



MBR1545 / MBR1560

SCHOTTKY BARRIER RECTIFIERS

Voltage

45 / 60 V

Current

15 A

Features

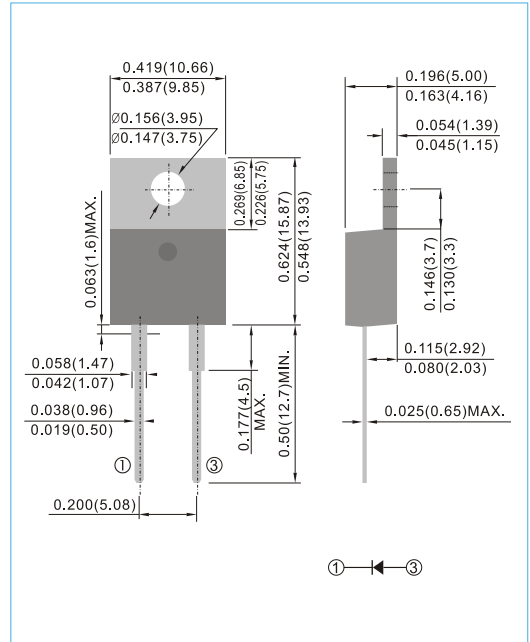
- Plastic package has Underwriters Laboratory Flammability Classification 94V-O. Flame Retardant Epoxy Molding Compound.
- High surge capacity.
- For use in low voltage, high frequency inverters free wheeling, and polarity protection applications
- Lead free in compliance with EU RoHS 2011/65/EU directive
- Green molding compound as per IEC61249 Std. . (Halogen Free)

Mechanical Data

- Case: Molded plastic, TO-220AC
- Terminals: Axial leads, solderable per MIL-STD-750, Method 2026
- Approx. Weight: 0.067 ounces, 1.89 grams
- Marking: Part number

TO-220AC

Unit : inch(mm)



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

PARAMETER	SYMBOL	MBR1545	MBR1560	UNIT
Maximum repetitive peak reverse voltage	V_{RRM}	45	60	V
Maximum rms voltage	V_{RMS}	31	42	V
Maximum dc blocking voltage	V_R	45	60	V
Maximum average forward rectified current	$I_{F(AV)}$	15		A
Peak forward surge current : 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	280		A
Maximum forward voltage at 15A	V_F	0.64	0.75	V
Maximum dc reverse current at rated dc blocking voltage	I_R	50		μA
Typical thermal resistance	(Note 1) $R_{\theta JC}$	2		$^{\circ}\text{C/W}$
Operating junction temperature range	T_J	-55 to +150		$^{\circ}\text{C}$
Storage temperature range	T_{STG}	-55 to +150		$^{\circ}\text{C}$

Note : 1. Device mounted on a infinite heatsink.



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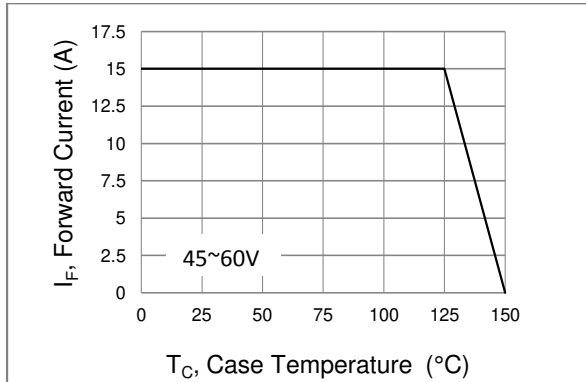


Fig.1 Forward Current Derating Curve

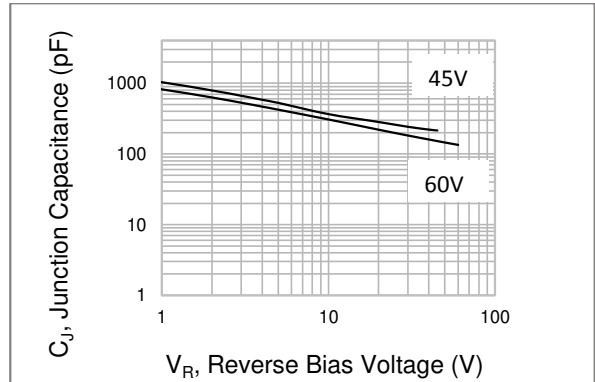


Fig.2 Typical Junction Capacitance

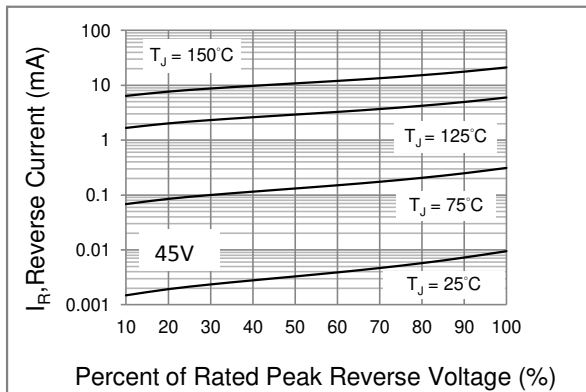


Fig.3 Typical Reverse Characteristics

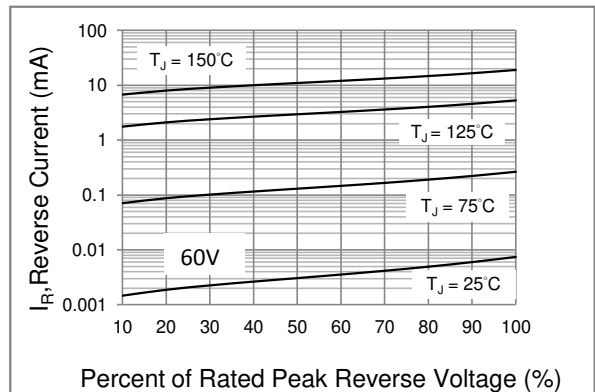


Fig.3 Typical Reverse Characteristics

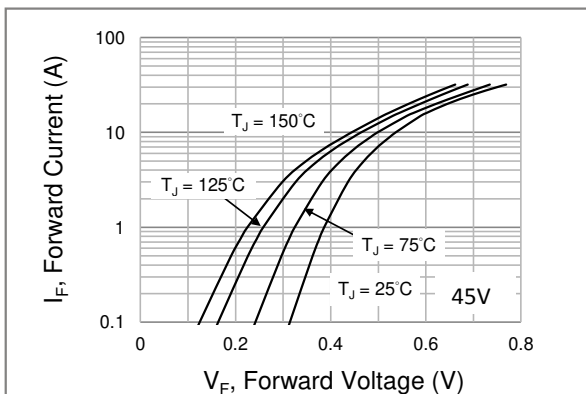


Fig.4 Typical Forward Characteristics

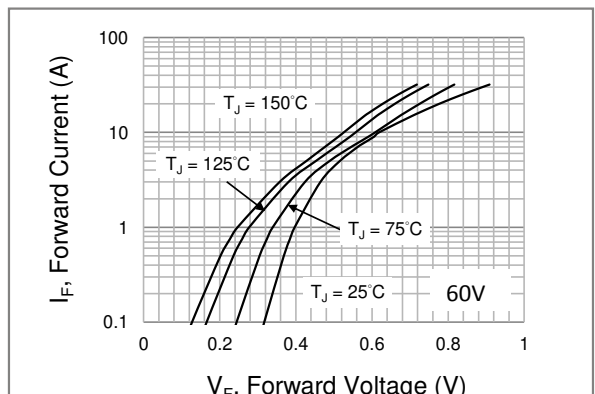


Fig.4 Typical Forward Characteristics



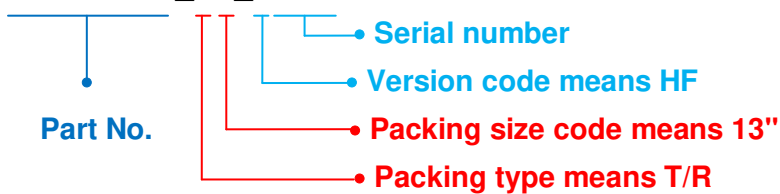
MBR1545 / MBR1560

Part No_packing code_Version

MBR1545_T0_00001

For example :

RB500V-40_R2_00001



Packing Code XX				Version Code XXXXX		
Packing type	1 st Code	Packing size code	2 nd Code	HF or RoHS	1 st Code	2 nd ~5 th Code
Tape and Ammunition Box (T/B)	A	N/A	0	HF	0	serial number
Tape and Reel (T/R)	R	7"	1	RoHS	1	serial number
Bulk Packing (B/P)	B	13"	2			
Tube Packing (T/P)	T	26mm	X			
Tape and Reel (Right Oriented) (TRR)	S	52mm	Y			
Tape and Reel (Left Oriented) (TRL)	L	PANASERT T/B CATHODE UP (PBCU)	U			
FORMING	F	PANASERT T/B CATHODE DOWN (PBCD)	D			



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