



# SX32 SERIES

## SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

**VOLTAGE** 20 to 60 Volt **CURRENT** 3 Ampere

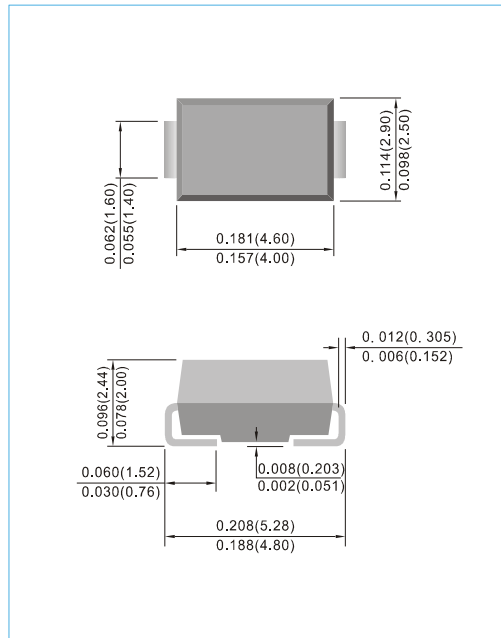
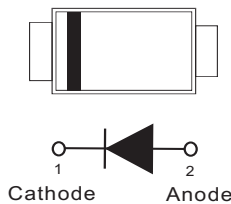
**SMA / DO-214AC** Unit : inch(mm)

### FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O
- For surface mounted applications in order to optimize board space
- Low power loss, high efficiency
- High surge capacity
- Lead free in compliance with EU RoHS 2.0
- Green molding compound as per IEC 61249 standard

### MECHANICAL DATA

- Case : JEDEC DO-214AC molded plastic
- Terminals : Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity : Color band denotes cathode end
- Standard packaging : 12mm tape (EIA-481)
- Weight : 0.0023 ounces, 0.0679 grams



## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.  
Resistive or inductive load.

PARAMETER	SYMBOL	SX32	SX33	SX34	SX35	SX36	UNITS
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	20	30	40	50	60	V
Maximum RMS Voltage	$V_{RMS}$	14	21	28	35	42	V
Maximum DC Blocking Voltage	$V_{DC}$	20	30	40	50	60	V
Maximum Average Forward 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 (Note 1)	$V_F$	0.5			0.75		V
Maximum DC Reverse Current at Rated DC Blocking Voltage $T_J=25^{\circ}C$ $T_J=100^{\circ}C$	$I_R$	0.2 20			0.1 20		mA
Typical Thermal Resistance (Note 2) (Note 3)	$R_{\theta JL}$ $R_{\theta JA}$	25 150					$^{\circ}C / W$
Operating Junction and Storage Temperature Range	$T_J, T_{STG}$	-55 to +125		-55 to +150			$^{\circ}C$

### NOTES :

1. Pulse Test with PW =300μsec, 1% Duty Cycle.
2. Mounted on a FR4 PCB, single-sided copper, with 100cm<sup>2</sup> copper pad area.
3. Mounted on a FR4 PCB, single-sided copper, mini pad.



# SX32 SERIES

## RATING AND CHARACTERISTIC CURVES

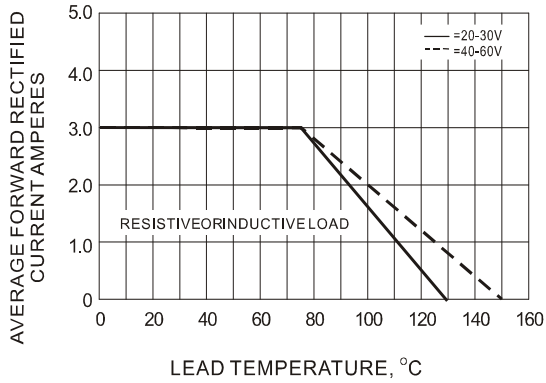


Fig.1- FORWARD CURRENT DERATING CURVE

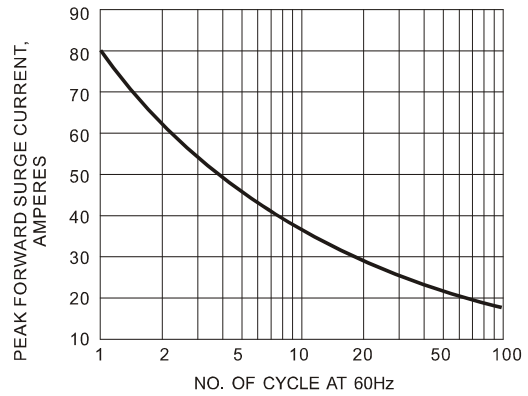


Fig.2- MAXIMUM NON - REPETITIVE SURGE CURRENT

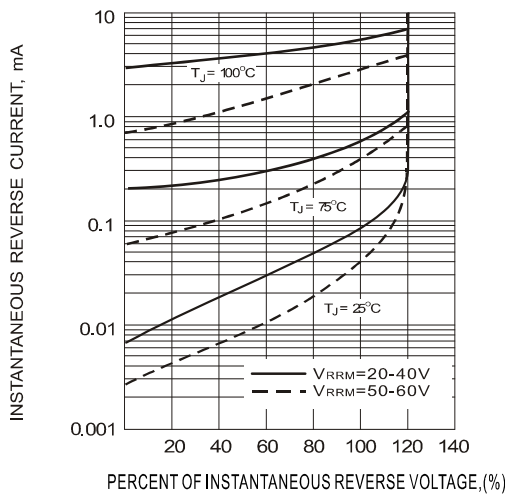


Fig.3- TYPICAL REVERSE CHARACTERISTICS

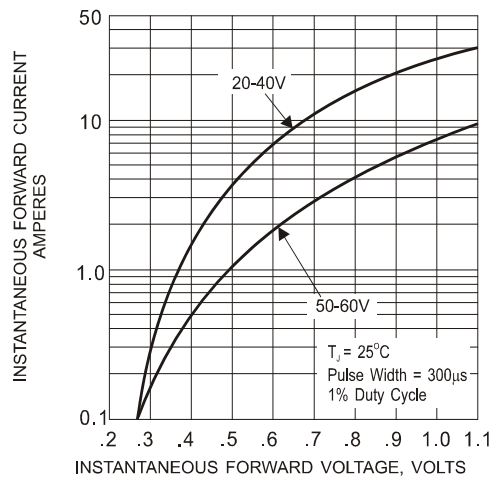


Fig.4- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

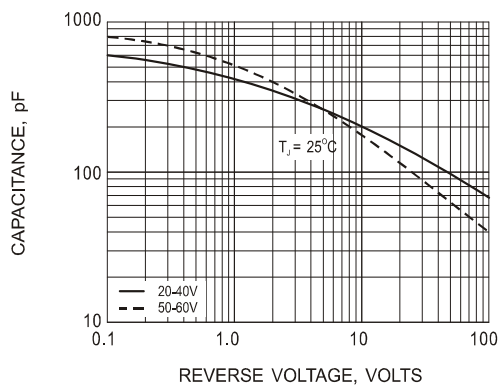


Fig.5- TYPICAL JUNCTION CAPACITANCE

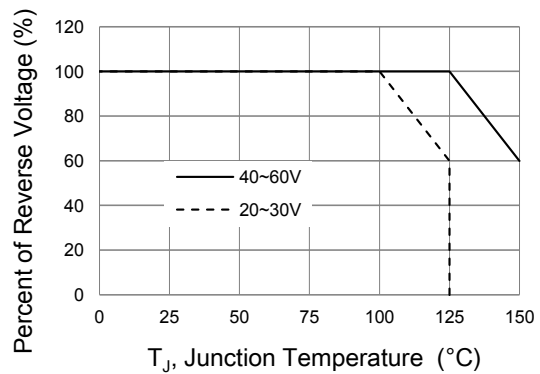


Fig.6- OPERATING TEMPERATURE DERATING CURVE

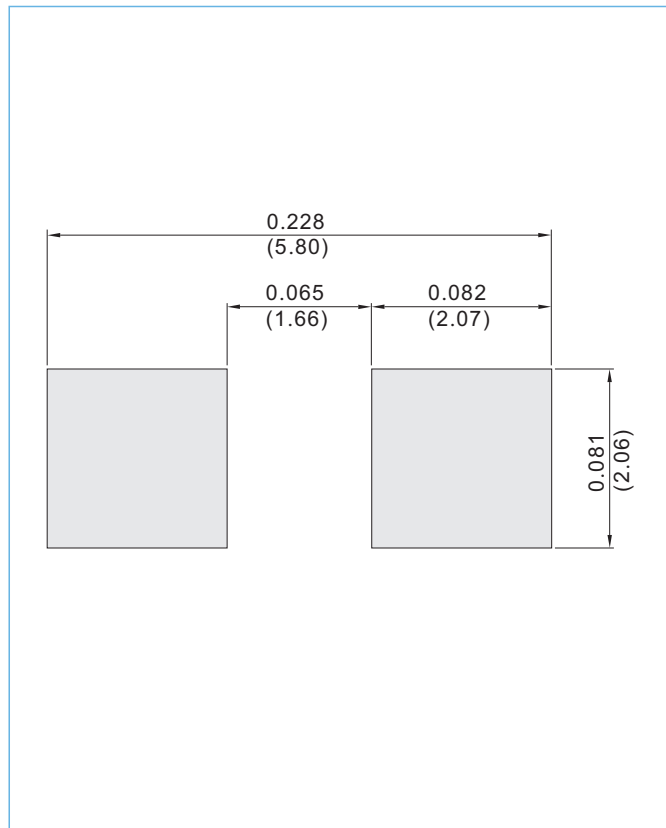


## SX32 SERIES

### 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



## SX32 SERIES

### Part No\_packing code\_Version

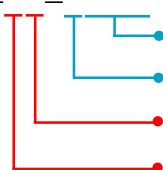
SX32\_R1\_00001

SX32\_R2\_00001

For example :

**RB500V-40\_R2\_00001**

Part No.



Serial number

Version code means HF

Packing size code means 13"

Packing type means T/R

Packing Code <b>XX</b>				Version Code <b>XXXXX</b>		
Packing type	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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