

# SX32F SERIES

## SCHOTTKY BARRIER RECTIFIER

**VOLTAGE** 20-60 Volts **CURRENT** 3 Amperes

### FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O
- For surface mounted applications
- Low profile package
- Built-in strain relief
- Metal to silicon rectifier. majority carrier conduction
- Low power loss,high efficiency
- High surge capacity
- For use in low voltage high frequency inverters, free wheeling, and polarity protection applications
- Lead free in comply with EU RoHS 2002/95/EC directives.
- Green molding compound as per IEC61249 Std. . (Halogen Free)

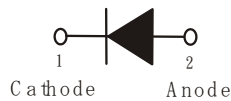
### MECHANICAL DATA

Case : SMAF, Plastic

Terminals : Solderable per MIL-STD-750, Method 2026

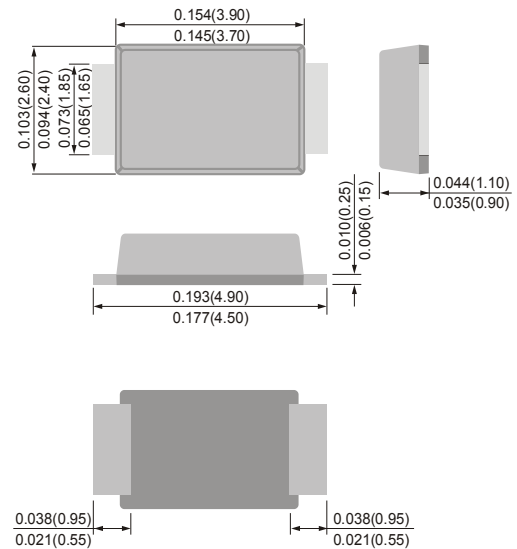
Polarity: Color band denotes cathode end

Weight: 0.0011 ounces, 0.0328 grams



### SMAF

Unit : inch(mm)



### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T<sub>A</sub>=25°C unless otherwise noted)

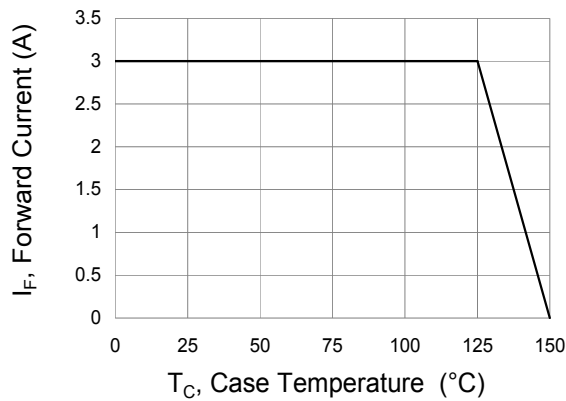
PARAMETER	SYMBOL	SX32F	SX33F	SX34F	SX35F	SX36F	UNITS
Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	20	30	40	50	60	V
RMS Voltage	V <sub>RMS</sub>	14	21	28	35	42	V
DC Blocking Voltage	V <sub>R</sub>	20	30	40	50	60	V
Average Forward Current	I <sub>F(AV)</sub>	3.0					A
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load(JEDEC method)	I <sub>FSM</sub>	80					A
Forward Voltage at 3.0A	V <sub>F</sub>	0.5			0.75		V
DC Reverse Current at Rated DC Blocking Voltage T <sub>j</sub> =25°C	I <sub>R</sub>	100					μA
Typical Junction capacitance V <sub>R</sub> =0V,1MHz	C <sub>J</sub>	485			150		pF
Typical Thermal Resistance ,Junction to Lead (Note 1) Junction to Ambient (Note 2)	R <sub>θJL</sub> R <sub>θJA</sub>	20 150					°C / W
Operating Junction Temperature and Storage Temperature Range	T <sub>J</sub> ,T <sub>STG</sub>	-55 to +150					°C

### NOTES :

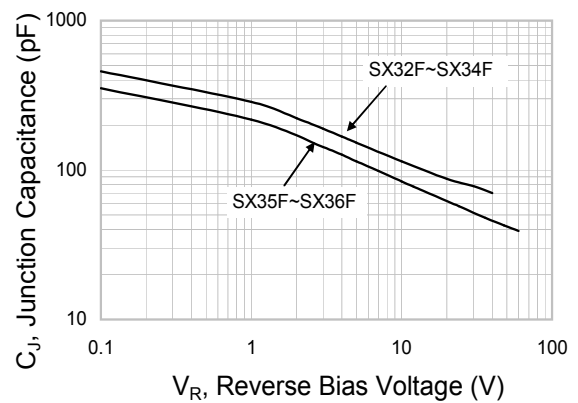
- 1.Mounted on an FR4 PCB, single-sided copper, with 48cm<sup>2</sup>copper pad area.
- 2.Mounted on an FR4 PCB, single-sided copper, mini pad.

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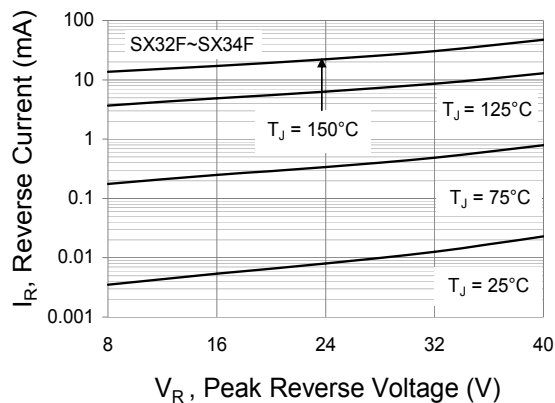
## RATING AND CHARACTERISTIC CURVES



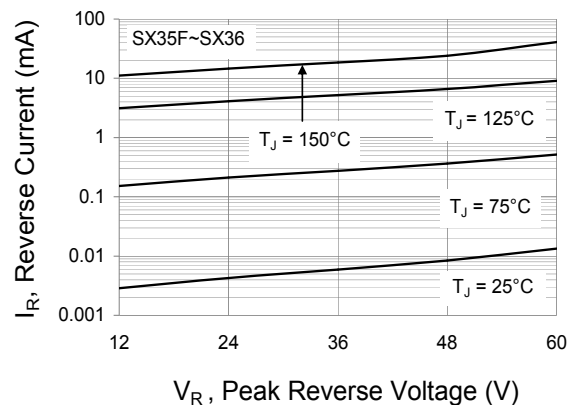
**Fig.1 Forward Current Derating Curve**



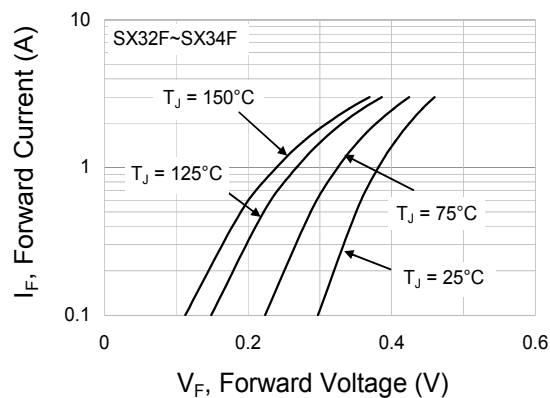
**Fig.2 Typical Junction Capacitance**



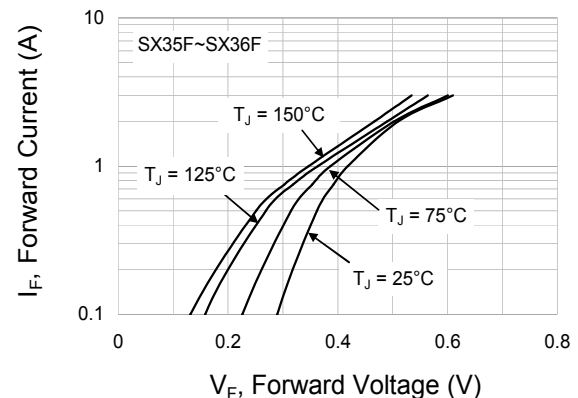
**Fig.3 Typical Reverse Characteristics**



**Fig.4 Typical Reverse Characteristics**



**Fig.5 Typical Forward Characteristics**



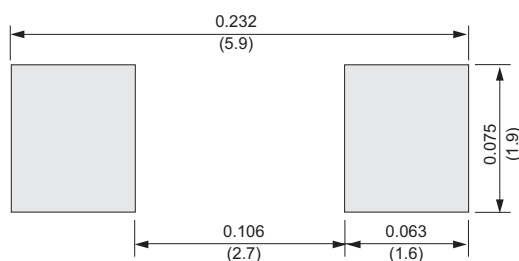
**Fig.6 Typical Forward Characteristics**

# SX32F SERIES

## MOUNTING PAD LAYOUT

SMAF

Unit:inch(mm)



## ORDER INFORMATION

- Packing information
  - T/R - 10K per 13" plastic Reel
  - T/R - 3K per 7" plastic Reel

## LEGAL STATEMENT

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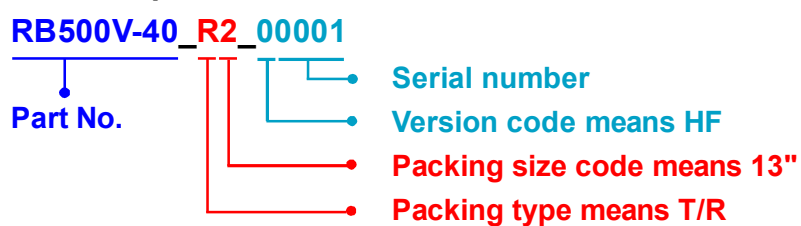
## SX32F SERIES

### Part No\_packing code\_Version

SX32F\_R1\_00001

SX32F\_R2\_00001

For example :



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
T/B	<b>A</b>	N/A	<b>0</b>	HF	<b>0</b>	serial number
T/R	<b>R</b>	7"	<b>1</b>	RoHS	<b>1</b>	serial number
B/P	<b>B</b>	13"	<b>2</b>			
T/P	<b>T</b>	26mm	<b>X</b>			
TRR	<b>S</b>	52mm	<b>Y</b>			
TRL	<b>L</b>	PBCU	<b>U</b>			
FORMING	<b>F</b>	PBCD	<b>D</b>			



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