MBR3H150SS \ SX3H15

ULTRA LOW IR SCHOTTKY BARRIER RECTIFIERS

Voltage	150 V	Current	3 A

DO-201AD

SMA

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: SMA, DO-201AD package
- Terminals: solder plated, solderable per MIL-STD-750,Method 2026
- SMA Weight: 0.0024 ounces, 0.068 grams.
- DO-201AD Weight: 0.0403 ounces, 1.142 grams.
- Marking: Part number

	150V
SMA	SX3H15
DO-201AD	MBR3H150SS

Maximum Ratings And Electrical Characteristics (T_A=25°C unless otherwise noted)

PARAMETER		SYMBOL	150V	UNIT
Maximum repetitive peak reverse voltage		V_{RRM}	150	V
Maximum rms voltage		V_{RMS}	105	V
Maximum dc blocking voltage		V_R	150	V
Maximum average forward rectified current		$I_{F(AV)}$	3	A
Peak forward surge current : 8.3ms single half sine-wave superimposed on rated load		I_{FSM}	80	A
Maximum forward voltage at 3A		V_F	0.85	V
Maximum dc reverse current	T_J =25°C	I_R	0.5	μA
at rated dc blocking voltage	T_J =125°C		1	mA
Typical thermal resistance	SMA(Note 1)	$R_{\theta JC}$	22	°C/W
	DO-201AD(Note 2)		17	
Operating junction temperature range		T_J	-55 to +175	°C
Storage temperature range		T_{STG}	-55 to +175	°C

Note : 1. Mounted on a FR4 PCB, single-sided copper, with 100cm^2 copper pad area

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

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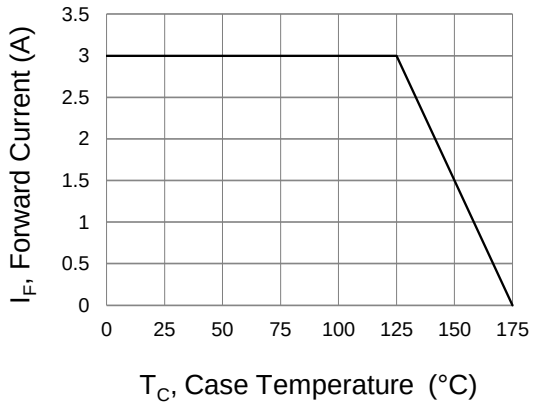

Fig.1 Forward Current Derating Curve

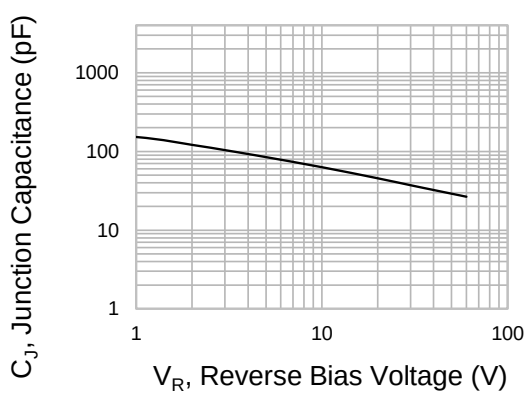

Fig.2 Typical Junction Capacitance

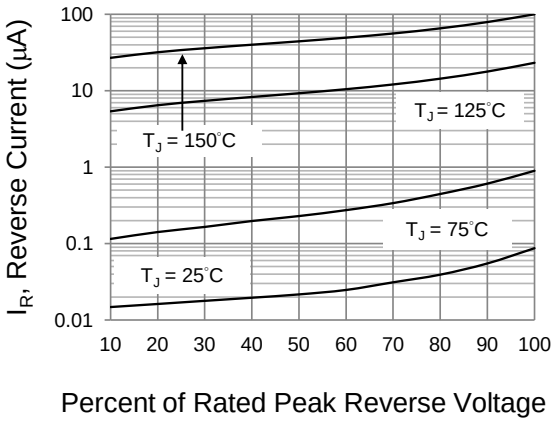

Fig.3 Typical Reverse Characteristics

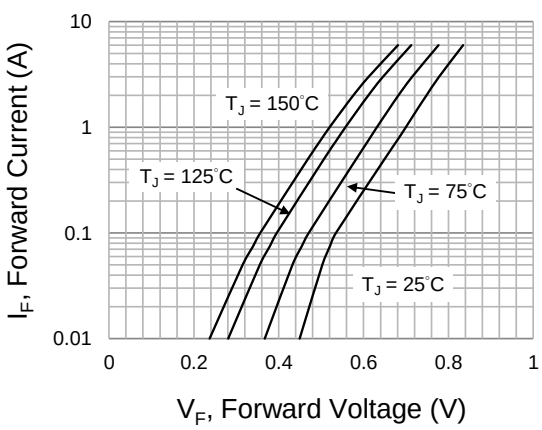

Fig.4 Typical Forward Characteristics

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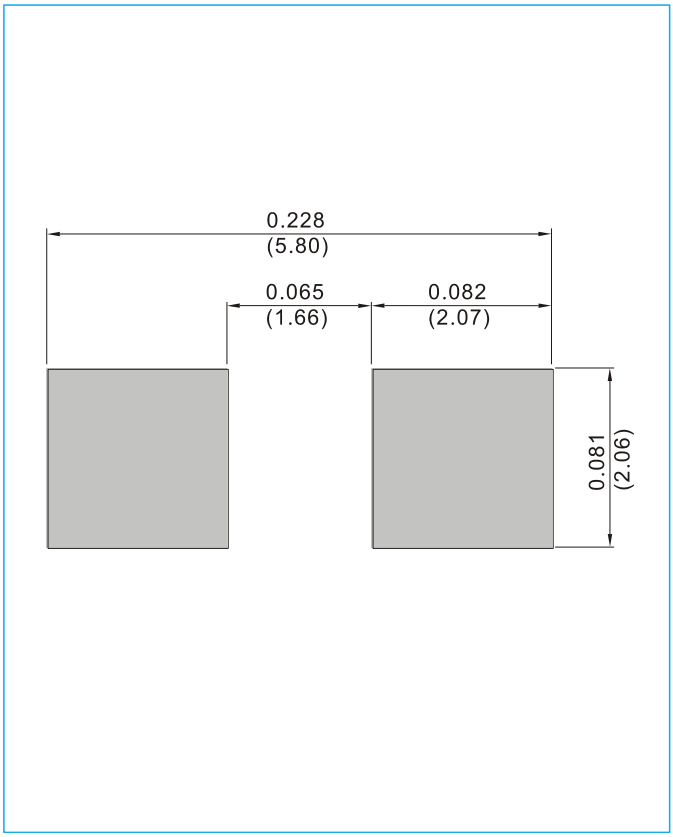
MOUNTING PAD LAYOUT

SMA / DO-214AC Unit：inch(mm)



ORDER INFORMATION

- Packing information
  T/R – 7.5K per 13" plastic Reel
  T/R – 1.8K per 7" plastic Reel

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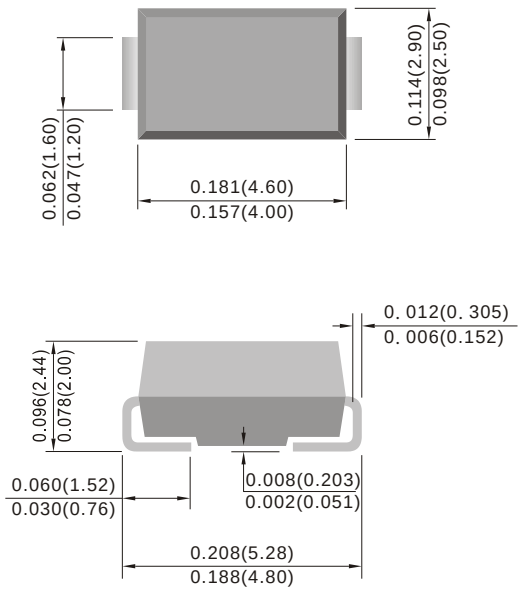
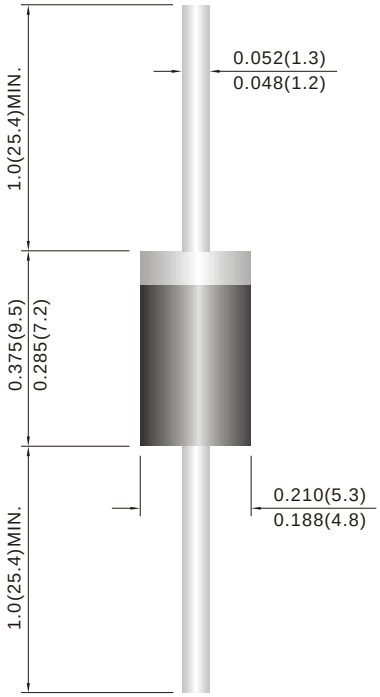
SMA / DO-214AC

Unit : inch(mm)



DO-201AD

Unit : inch(mm)



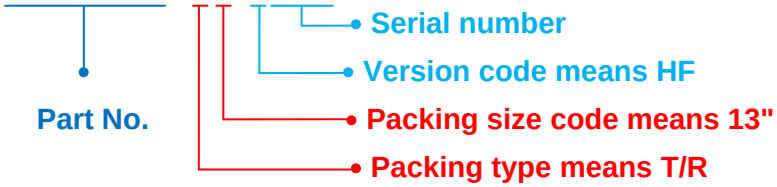
MBR3H150SS \ SX3H15

Part No_packing code_Version

SX3H15_R1_00001
SX3H15_R2_00001
MBR3H150SS_AY_00001
MBR3H150SS_AY_10001
MBR3H150SS_B0_00001
MBR3H150SS_B0_10001
MBR3H150SS_R2_00001
MBR3H150SS_R2_10001

For example :

RB500V-40_R2_00001



Packing Code XX				Version Code XXXXX		
Packing type	1st Code	Packing size code	2nd Code	HF or RoHS	1st Code	2nd~5th 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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