



New Product

SS29 and SS210

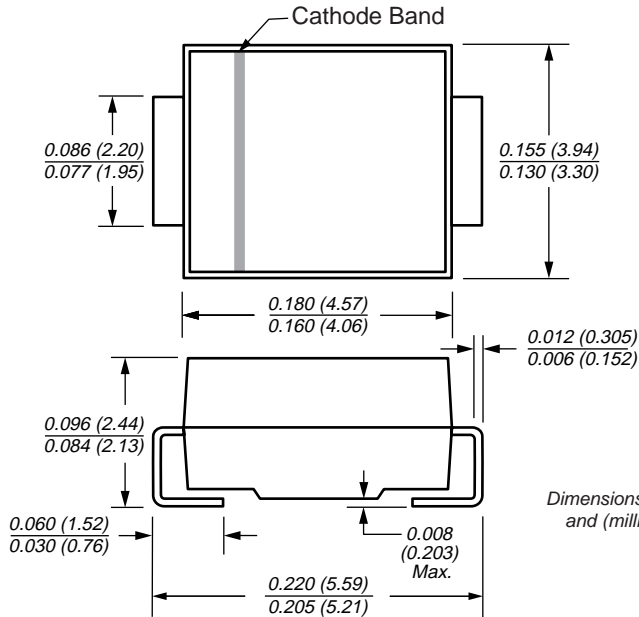
Vishay Semiconductors
formerly General Semiconductor



High Voltage Surface Mount Schottky Rectifier

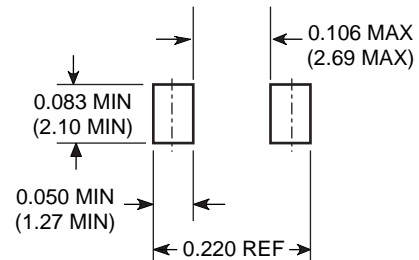
DO-214AA (SMB)

Reverse Voltage 90 to 100V
Forward Current 1.5A



Dimensions in inches and (millimeters)

Mounting Pad Layout



Mechanical Data

Case: JEDEC DO-214AA molded plastic body

Terminals: Solder plated, solderable per MIL-STD750, Method 2026

High temperature soldering guaranteed: 250°C/10 seconds at terminals

Polarity: Color band denotes cathode end

Weight: 0.003 ounce, 0.093 gram

Features

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Low profile surface mount package
- Built-in strain relief
- Low power loss, high efficiency
- For use in low voltage high frequency inverters, free wheeling, and polarity protection applications
- Guardring for overvoltage protection

Maximum Ratings and Thermal Characteristics (T_A = 25°C unless otherwise noted)

Parameter	Symbol	SS29	SS210	Unit
Device marking code		S9	S10	
Maximum repetitive peak reverse voltage	V _{RRM}	90	100	V
Maximum RMS voltage	V _{RMS}	63	70	V
Maximum DC blocking voltage	V _{DC}	90	100	V
Maximum average forward rectified current at T _L = 90°C	I _{F(AV)}	1.5		A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	75		A
Peak repetitive reverse surge current at t _p = 2μs, 1KHz	I _{RRM}	1.0		A
Maximum thermal resistance (NOTE 2)	R _{θJA} R _{θJL}	75 17		°CW
Storage temperature range	T _{STG}	-55 to +150		°C
Maximum operating junction temperature	T _J	115		°C

Notes: (1) Pulse test: 300μs pulse width, 1% duty cycle
(2) P.C.B. mounted with 0.2 x 0.2" (5.0 x 5.0mm) copper pad areas

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Electrical Characteristics ($T_A = 25^\circ\text{C}$ unless otherwise noted)

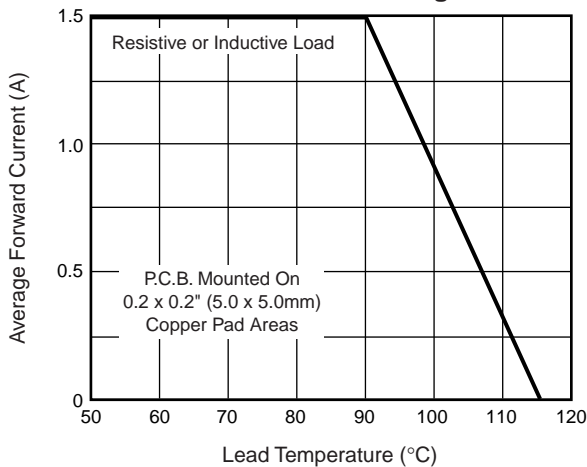
Parameter	Symbols	SS29	SS210	Units
Maximum instantaneous forward voltage at: (NOTE 1)	$I_F = 0.1\text{A}, T_A = 25^\circ\text{C}$ $I_F = 1.0\text{A}, T_A = 25^\circ\text{C}$ $I_F = 3\text{A}, T_A = 25^\circ\text{C}$ $I_F = 1.5\text{A}, T_A = 100^\circ\text{C}$ $I_F = 3\text{A}, T_A = 100^\circ\text{C}$		0.43 0.75 0.95 0.71 0.85	V
Maximum DC reverse current at rated DC blocking voltage (NOTE 1)	$T_A = 25^\circ\text{C}$ $T_A = 100^\circ\text{C}$		30 5	μA mA

Notes:

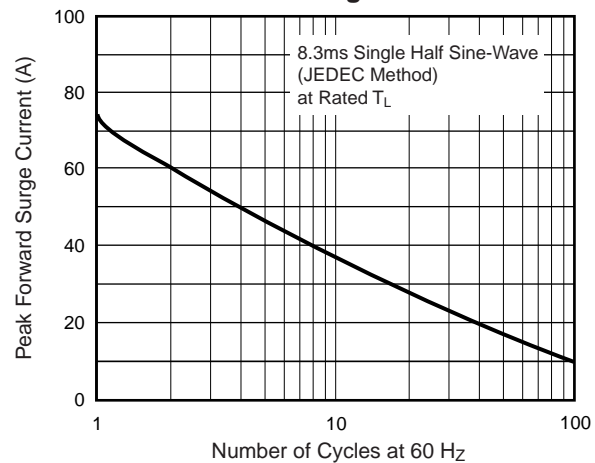
- (1) Pulse test: 300 μs pulse width, 1% duty cycle
- (2) P.C.B. mounted with 0.2 x 0.2" (5.0 x 5.0mm) copper pad areas

Ratings and Characteristic Curves ($T_A = 25^\circ\text{C}$ unless otherwise noted)

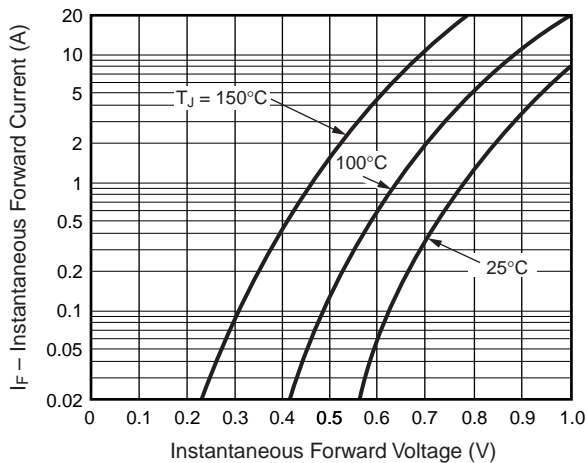
Forward Current Derating Curve



Maximum Non-Repetitive Peak Forward Surge Current



Typical Instantaneous Forward Characteristics



Typical Reverse Current Characteristics

