

S5JB ~ S5MB Series

Surface General Purpose Rectifier

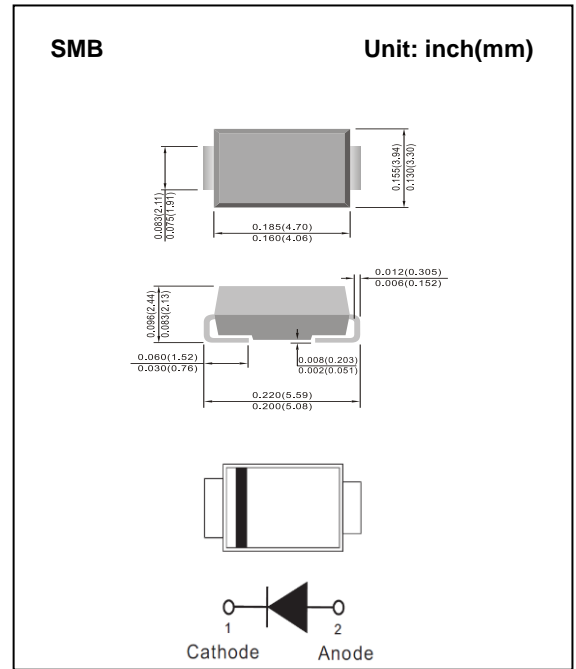
Voltage	600~1000 V	Current	5 A
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Features

- 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

Mechanical Data

- Case : SMB package
- Terminals : Solderable per MIL-STD-750, Method 2026
- Approx. Weight : 0.092 grams



Maximum Ratings And Electrical Characteristics (T_A=25°C unless otherwise noted)

PARAMETER	SYMBOL	S5JB	S5KB	S5MB	UNIT
Maximum repetitive peak reverse voltage	V _{RRM}	600	800	1000	V
Maximum RMS voltage	V _{RMS}	420	560	700	V
Maximum DC blocking voltage	V _R	600	800	1000	V
Maximum average forward rectified current	I _{F(AV)}	5			A
Peak forward surge current : 8.3ms single half sine-wave superimposed on rated load	I _{FSM}	200			A
Maximum forward voltage at 5A	V _F	1.15			V
Maximum dc reverse current at rated dc blocking voltage	I _R	10			μA
Typical junction capacitance Measured at 1MHz and applied V _R =4V	C _J	35			pF
Typical thermal resistance	(Note 1) R _{θJA}	135			°C/W
	(Note 2) R _{θJC}	11			
	(Note 2) R _{θJL}	14			
Operating junction temperature range	T _J	-55 to +150			°C
Storage temperature range	T _{STG}	-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 100cm² copper pad area.

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TYPICAL CHARACTERISTIC CURVES

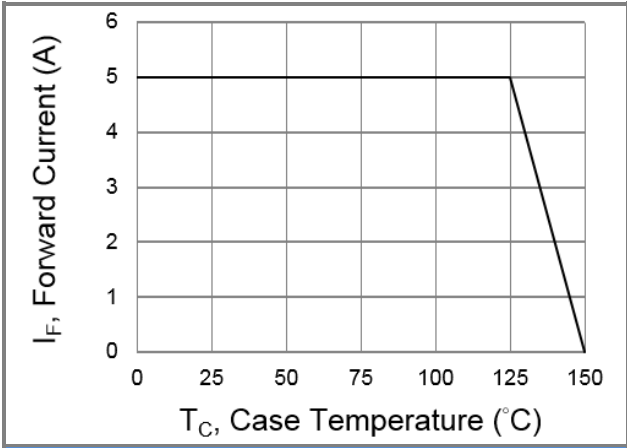


Fig.1 Forward Current Derating Curve

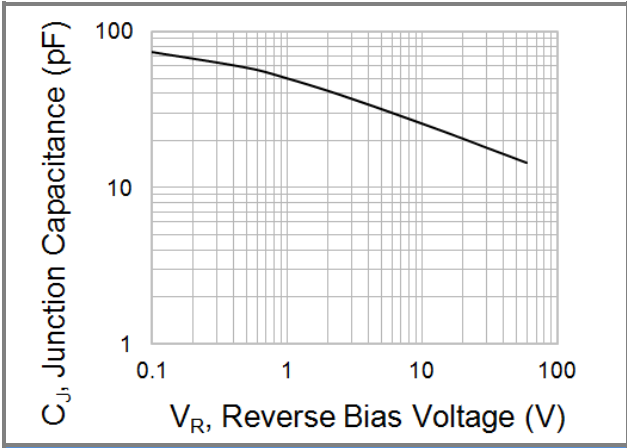


Fig.2 Typical Junction Capacitance

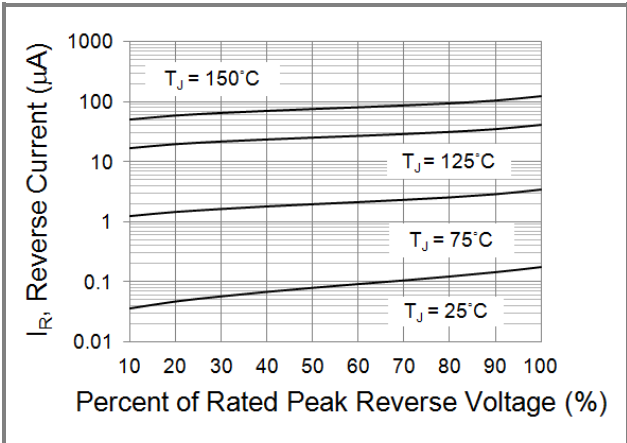


Fig.3 Typical Reverse Characteristics

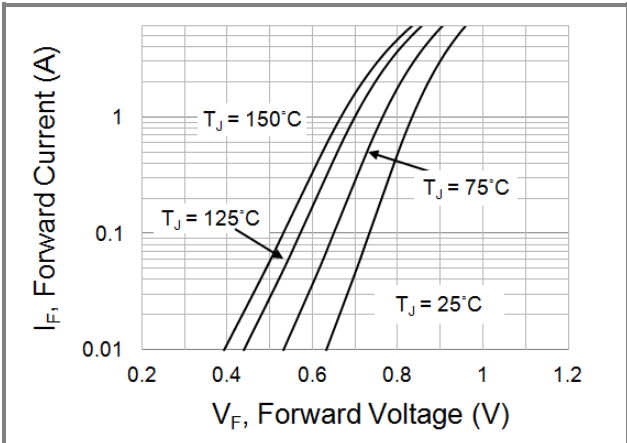


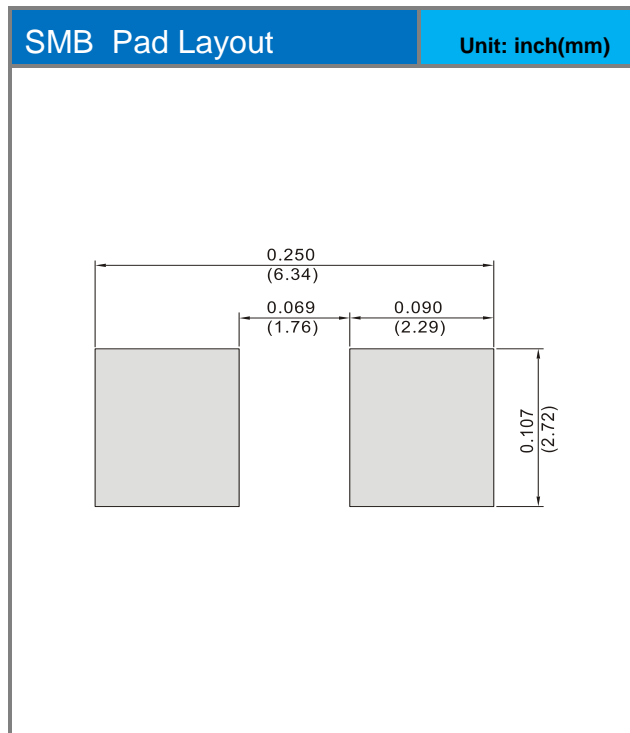
Fig.4 Typical Forward Characteristics

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Product and Packing Information

Part No.	Package Type	Packing Type	Marking
S5JB	SMB	0.8K pcs / 7" reel	S5JB
S5JB	SMB	3K pcs / 13" reel	S5JB
S5KB	SMB	0.8K pcs / 7" reel	S5KB
S5KB	SMB	3K pcs / 13" reel	S5KB
S5MB	SMB	0.8K pcs / 7" reel	S5MB
S5MB	SMB	3K pcs / 13" reel	S5MB

Mounting Pad Layout



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