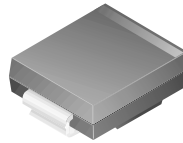




# SS32 - S310

## Features

- Metal to silicon rectifiers, majority carrier conduction.
- Low forward voltage drop.
- Easy pick and place.
- High surge current capability.



**SMC/DO-214AB**  
COLOR BAND DENOTES CATHODE

## Schottky Rectifiers

### Absolute Maximum Ratings\* T<sub>A</sub> = 25°C unless otherwise noted

Symbol	Parameter	Value								Units
		32	33	34	35	36	38	39	310	
V <sub>RRM</sub>	Maximum Repetitive Reverse Voltage	20	30	40	50	60	80	90	100	V
I <sub>F(AV)</sub>	Average Rectified Forward Current, @ T <sub>A</sub> = 75°C	3.0								A
I <sub>FSM</sub>	Non-repetitive Peak Forward Surge Current 8.3 ms Single Half-Sine-Wave	100								A
T <sub>stg</sub>	Storage Temperature Range	-55 to +150								°C
T <sub>J</sub>	Operating Junction Temperature	-55 to +150								°C

\*These ratings are limiting values above which the serviceability of any semiconductor device may be impaired.

### Thermal Characteristics

Symbol	Parameter	Value	Units
P <sub>D</sub>	Power Dissipation	2.27	W
R <sub>θJA</sub>	Thermal Resistance, Junction to Ambient *	55	°C/W
R <sub>θJL</sub>	Thermal Resistance, Junction to Lead	17	°C/W

\*Device mounted on FR-4 PCB 0.55 x 0.55" (14 x 14 mm).

### Electrical Characteristics T<sub>A</sub> = 25°C unless otherwise noted

Symbol	Parameter	Device								Units
		32	33	34	35	36	38	39	310	
V <sub>F</sub>	Forward Voltage @ 3.0 A	500		750		850			mV	
I <sub>R</sub>	Reverse Current @ rated V <sub>R</sub> T <sub>A</sub> = 25°C T <sub>A</sub> = 100°C	0.5								mA
		20		10						mA

Typical Characteristics

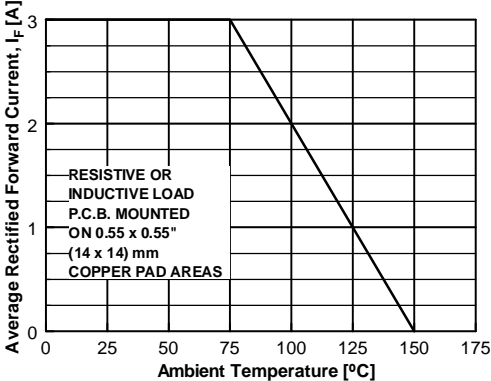


Figure 1. Forward Current Derating Curve

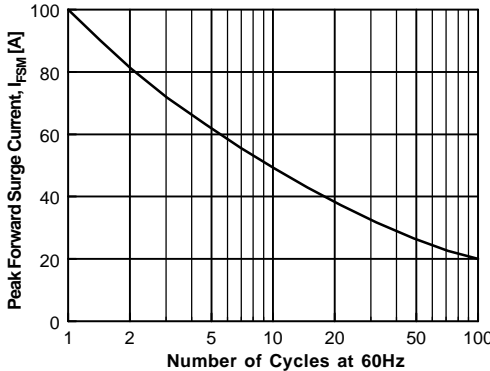


Figure 2. Non-Repetitive Surge Current

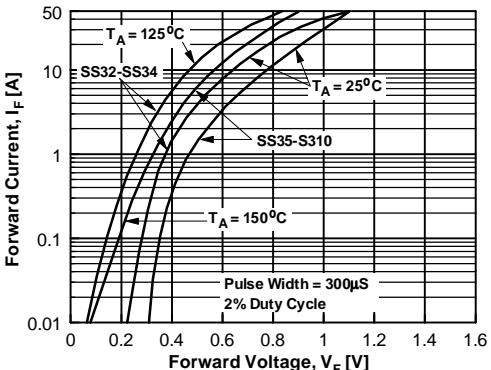


Figure 3. Forward Voltage Characteristics

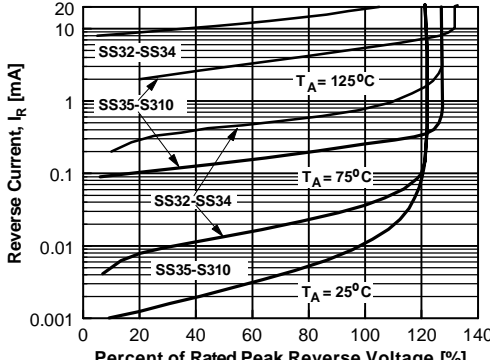


Figure 4. Reverse Current vs Reverse Voltage

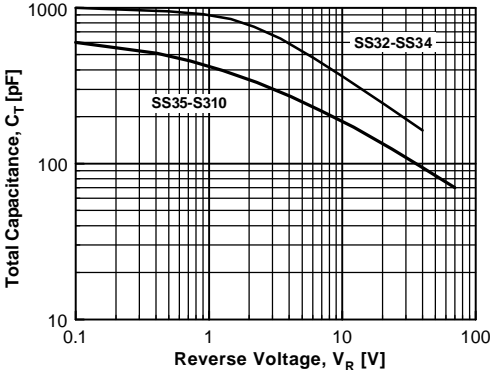


Figure 5. Total Capacitance

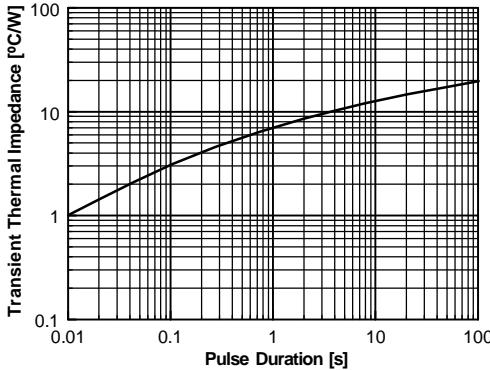


Figure 6. Thermal Impedance Characteristics

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