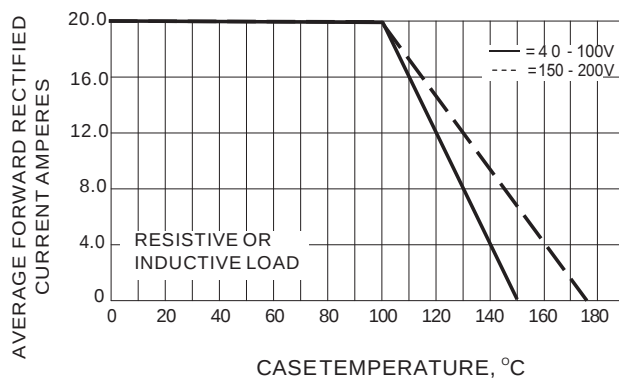


FIG.2-TYPICAL FORWARD CHARACTERISTICS

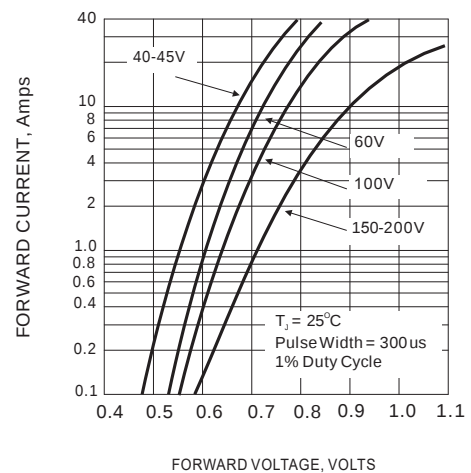


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

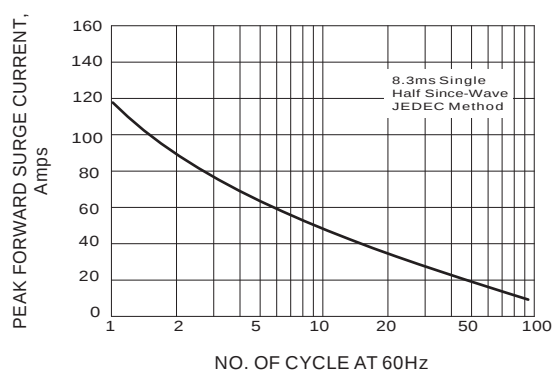
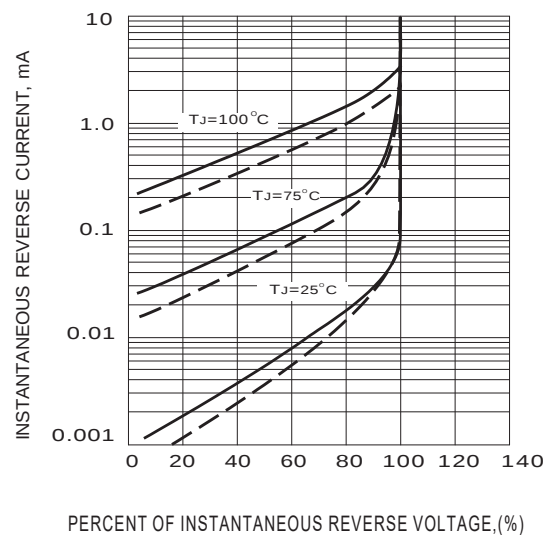
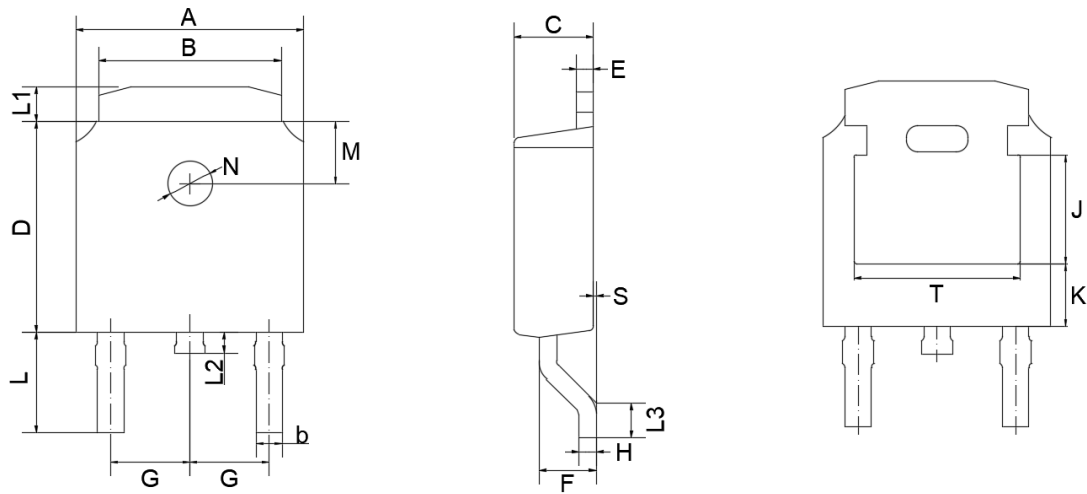


FIG.4 - TYPICAL REVERSE CHARACTERISTICS



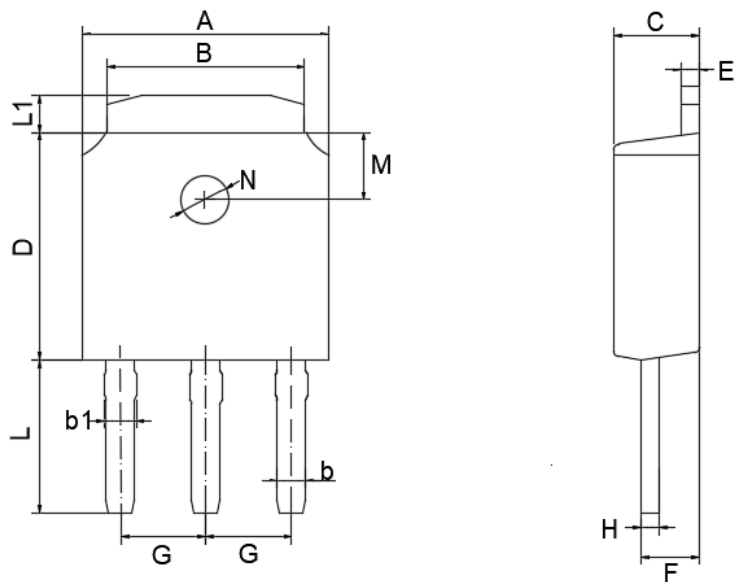
TO-252(D-PAK) Package Outline Dimensions



TO-252(D-PAK) mechanical data

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	0.86	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 ref.	1.80 ref.	4.83 ref.
	min	6.3	5.1	0.66	2.1	5.9	0.4	1.3		0.45	2.7	0.8	0.6	1.40	0.0					
mil	max	264	217	33	98	248	24	71	90 TYPICAL	22	122	47	39	69	4	71 TYPICAL	51 TYPICAL	124 ref.	71 ref.	190 ref.
	min	248	201	26	83	232	16	51		18	106	31	24	55	0					

TO-251(I-PAK) Package Outline Dimensions



TO-251(I-PAK) mechanical data

UNIT		A	B	b	b1	C	D	E	F	G	H	L	L1	M	N
mm	max	6.7	5.5	0.86	0.9	2.5	6.3	0.6	1.8	2.29 TYPICAL	0.55	4.3	1.2	1.8 TYPICAL	1.3 TYPICAL
	min	6.3	5.1	0.66	0.76	2.1	5.9	0.4	1.3		0.45	3.9	0.8		
mil	max	264	217	33	35	98	248	24	71	90 TYPICAL	22	169	47	71 TYPICAL	51 TYPICAL
	min	248	201	26	30	83	232	16	51		18	154	31		