



### SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

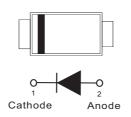
VOLTAGE 20 to 60 Volt CURRENT 3 Ampere

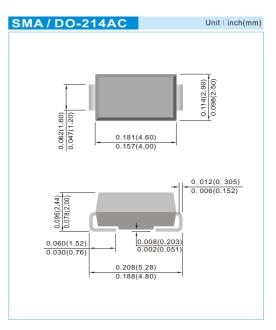
### **FEATURES**

- 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 2011/65/EU directive
- Green molding compound as per IEC61249 Std. . (Halogen Free)

#### **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 <sub>RRM</sub>	20	30	40	50	60	V
Maximum RMS Voltage		V <sub>RMS</sub>	14	21	28	35	42	V
Maximum DC Blocking Voltage		V <sub>DC</sub>	20	30	40	50	60	V
Maximum Average Forward Current			3					А
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load		I <sub>FSM</sub>	80					А
Maximum Forward Voltage at 3A (Note 1)		V <sub>F</sub>	0.5			0.75		V
Maximum DC Reverse Current at Rated DC Blocking Voltage	T <sub>J</sub> =25°C T <sub>J</sub> =100°C	I <sub>R</sub>	0.2 20		0.1 20		mA	
Typical Thermal Resistance	(Note 2) (Note 3)	$R_{_{\theta JA}}$	25 150				°C / W	
Operating Junction and Storage Temperature Range		$T_J, T_{STG}$	-55 to +125 -55 to +150			°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.





#### **RATING AND CHARACTERISTIC CURVES**

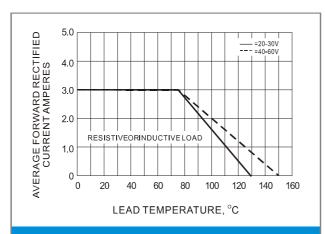


Fig.1- FORWARD CURRENT DERATING CURVE

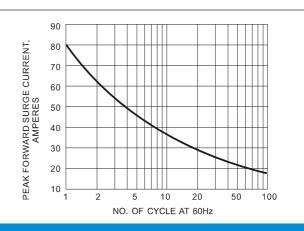


Fig.2- MAXIMUM NON - REPETITIVE SURGE CURRENT

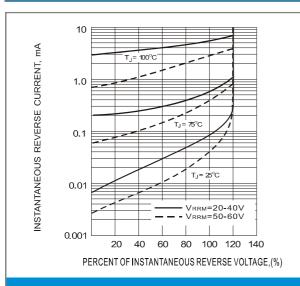


Fig.3- TYPICAL REVERSE CHARACTERISTICS

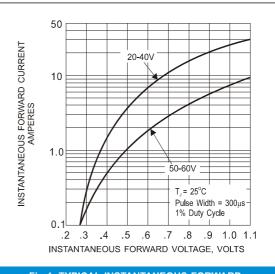


Fig.4- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

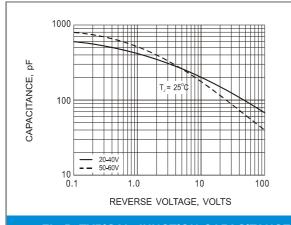


Fig.5- TYPICAL JUNCTION CAPACITANCE

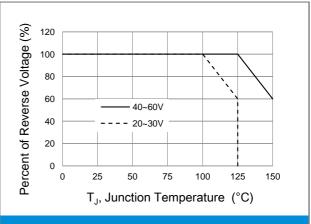
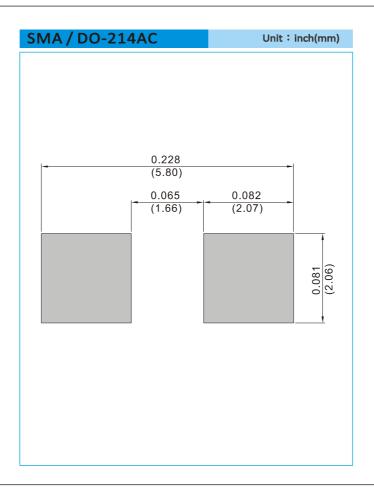


Fig.6- OPERATING TEMPERATURE DERATING CURVE





### **MOUNTING PAD LAYOUT**



### **ORDER INFORMATION**

• Packing information

T/R - 7.5K per 13" plastic Reel

T/R - 1.8K per 7" plastic Reel





## Part No\_packing code\_Version

SX32\_R1\_00001 SX32\_R2\_00001

# For example:



Packing Code XX				Version Code XXXXX			
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)	Α	N/A	0	HF	0	serial number	
Tape and Reel (T/R)	R	7"	1	RoHS	1	serial number	
Bulk Packing (B/P)	В	13"	2				
Tube Packing (T/P)	Т	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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