



# MBR3H200SS / SX3H20 SERIES

## ULTRA LOW IR SCHOTTKY BARRIER RECTIFIERS

**VOLTAGE** 200~250 Volt **CURRENT** 3 Ampere

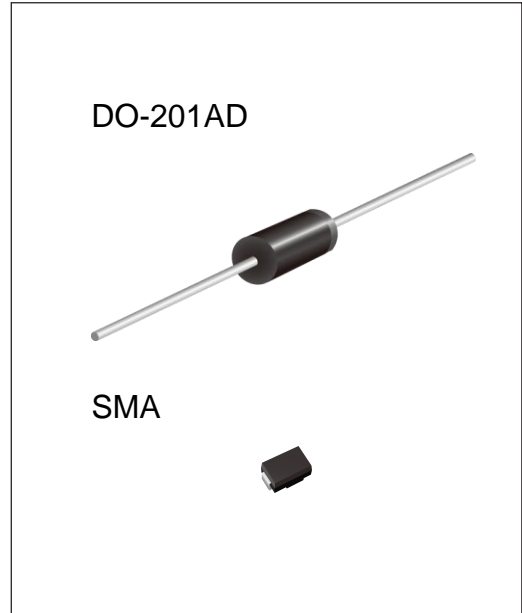
### FEATURES

- 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-201AD, SMA package
- Terminals: solder plated, solderable per MIL-STD-750, Method 2026
- DO-201AD Weight: 0.04 ounces, 1.142 grams.
- SMA Weight: 0.002 ounces, 0.068 grams.

	200V	250V
DO-201AD	MBR3H200SS	MBR3H250SS
SMA	SX3H20	SX3H25



### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

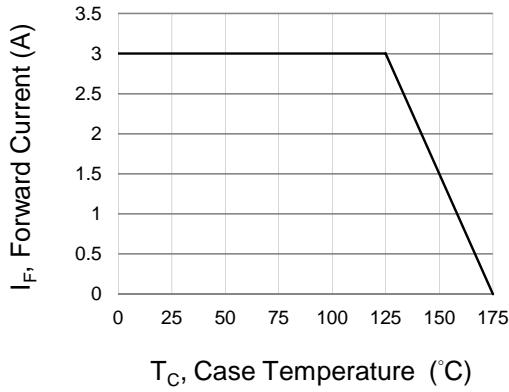
Ratings at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load.  
For capacitive load, derate current by 20%

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	$I_{F(AV)}$	3		A
Peak Forward Surge Current : 8.3 ms single half sine-wave superimposed on rated load	$I_{FSM}$	50		A
Maximum Forward Voltage at 3A	$V_F$	0.9		V
Maximum DC Reverse Current at Rated DC Blocking Voltage	$I_R$	0.5 1		$\mu A$ mA
Typical Thermal Resistance	$R_{\theta JC}$	22 17		°C / W
Operating Junction and Storage Temperature Range	$T_J, T_{STG}$	-55 to + 175		°C

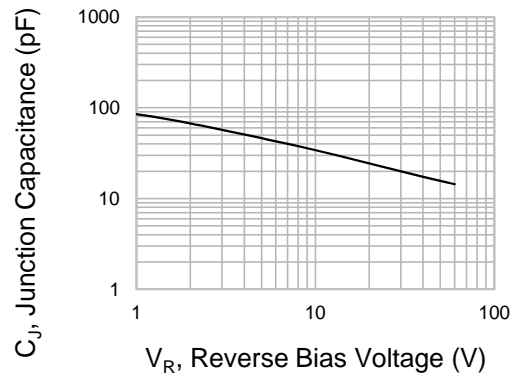
NOTES : 1. Mounted on a FR4 PCB, single-sided copper, with 100cm<sup>2</sup> copper pad area  
2. The testing condition of the thermal resistance (junction to lead) is based on 10 mm lead length between two 10cm x 10cm copper pad



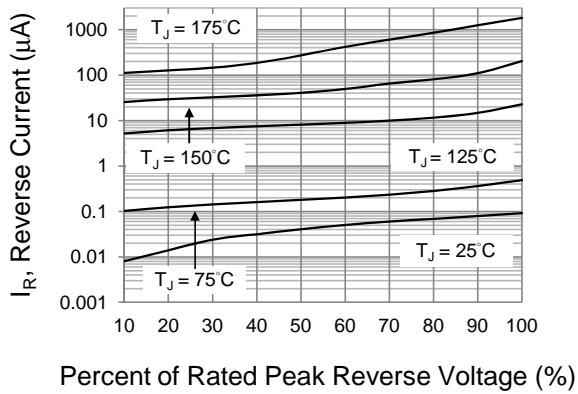
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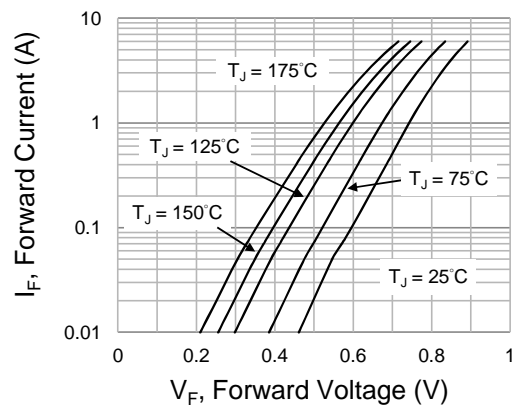
**Fig.1 Forward Current Derating Curve**



**Fig.2 Typical Junction Capacitance**



**Fig.3 Typical Reverse Characteristics**



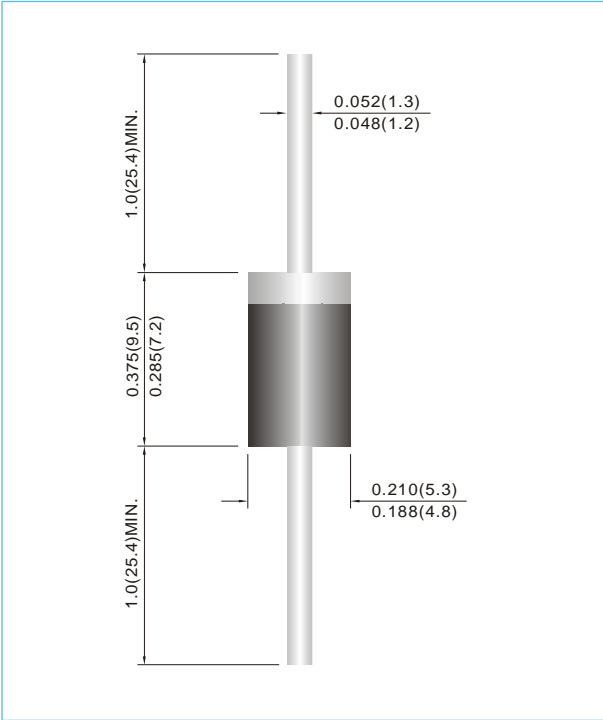
**Fig.4 Typical Forward Characteristics**



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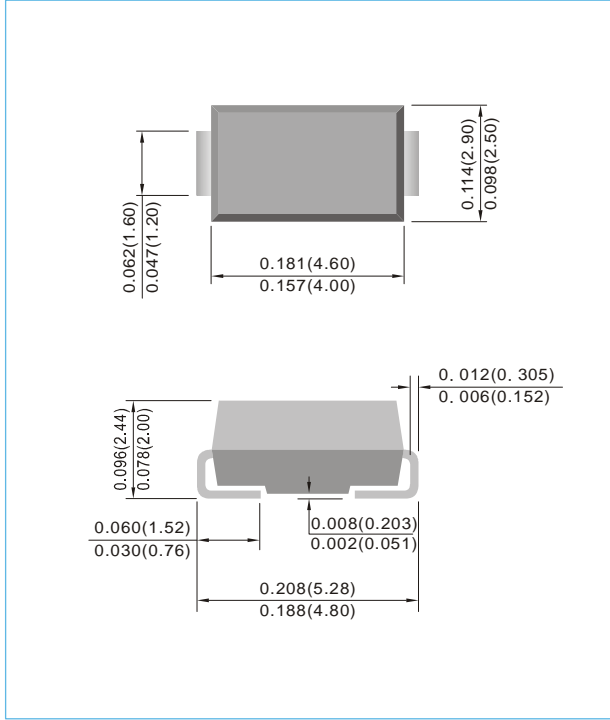
## DO-201AD

Unit : inch(mm)



## SMA / DO-214AC

Unit : inch(mm)





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## Part No\_packing code\_Version

MBR3H200SS\_AY\_00001  
 MBR3H200SS\_AY\_10001  
 MBR3H200SS\_B0\_00001  
 MBR3H200SS\_B0\_10001  
 MBR3H200SS\_R2\_00001  
 MBR3H200SS\_R2\_10001  
 SX3H20\_R1\_00001  
 SX3H20\_R2\_00001

For example :

**RB500V-40\_R2\_00001**



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



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