



SCHOTTKY BARRIER RECTIFIERS

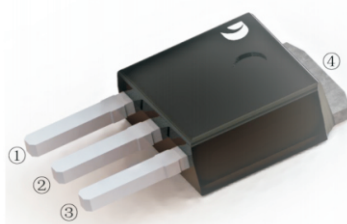
Reverse Voltage - 40 to 200 V

Forward Current - 3.0 A

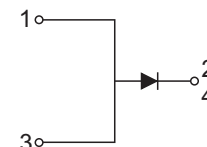
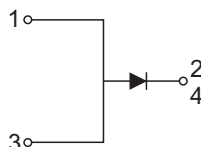
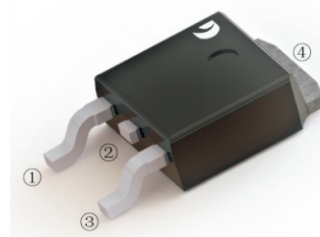
FEATURES

- 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	MBR340VY	MBR345VY	MBR360VY	MBR3100VY	MBR3150VY	MBR3200VY	Units	
	TO-252	MBR340DY	MBR345DY	MBR360DY	MBR3100DY	MBR3150DY	MBR3200DY		
Maximum Recurrent 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	$I_{F(AV)}$	3.0						A	
Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	80						A	
Max Instantaneous Forward Voltage at 3 A	V_F	0.65		0.70	0.85	0.90	0.92	V	
Maximum DC Reverse Current $T_a = 25^\circ\text{C}$ at Rated DC Reverse Voltage $T_a = 125^\circ\text{C}$	I_R	0.1 20			0.05 20			mA	
Typical Junction Capacitance ⁽¹⁾	C_j	200		150				pF	
Typical Thermal Resistance ⁽²⁾	$R_{\theta JA}$	50						°C/W	
Operating Junction Temperature Range	T_j	-55 ~ +150				-55 ~ +175			°C
Storage Temperature Range	T_{stg}	-55 ~ +150				-55 ~ +175			°C

(1) Measured at 1 MHz and applied reverse voltage of 4 V D.C

(2) P.C.B. mounted with 10cmX10cmX1mm copper pad areas.



Fig.1 Typical Forward Current Derating Curve

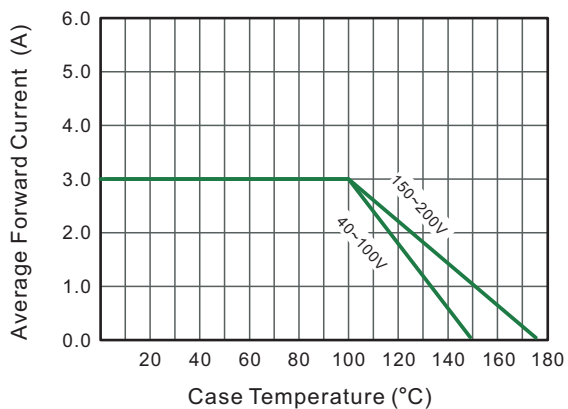


Fig.2 Typical Reverse Characteristics

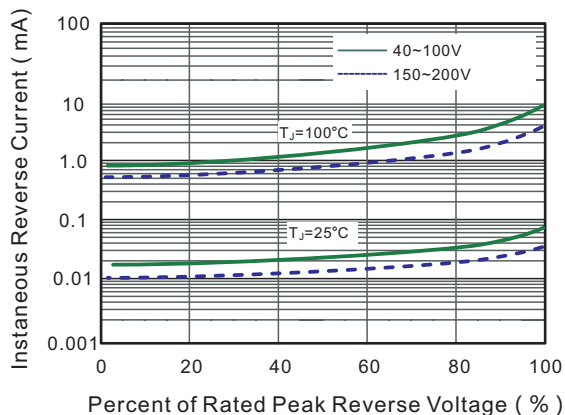


Fig.3 Typical Forward Characteristics

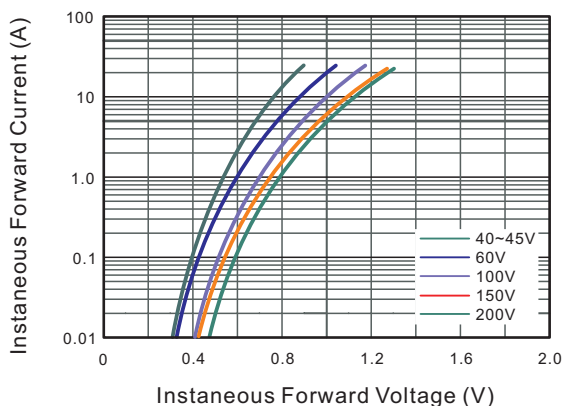


Fig.4 Typical Junction Capacitance

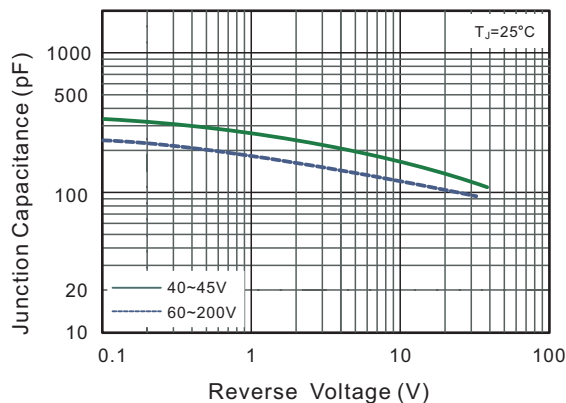


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

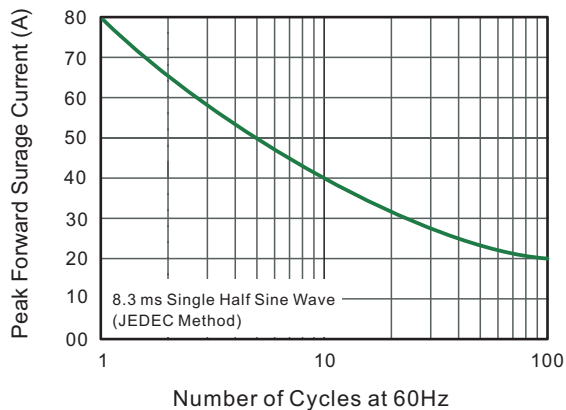
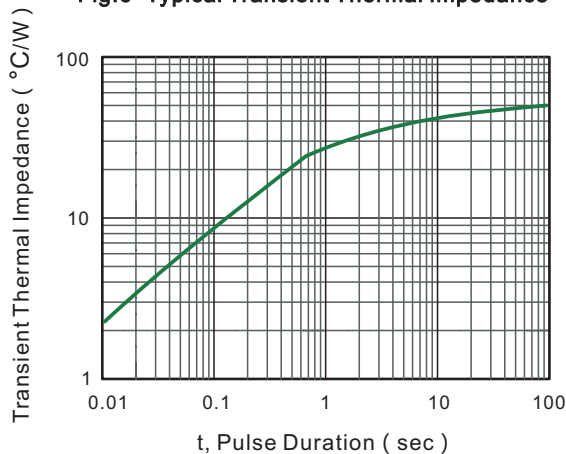
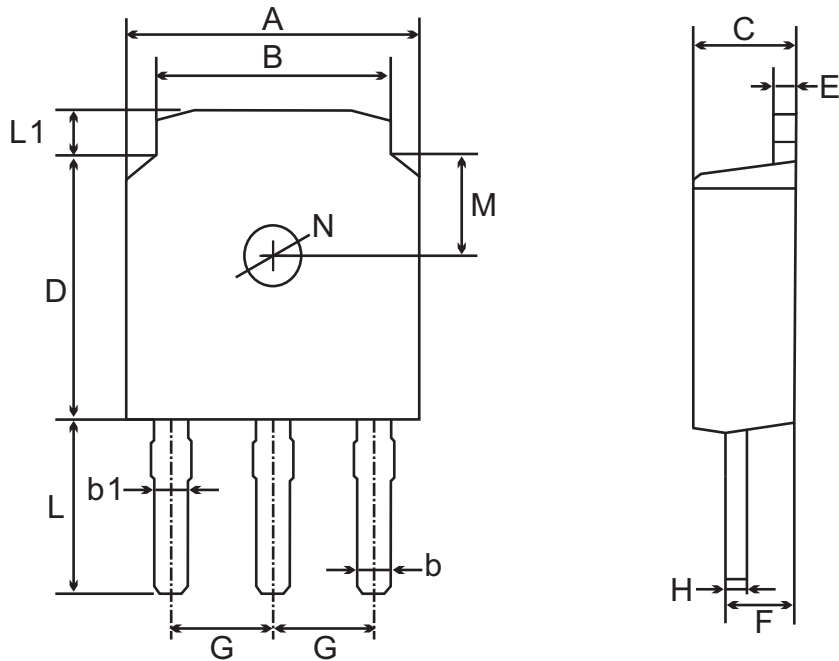


Fig.6- Typical Transient Thermal Impedance





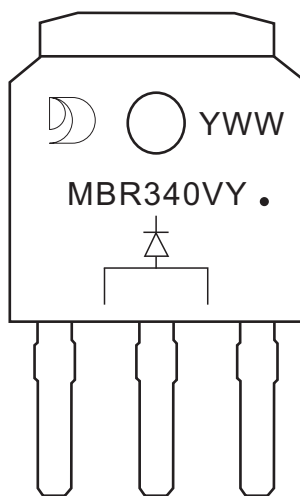
TO-251(I-PAK) Package Outline Dimensions



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	0.8	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	0.3	0.76	2.1	5.9	0.4	1.3		0.45	3.9	0.8		
mil	max	264	217	31	35	98	248	24	71	90 TYPICAL	22	169	47	71 TYPICAL	51 TYPICAL
	min	248	201	12	30	83	232	16	51		18	154	31		

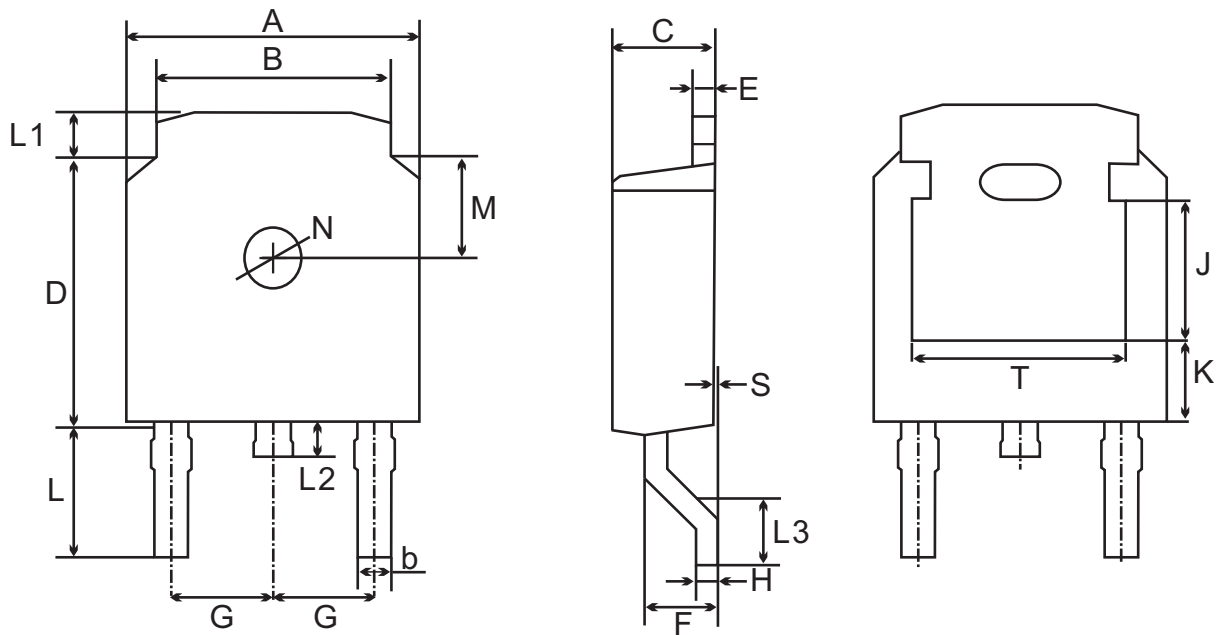
MARKING DIAGRAM



YWW: Date Code
 Y: Years(0~9)
 WW: Week
 MBR340VY: Product name
 (NOTE: The weekly code is based on the actual number of weeks in the calendar year.)



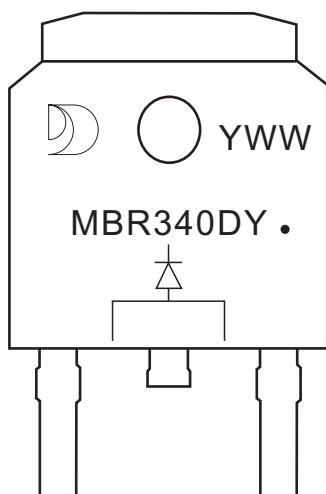
TO-252(D-PAK) Package Outline Dimensions



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	0.8	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.

MARKING DIAGRAM



YWW: Date Code
 Y: Years(0~9)
 WW: Week
 MBR340DY: Product name
 (NOTE: The weekly code is based on the actual number of weeks in the calendar year.)



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