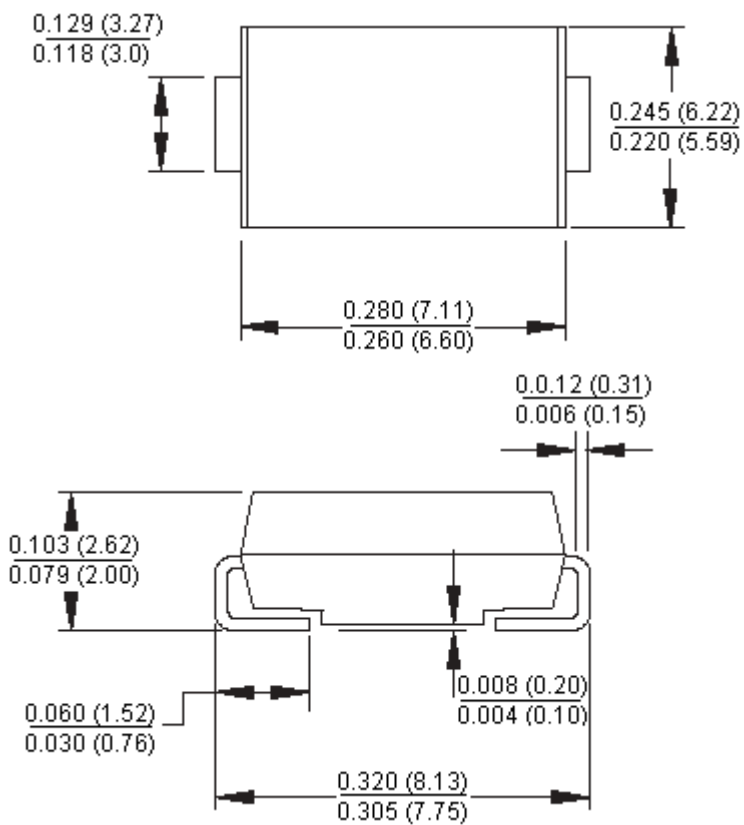




Features:

- For surface mounted application.
- Glass passivated junction chip.
- Low forward voltage drop.
- High current capability.
- Easy pick and place.
- High surge current capability.
- Plastic material.
- High temperature soldering: 260°C/10 seconds at terminals.

SMC/DO-214AB



Dimensions : Inches (Millimetres)

Mechanical Data:

Cases	: Moulded plastic.
Terminals	: Solder plated.
Polarity	: Indicated by cathode band.
Packaging	: 16mm tape per EIA STD RS-481.
Weight	: 0.21 gram.

Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

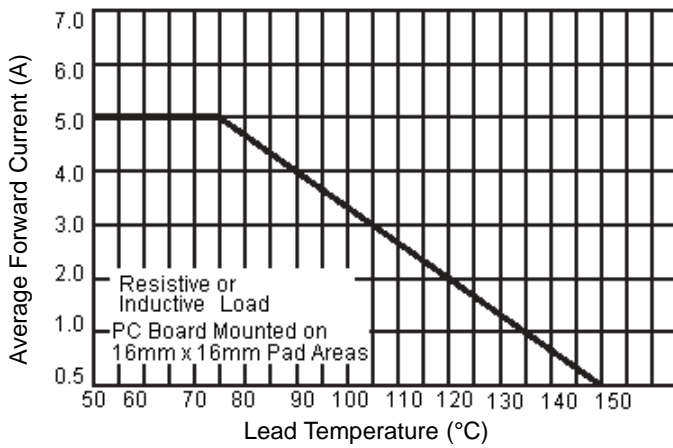
Type Number	Symbol	S5B	S5D	S5J	Units
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	100	200	600	V
Maximum RMS Voltage	V_{RMS}	70	140	420	
Maximum DC Blocking Voltage	V_{DC}	100	200	600	
Maximum Average Forward Rectified Current at $T_L = 75^\circ\text{C}$ (Note 1)	$I_{(AV)}$	5.0			A
Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	100			
Maximum Instantaneous Forward Voltage at 5.0A	V_F	1.15			V
Maximum DC Reverse Current at $T_A = 25^\circ\text{C}$ at Rated DC Blocking Voltage at $T_A = 125^\circ\text{C}$	I_R	10.0 250			μA μA
Typical Thermal Resistance (Note 1)	$R_{\theta JL}$	13			$^\circ\text{C/W}$
	$R_{\theta JA}$	47			
Typical Junction Capacitance (Note 2)	C_j	60			pF
Operating Temperature Range	T_J	-55 to +150			$^\circ\text{C}$
Storage Temperature Range	T_{STG}				

Notes: 1. Measured on PC Board with 0.6 x 0.6 inches (16mm x 16mm) Copper Pad Areas.

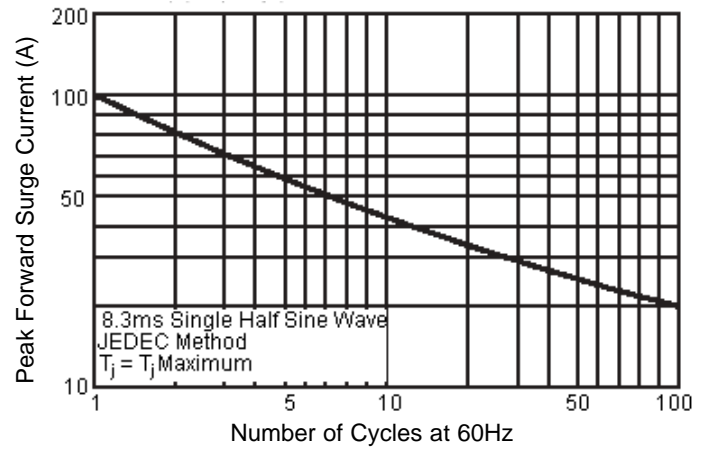
2. Measured at 1MHz and Applied $V_R = 4.0$ Volts.

Ratings and Characteristic Curves (S5B, S5D and S5J)

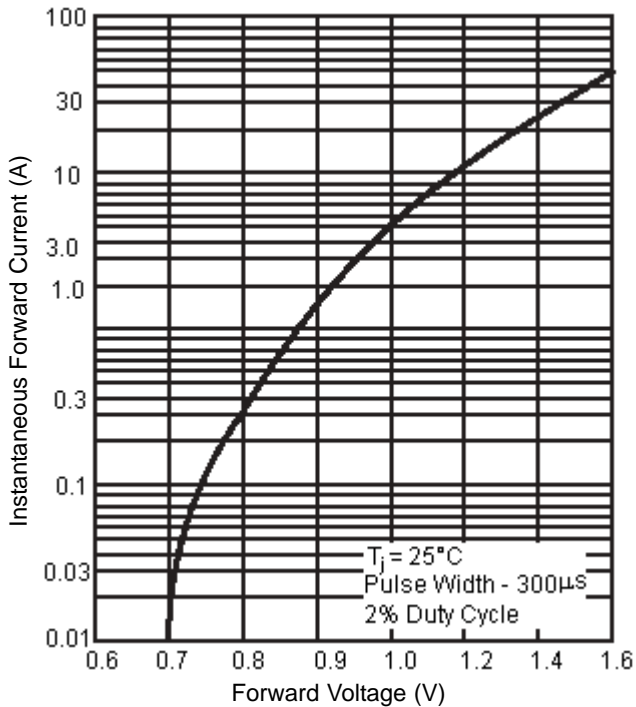
Maximum Forward Current Derating Curve



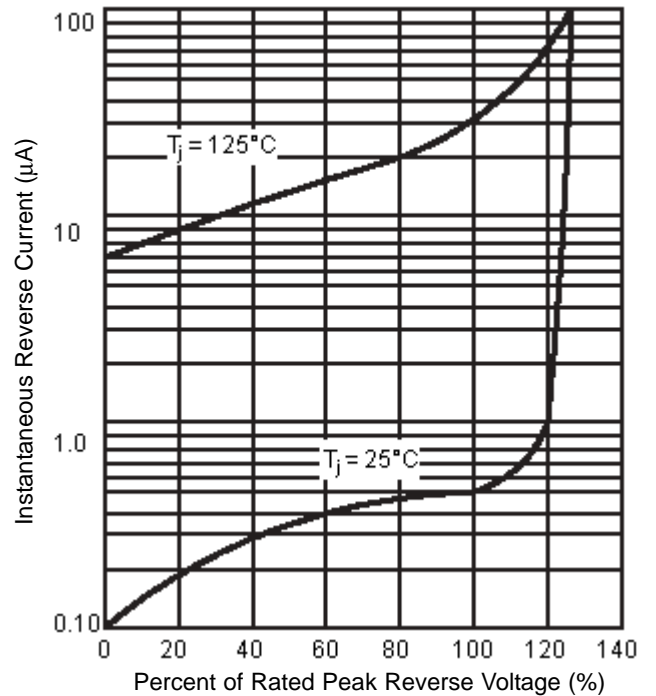
Maximum Non-Repetitive Forward Surge Current



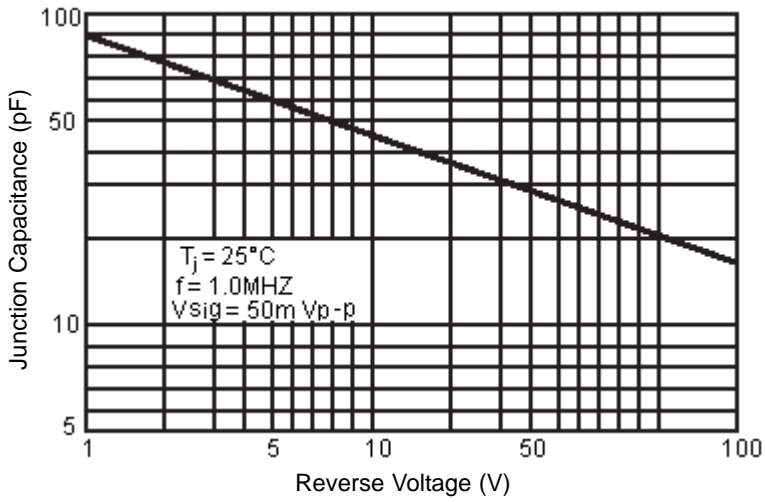
Typical Forward Characteristics



Typical Reverse Characteristics



Typical Junction Capacitance



Part Number Table

Description	Part Number
Diode, Standard, 5A, 100V	S5B
Diode, Standard, 5A, 200V	S5D
Diode, Standard, 5A, 600V	S5J

Notes:

International Sales Offices:

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