



MBR1H200 / SX1H20 SERIES

ULTRA LOW IR SCHOTTKY BARRIER RECTIFIERS

VOLTAGE 200~250 Volt **CURRENT** 1 Ampere

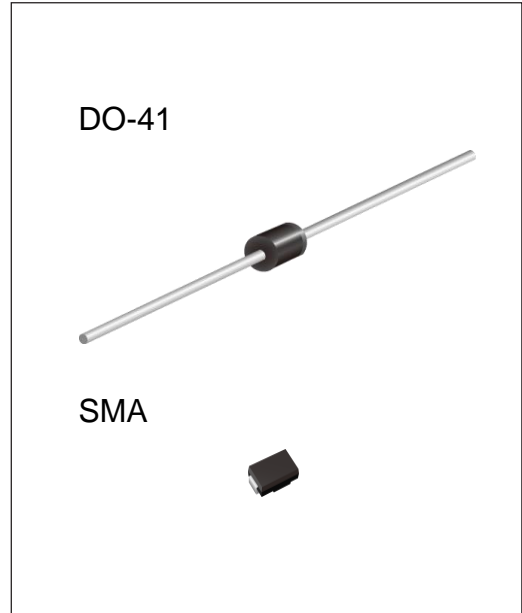
FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O. Flame Retardant Epoxy Molding Compound.
- Low power loss, high efficiency.
- High current capability
- High junction temperature capability
- Lead free in compliance with EU RoHS 2011/65/EU directive
- Green molding compound as per IEC61249 Std. . (Halogen Free) (SMA)

MECHANICAL DATA

- Case: DO-41, SMA package
- Terminals: solder plated, solderable per MIL-STD-750, Method 2026
- DO-41 Weight: 0.012 ounces, 0.34 grams.
- SMA Weight: 0.002 ounces, 0.068 grams.

	200V	250V
DO-41	MBR1H200	MBR1H250
SMA	SX1H20	SX1H25



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

For capacitive load, derate current by 20%

PARAMETER	SYMBOL	200V	250V	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	200	250	V
Maximum RMS Voltage	V_{RMS}	140	175	V
Maximum DC Blocking Voltage	V_{DC}	200	250	V
Maximum Average Forward Current	$I_{F(AV)}$	1		A
Peak Forward Surge Current : 8.3 ms single half sine-wave superimposed on rated load	I_{FSM}	30		A
Maximum Forward Voltage at 1A	V_F	0.9		V
Maximum DC Reverse Current at Rated DC Blocking Voltage	I_R	0.5 1		μ A mA
Typical Thermal Resistance	$R_{\theta JC}$	22 47		°C / W
Operating Junction and Storage Temperature Range	T_J, T_{STG}	-55 to + 175		°C

NOTES : 1. Mounted on a FR4 PCB, single-sided copper, with 100cm² copper pad area

2. The testing condition of the thermal resistance (junction to lead) is based on 10 mm lead length between two 10cm x 10cm copper pad



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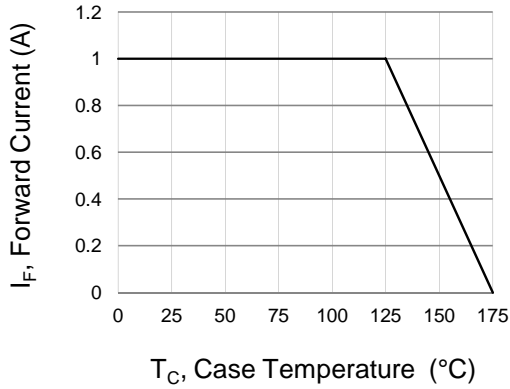


Fig.1 Forward Current Derating Curve

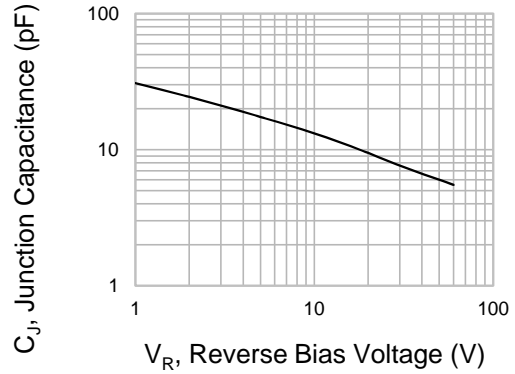


Fig.2 Typical Junction Capacitance

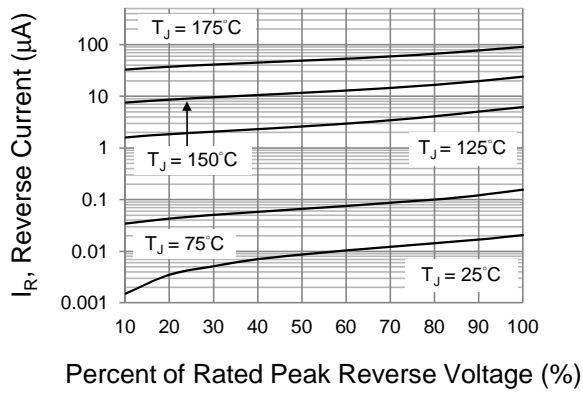


Fig.3 Typical Reverse Characteristics

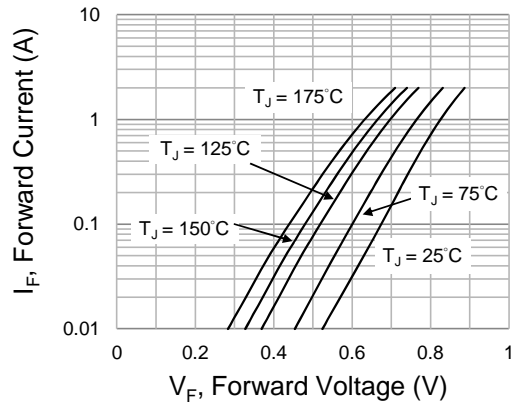


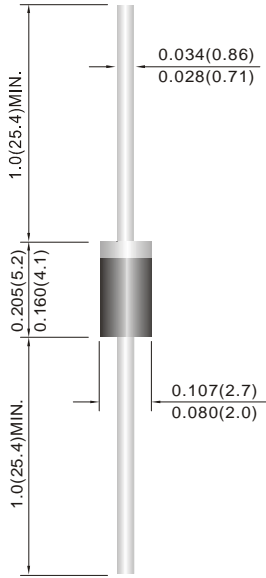
Fig.4 Typical Forward Characteristics



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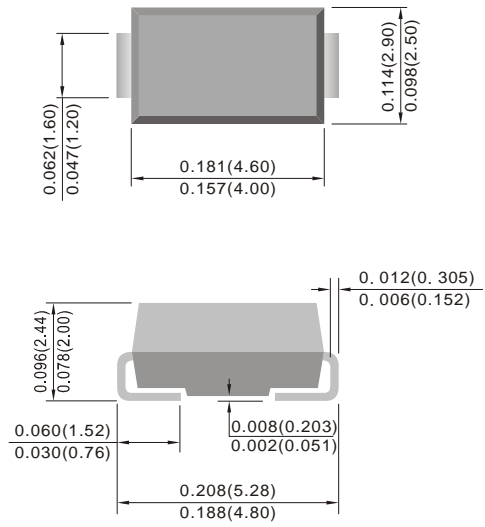
DO-41

Unit : inch(mm)



SMA / DO-214AC

Unit : inch(mm)





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Part No_packing code_Version

MBR1H200_AY_00001
 MBR1H200_AY_10001
 MBR1H200_B0_00001
 MBR1H200_B0_10001
 MBR1H200_R2_00001
 MBR1H200_R2_10001
 SX1H20_R1_00001
 SX1H20_R2_00001

For example :

RB500V-40_R2_00001



Packing type	Packing Code XX			Version Code XXXXX		
	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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