



### SURFACE MOUNT RECTIFIER

VOLTAGE 50~1000 Volt CURRENT 5 Ampere

#### **FEATURES**

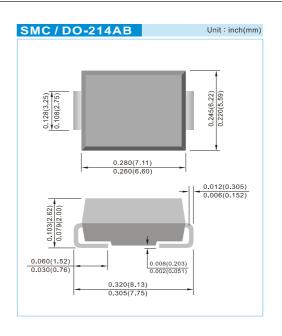
- Plastic package has Underwriters Laboratory Flammability Classification 94V-O
- For surface mounted applications in order to optimize board space
- · Easy pick and place
- · Glass passivated junction
- Lead free in compliance with EU RoHS 2.0
- Green molding compound as per IEC 61249 standard
- · AEC-Q101 qualified

### **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%.

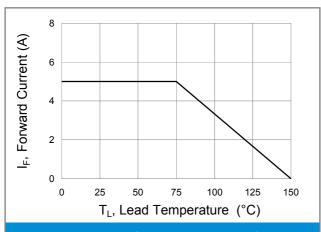
SYMBOL	S5A-AU	S5B-AU	S5D-AU	S5G-AU	S5J-AU	S5M-AU	UNITS
$V_{_{\mathrm{RRM}}}$	50	100	200	400	600	1000	٧
V <sub>RMS</sub>	35	70	140	280	420	700	V
V <sub>DC</sub>	50	100	200	400	600	1000	٧
I <sub>F(AV)</sub>	5						А
I <sub>FSM</sub>	275						А
I²t	313					A <sup>2</sup> sec	
V <sub>F</sub>	1.1					V	
C Reverse Current at Rated DC Blocking $T_j=25^{\circ}C$ $T_j=125^{\circ}C$ $T_j=125^{\circ}C$ $T_R$ $T_R$						μA	
CJ	80 46				46	pF	
R <sub>eja</sub> R <sub>ejl</sub>	75 10				•	°C / W	
$T_J,T_STG$	-55 to +150				°C		
	V <sub>RMM</sub> V <sub>RMS</sub> V <sub>DC</sub> I <sub>F(AV)</sub> I <sub>FSM</sub> I2t V <sub>F</sub> I <sub>R</sub> C <sub>J</sub> R <sub>BJA</sub> R <sub>BJL</sub>	V <sub>RRM</sub> 50  V <sub>RMS</sub> 35  V <sub>DC</sub> 50  I <sub>F(AV)</sub> I <sub>FSM</sub> I <sup>2</sup> t  V <sub>F</sub> I <sub>R</sub> C <sub>J</sub> R <sub>BJA</sub> R <sub>BJL</sub>	V <sub>RRM</sub> 50 100  V <sub>RMS</sub> 35 70  V <sub>DC</sub> 50 100  I <sub>F(AV)</sub> I <sub>FSM</sub> I <sup>2</sup> t  V <sub>F</sub> I <sub>R</sub> C <sub>J</sub> R <sub>BJA</sub> R <sub>BJL</sub>	V <sub>RRM</sub> 50         100         200           V <sub>RMS</sub> 35         70         140           V <sub>DC</sub> 50         100         200           I <sub>F(AV)</sub> 2         2           12t         3         3           V <sub>F</sub> 1         1           I <sub>R</sub> 2         2           C <sub>J</sub> 8         6           R <sub>BJA</sub> R <sub>BJL</sub> 7         7	V <sub>RRM</sub> 50         100         200         400           V <sub>RMS</sub> 35         70         140         280           V <sub>DC</sub> 50         100         200         400           I <sub>FAV</sub> 5         275           I <sup>2</sup> t         313         313           V <sub>F</sub> 1.1         10           I <sub>R</sub> 250         80           R <sub>BJA</sub> R <sub>BJA</sub> R <sub>BJL</sub> 75 10	V <sub>RRM</sub> 50       100       200       400       600         V <sub>RMS</sub> 35       70       140       280       420         V <sub>DC</sub> 50       100       200       400       600         I <sub>FSM</sub> 275         I <sup>2</sup> t       313         V <sub>F</sub> 1.1         I <sub>R</sub> 10         250         C <sub>J</sub> 80         R <sub>SJA</sub> R <sub>SJL</sub> 75 10	V <sub>RRM</sub> 50         100         200         400         600         1000           V <sub>RMS</sub> 35         70         140         280         420         700           V <sub>DC</sub> 50         100         200         400         600         1000           I <sub>FSM</sub> 275           I <sup>2</sup> t         313           V <sub>F</sub> 1.1           I <sub>R</sub> 10           250           C <sub>J</sub> 80         46           R <sub>BJA</sub> R <sub>BJL</sub> 75 10

#### NOTES

- 1.Measured at 1 MHZ and applied Vr=4 volts.
- 2.8mm<sup>2</sup> (0.013mm thick)land areas.







**Fig.1 Forward Current Derating Curve** 

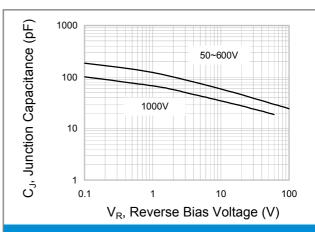


Fig.2 Typical Junction Capacitance

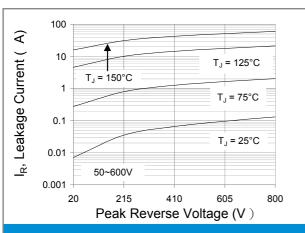


Fig.3 Typical Reverse Characteristics

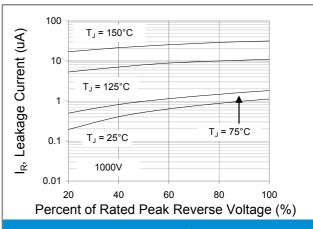
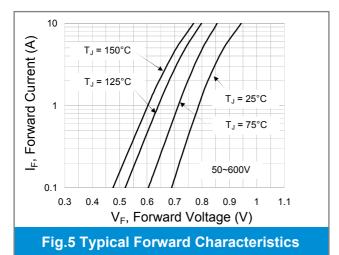
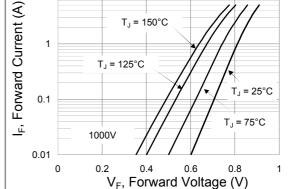


Fig.4 Typical Reverse Characteristics





 $T_J = 150$ °C

**Fig.6 Typical Forward Characteristics** 

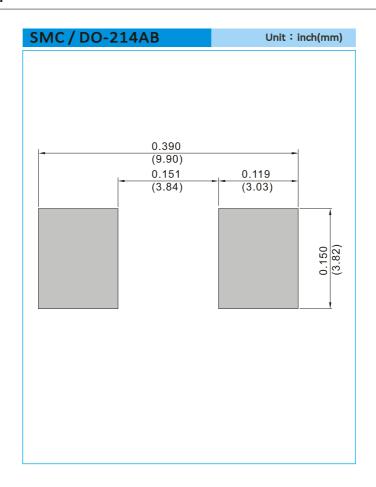
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### **MOUNTING PAD LAYOUT**



### **ORDER INFORMATION**

· Packing information

T/R - 3K per 13" plastic Reel

T/R - 0.8K per 7" plastic Reel





Part No\_packing code\_Version

S5A-AU\_R1\_000A1 S5A-AU\_R2\_000A1

## 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	ode 2 <sup>nd</sup> ~5 <sup>th</sup> 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)	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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