



# S3DA SERIES

## SURFACE GENERAL PURPOSE RECTIFIER

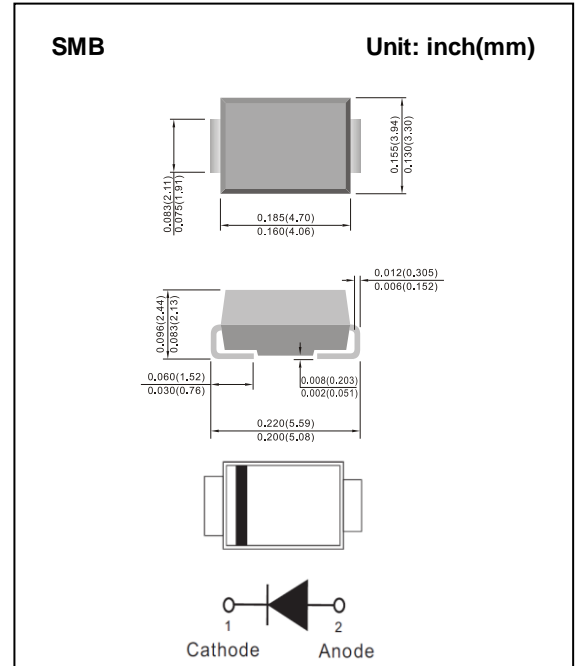
**Voltage** 200~1000 V **Current** 3 A

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

### Mechanical Data

- Case: SMB package
- Terminals: solder plated, solderable per MIL-STD-750, Method 2026
- Weight: 0.0032 ounces, 0.092 grams



### Maximum Ratings And Electrical Characteristics (T<sub>A</sub>=25<sup>o</sup>C unless otherwise noted)

PARAMETER	SYMBOL	S3DA	S3GA	S3JA	S3KA	S3MA	UNIT	
Maximum repetitive peak reverse voltage	V <sub>RRM</sub>	200	400	600	800	1000	V	
Maximum rms voltage	V <sub>RMS</sub>	140	280	420	560	700	V	
Maximum dc blocking voltage	V <sub>R</sub>	200	400	600	800	1000	V	
Maximum average forward rectified current	I <sub>F(AV)</sub>	3					A	
Peak forward surge current : 8.3ms single half sine-wave superimposed on rated load	I <sub>FSM</sub>	200					A	
Maximum forward voltage at 3A	V <sub>F</sub>	1.1					V	
Maximum dc reverse current at rated dc blocking voltage	I <sub>R</sub>	1					μA	
Typical junction capacitance Measured at 1MHz and applied V <sub>R</sub> =4V	C <sub>J</sub>	35					pF	
Typical thermal resistance	(Note 1)	R <sub>θJA</sub>	135					°C/W
	(Note 2)	R <sub>θJC</sub>	11					
	(Note 2)	R <sub>θJL</sub>	14					
Operating junction temperature range	T <sub>J</sub>	-55 to +150					°C	
Storage temperature range	T <sub>STG</sub>	-55 to +150					°C	

Note : 1. Mounted on a FR4 PCB, single-sided copper, mini pad.

2. Mounted on a FR4 PCB, single-sided copper, with 100cm<sup>2</sup> copper pad area



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## TYPICAL CHARACTERISTIC CURVES

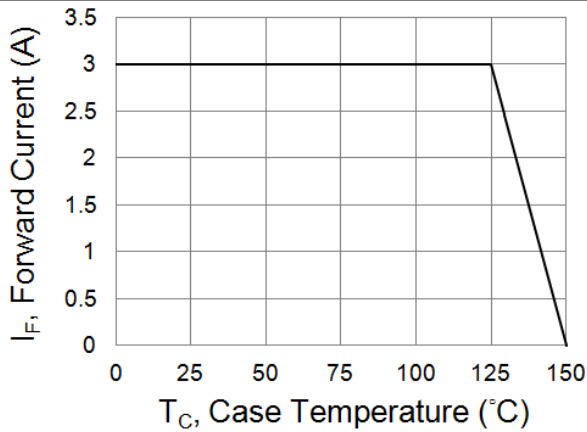


Fig.1 Forward Current Derating Curve

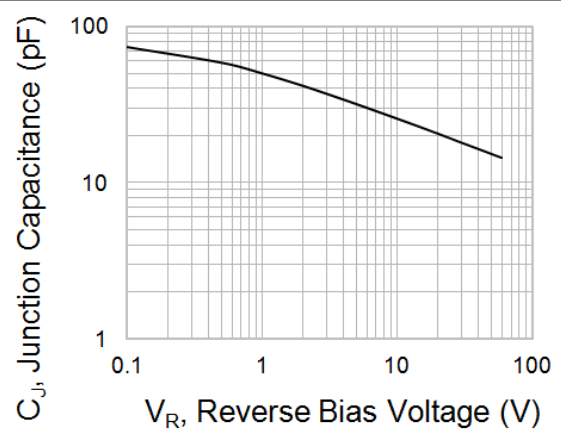


Fig.2 Typical Junction Capacitance

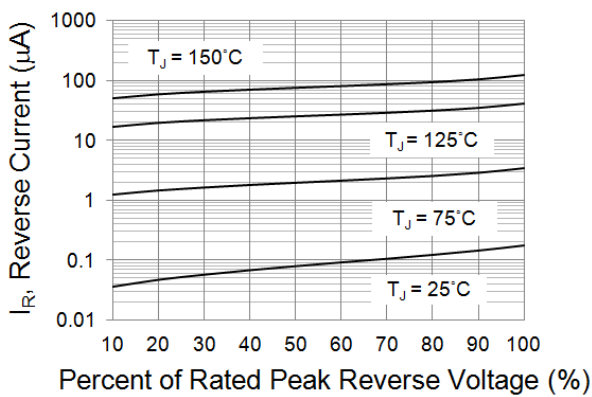


Fig.3 Typical Reverse Characteristics

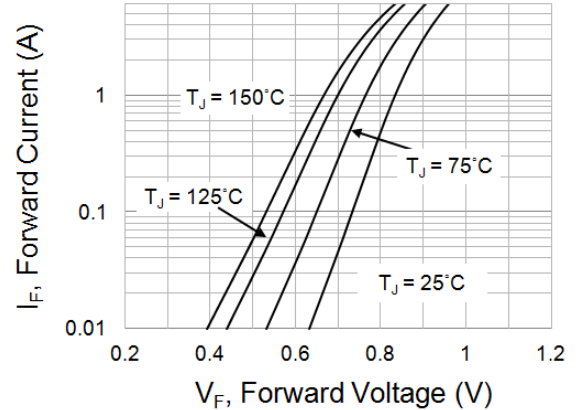


Fig.4 Typical Forward Characteristics

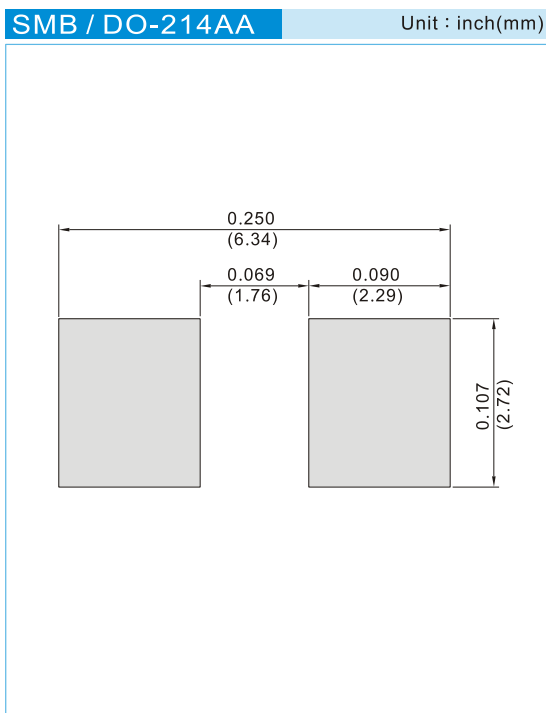


## S3DA SERIES

### Part No Packing Code Version

Part No Packing Code	Package Type	Packing Type	Marking	Version
S3DA_R1_00001	SMB	0.5K pcs / 7" reel	S3DA	Halogen free
S3DA_R2_00001	SMB	3K pcs / 13" reel	S3DA	Halogen free
S3GA_R1_00001	SMB	0.5K pcs / 7" reel	S3GA	Halogen free
S3GA_R2_00001	SMB	3K pcs / 13" reel	S3GA	Halogen free
S3JA_R1_00001	SMB	0.5K pcs / 7" reel	S3JA	Halogen free
S3JA_R2_00001	SMB	3K pcs / 13" reel	S3JA	Halogen free
S3KA_R1_00001	SMB	0.5K pcs / 7" reel	S3KA	Halogen free
S3KA_R2_00001	SMB	3K pcs / 13" reel	S3KA	Halogen free
S3MA_R1_00001	SMB	0.5K pcs / 7" reel	S3MA	Halogen free
S3MA_R2_00001	SMB	3K pcs / 13" reel	S3MA	Halogen free

### Mounting Pad Layout





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