Schottky Diodes





Features:

- For surface mounted application
- Metal to silicon rectifier, majority carrier conduction
- Low forward voltage drop
- Easy pick and place
- High surge current capability
- Plastic material
- Epitaxial construction
- High temperature soldering : 260°C / 10 seconds at terminals

SMB / DO-214AA

0.082(2.08) 0.076(1.93) 0.147(3.73) 0.137(3.48) 0.187(4.75) 0.167(4.25) 0.012(0.31) 0.006(0.15) 0.<u>103(2.61</u>) 0.078(1.99) 0.012(0.31) T 0.006 (0.15) 0.056(1.41) 0.008 (0.2) 0.035(0.9) 0.004 (0.1) 0.208 (5.28) 0.2 (5.08)

Mechanical Data:

Case: Moulded plasticTerminals: Solder platedPolarity: Indicated by cathode bandPackaging: 12 mm tape per EIA STD RS-481Weight: 0.093 gram

Dimensions Inches (Millimetres)

Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load. For capacitive load, derate current by 20%

Description	Symbol	SS24	SS26	SS210	Unit
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	40	60	100	
Maximum RMS Voltage	V _{RMS}	28	42	70	V
Maximum DC Blocking Voltage	V _{DC}	40	60	100	
Maximum Average Forward Rectified Current at TL	I _(AV)		2		А
Peak Forward Surge Current, 8.3 ms Single Half Sine Wave Superimposed on Rated Load (JEDEC method)	I _{FSM}	50			А
Maximum Instantaneous Forward Voltage (Note 1) at 2 A	V _F	0.5	0.7	0.85	V



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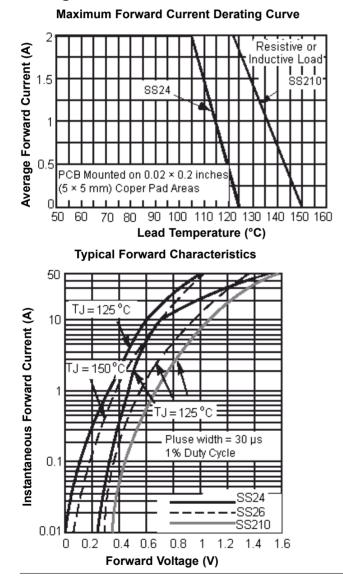


Description	Symbol	SS24	SS26	SS210	Unit
Maximum DC Reverse Current at TA = 25°C	1-	0.4		0.1	mA
at Rated DC Blocking Voltage at TA = 100°C	IR	20	10	20	
Typical Junction Capacitance (Note 3)	Cj	130			pF
Typical Thermal Resistance (Note 2)	Rθ _{JL} Rθ _{JA}	17 15			°C / W
Operating Temperature Range	TJ	-65 to +125 -65 to +150		- °C	
Storage Temperature Range	T _{STG}	-65 to +150			

Notes:

- 1. Pulse Test with PW = 300 µ seconds, 1% Duty Cycle
- 2. Measured on P.C. Board with 0.4 × 0.4 inches (10 × 10 mm) Copper Pad Areas
- 3. Measured at 1 MHz and Applied Reverse Voltage of 4 V dc

Ratings and Characteristic Curves



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50 Peak Forward Surge Current (A) 8.3 ms Single Half Sine Wave JEDEC 40 Method at Rated TI 30 20 10 0 10 100 1 Number of Cycles 60Hz **Typical Reverse Characteristics** 100 SS24 SS210 Instantaneous Reverse Current (mA) TJ = 125 10 1 T.I 0.1 0.01 =25 °C

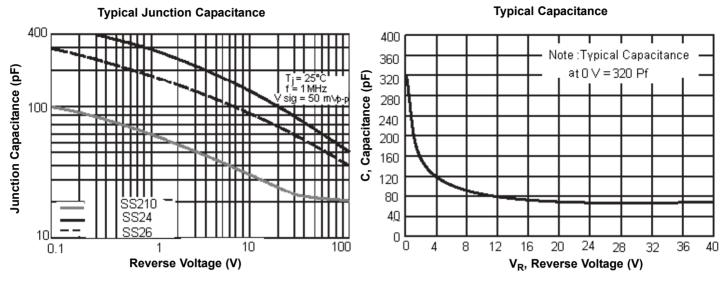
0.001 0 20 40 60 80 100 120 140 Percent of Rated Peak Reverse Voltage (%)





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Ratings and Characteristic Curves



Part Number Table

Description	Part Number		
Diode, Schottky 2 A 40 V SMB	SS24		
Diode, Schottky 2 A 60 V SMB	SS26		
Diode, Schottky 2 A 100 V SMB	SS210		

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