



### SURFACE MOUNT RECTIFIER

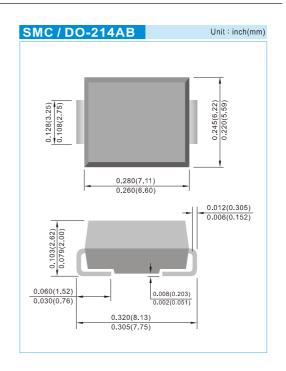
**VOLTAGE** 50~1000 Volt CURRENT 5 Ampere

#### **FEATURES**

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O
- · For surface mounted applications
- Easy pick and place
- Glass passivated iunction
- Lead free in compliance with EU RoHS 2011/65/EU directive
- Green molding compound as per IEC61249 Std. . (Halogen Free)

### **MECHANICAL DATA**

- Case: JEDEC SMC / DO-214AB molded plastic
- Terminals: Solder plated, solderable per MIL-STD-750,Method 2026
- Polarity: Color band denotes cathode end
- Standard packaging: 16mm tape (EIA-481)
- Weight: 0.0082 ounces, 0.23 grams



### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

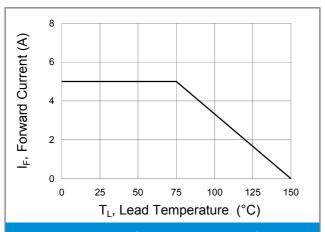
PARAMETER	SYMBOL	S5A	S5B	S5D	S5G	S5J	S5K	S5M	UNITS
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V <sub>RMS</sub>	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current	I <sub>F(AV)</sub>	5						А	
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load	I <sub>FSM</sub>	275					А		
Maximum Forward Voltage at 5.0A	V <sub>F</sub>	1.1				V			
Maximum DC Reverse Current at Rated DC Blocking $T_{_J}$ =25°C Voltage $T_{_J}$ =125°C	I <sub>R</sub>	10 250				μА			
Typical Junction Capacitance (NOTES 1)	C¹	80			46	pF			
Typical Junction Resistance (NOTES 2)	$R_{_{ heta JL}}$	75 10				°C / W			
Operating Junction and Storage Temperature Range	T <sub>J</sub> ,T <sub>STG</sub>	-55 to +150				°C			

#### NOTES:

- 1.Measured at 1 MHZ and applied Vr=4 volts.
- $2.8 \, \text{mm}^2$  (0.013 mm thick) land areas.







**Fig.1 Forward Current Derating Curve** 

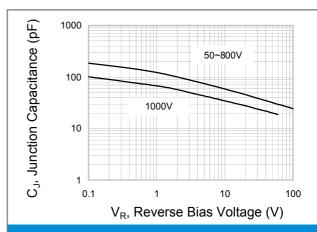


Fig.2 Typical Junction Capacitance

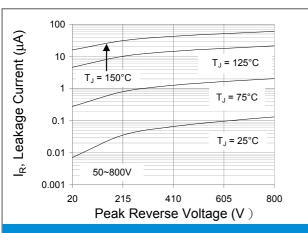


Fig.3 Typical Reverse Characteristics

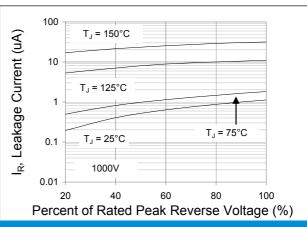
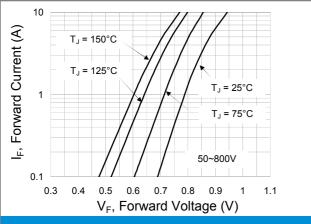
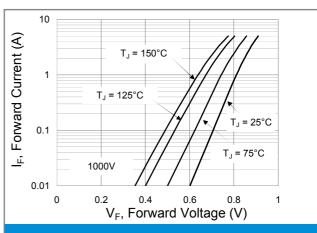


Fig.4 Typical Reverse Characteristics



**Fig.5 Typical Forward Characteristics** 

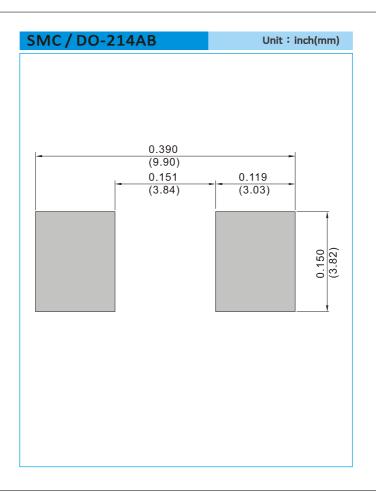


**Fig.6 Typical Forward Characteristics** 





### **MOUNTING PAD LAYOUT**



### **ORDER INFORMATION**

Packing information

T/R - 3K per 13" plastic Reel

T/R - 0.5K per 7" plastic Reel





Part No\_packing code\_Version

S5A\_R1\_00001 S5A\_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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