



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

Specifications:

Mechanical Data:

Cases	: Moulded plastic
Terminals	: Pure tin plated, lead free
Polarity	: Indicated by cathode band
Packaging	: 16mm tape per EIA STD RS-481
Weight	: 0.21g

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%.

Parameters	Symbol	S4G	Units
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	400	V
Maximum RMS Voltage	V_{RMS}	280	
Maximum DC Blocking Voltage	V_{DC}	400	
Maximum Average Forward Rectified Current at $T_L = 75^\circ\text{C}$	$I_{(AV)}$	4	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 4A	V_F	1.15	V

Standard Diode

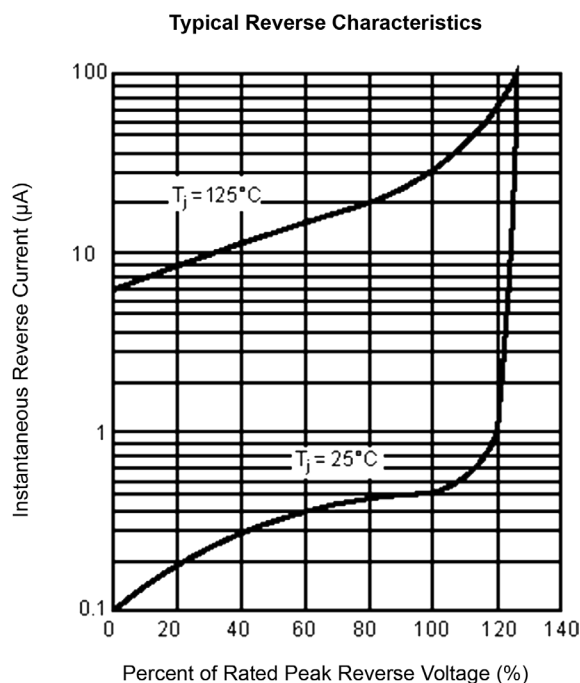
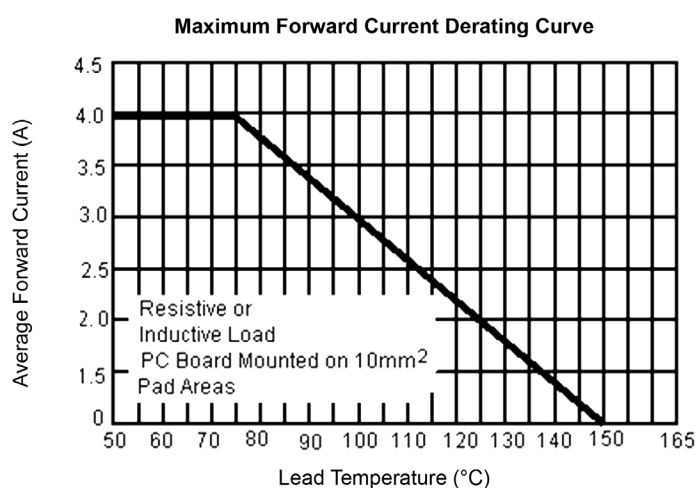


Parameters	Symbol	S4G	Units
Maximum DC Reverse Current at $T_A = 25^\circ\text{C}$ at Rated DC Blocking Voltage at $T_A = 125^\circ\text{C}$	I_R	10 250	μA μA
Maximum Reverse Recovery Time (Note 1)	T_{rr}	2.5	μs
Typical Junction Capacitance (Note 2)	C_j	60	pF
Typical Thermal Resistance (Note 3)	$R_{\theta JL}$ $R_{\theta JA}$	13 47	$^\circ\text{C/W}$
Operating Temperature Range	T_J	-55 to +150	$^\circ\text{C}$
Storage Temperature Range	T_{STG}		

Notes:

1. Reverse Recovery Test Conditions: $I_F = 0.5\text{A}$, $I_R = 1\text{A}$, $I_{RR} = 0.25\text{A}$.
2. Measured at 1MHz and Applied $V_R = 4\text{V}$.
3. Measured on PC Board with $0.6" \times 0.6"$ (16mm x 16mm) Copper Pad Areas.

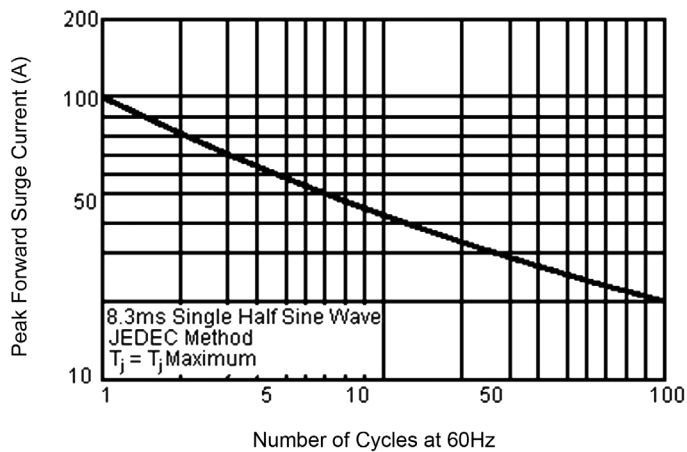
Ratings and Characteristic Curves (S4J)



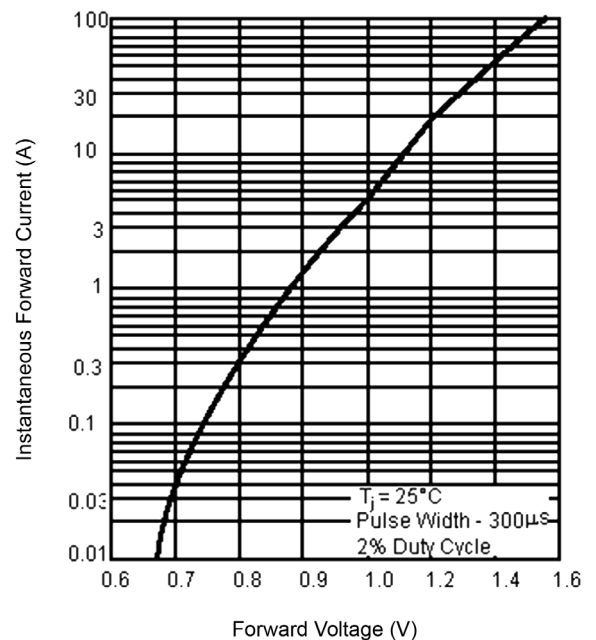
Standard Diode



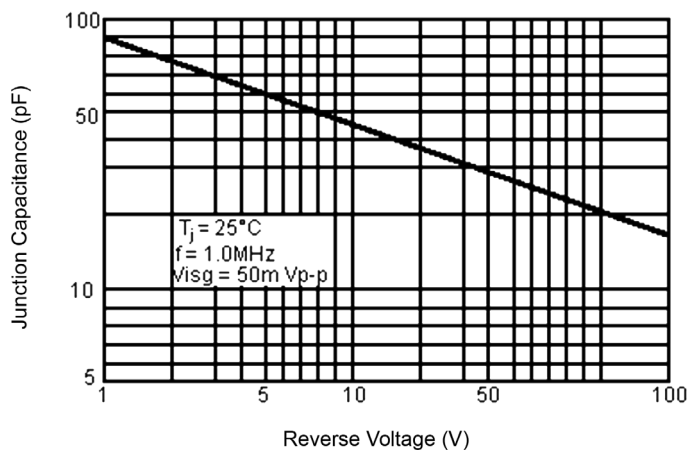
Maximum Non-Repetitive Forward Surge Current



Typical Forward Characteristics



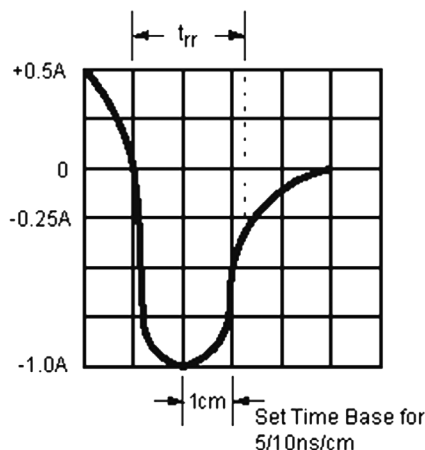
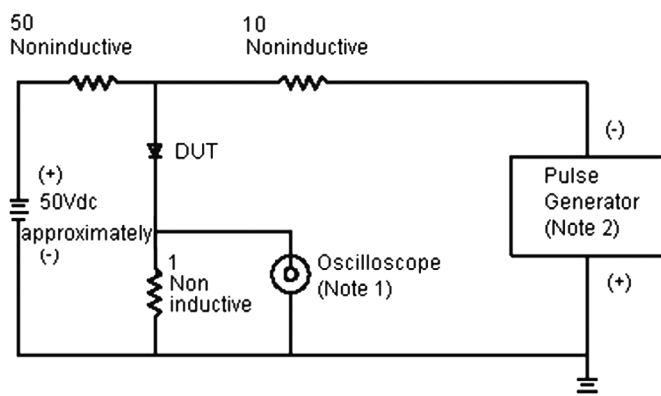
Typical Junction Capacitance



Standard Diode



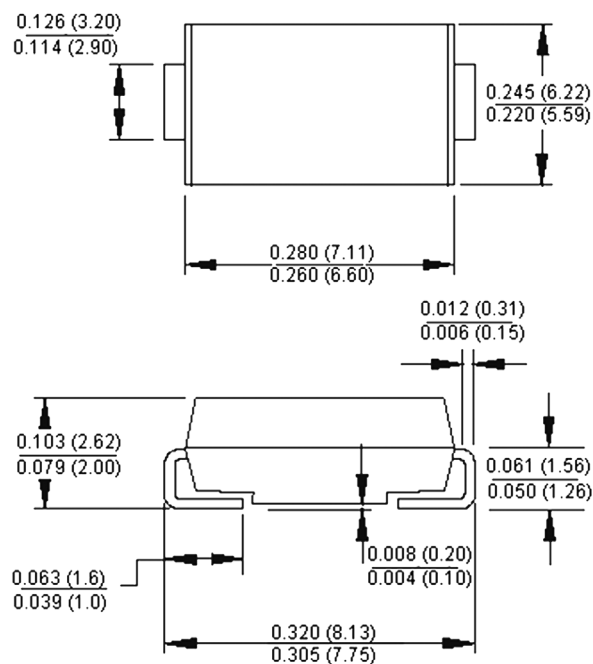
Reverse Recovery Time Characteristic and Test Circuit Diagram



Note:

1. Rise Time = 7ns Maximum Input Impedance = 1M Ω 22pf
2. Rise Time = 10ns Maximum Source Impedance = 50 Ω

SMC/DO-214AB



Dimensions : Inches (Millimetres)

Part Number Table

Description	Part Number
Diode, Standard, 4A, 600V	S4J

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