



MBR140~MBR1200

SCHOTTKY BARRIER RECTIFIERS

VOLTAGE 40~200 Volt **CURRENT** 1.0 Ampere

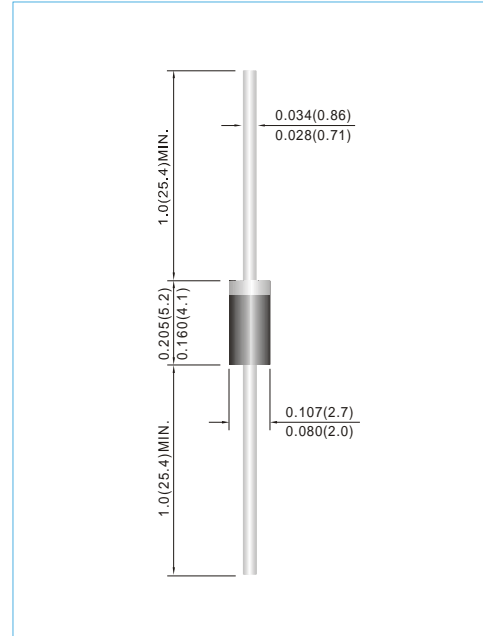
DO-41 Unit : inch(mm)

FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O utilizing Flame Retardant Epoxy Molding Compound.
- 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

MECHANICALDATA

- Case: DO-41 Molded plastic
- Terminals: Axial leads, solderable per MIL-STD-750,Method 2026
- Polarity: Color band denotes cathode
- Weight: 0.0118 ounces, 0.336 grams



MAXIMUM RATINGS

Ratings at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load.

PARAMETER	SYMBOL	MBR140	MBR145	MBR150	MBR160	MBR180	MBR190	MBR1100	MBR1150	MBR1200	UNITS
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	40	45	50	60	80	90	100	150	200	V
Maximum RMS Voltage	V _{RMS}	28	31.5	35	42	56	63	70	105	140	V
Maximum DC Blocking Voltage	V _{DC}	40	45	50	60	80	90	100	150	200	V
Maximum Average Forward Rectified Current 0.375"(9.5mm) lead length (See Figure 1)	I _{AV}	1.0									A
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load	I _{FSM}	30									A
Maximum Forward Voltage at 1.0A	V _F	0.7	0.74		0.8			0.9		V	
Maximum DC Reverse Current at Rated DC Blocking Voltage T _J =25°C T _J =100°C	I _R	0.05					10				mA
Typical Thermal Resistance	R _{θJA}	50					°C / W				
Operating Junction and Storage Temperature Rang	T _J ,T _{STG}	-55 to +150				-65 to +175					°C



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RATING AND CHARACTERISTIC CURVES

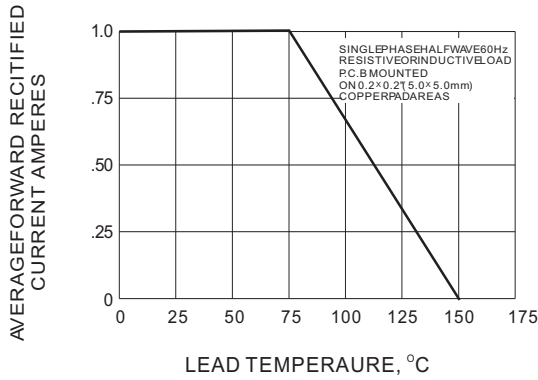


Fig.1 FORWARD CURRENT DERATING CURVE

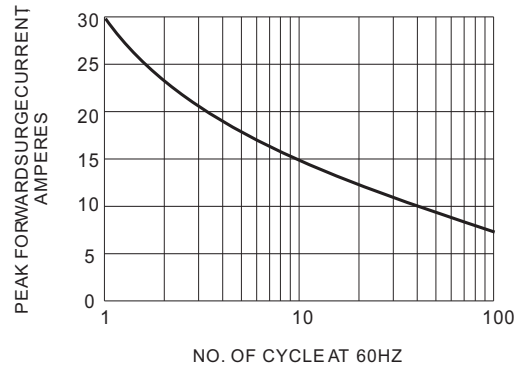


Fig.2 MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

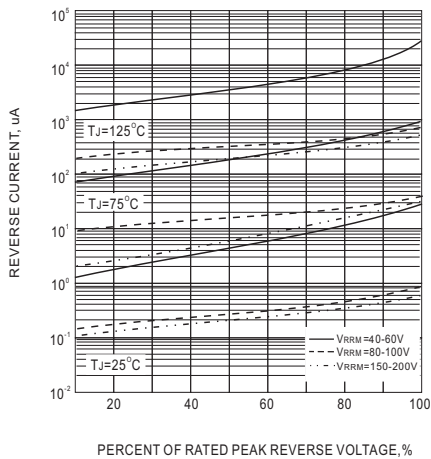


Fig.3 TYPICAL REVERSE CHARACTERISTIC

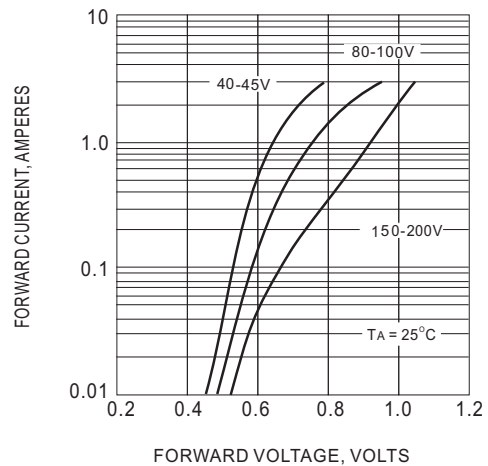


Fig.4 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC

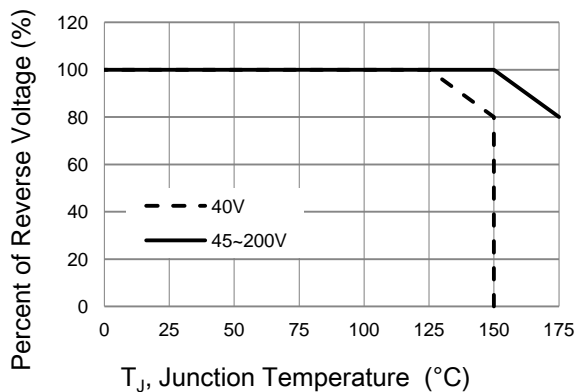


Fig.5 Operating Temperature Derating Curve

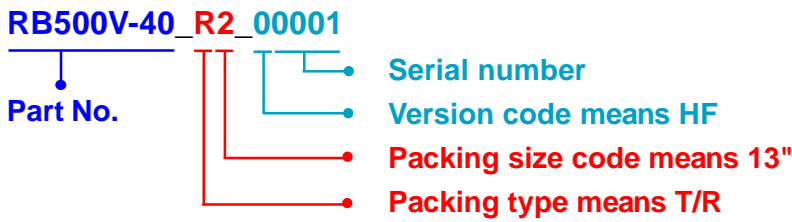


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Part No_packing code_Version

MBR140_AY_00001
 MBR140_AY_10001
 MBR140_B0_00001
 MBR140_B0_10001
 MBR140_R2_00001
 MBR140_R2_10001

For example :



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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