

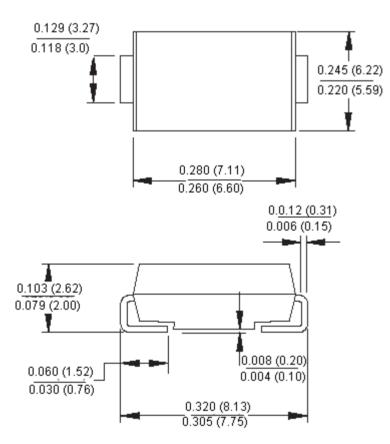




Features:

- For surface mounted application.
- Easy pick and place.
- Metal to silicon rectifier, majority carrier conduction.
- Low power loss, high efficiency.
- High current capability, low V_F.
- High surge current capability.
- Plastic material.
- Epitaxial construction.
- High temperature soldering : 260°C/10 seconds at terminals.

SMC/DO-214AB



Dimensions: Inches (Millimetres)





Mechanical Data

Case : Moulded plastic.

Terminals : Pure tin plated, lead free.
Polarity : Indicated by cathode band.
Packing : 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	SS32	SS33	SS35	SS39	Units
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	20	30	50	90	V
Maximum RMS Voltage	V _{RMS}	14	21	35	63	
Maximum DC Blocking Voltage	V _{DC}	20	30	50	90	
Maximum Average Forward Rectified Current at TL	I _(AV)	3.0			Α	
Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I _{FSM}	100 70				
Maximum Instantaneous Forward Voltage (Note 1) IF = 3.0A at 25°C at 100°C	V _F	1	.5 .4	0.75 0.65	0.85 0.70	V
Maximum DC Reverse Current at TA = 25°C at Rated DC Blocking Voltage at TA = 125°C	I _R	0.5 0.6			mA	
		20	10	0.0	20	mA
Typical Junction Capacitance (Note 2)	$R_{ heta J A}$	17 55				°C/W
Operating Temperature Range	T _J	-55 to +125 -55 to +150		+150	- °C	
Storage Temperature Range	T _{STG}	-55 to +150				

Notes 1. Pulse Test with PW = 300 μ seconds, 1% Duty Cycle.





Ratings and Characteristic Curves (SS32 THRU SS310)

FIG.1- Maximum Forward Current Derating Curve

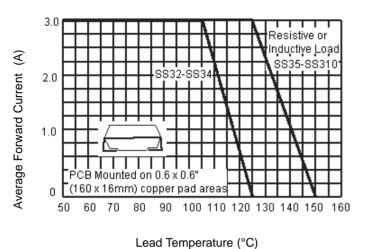
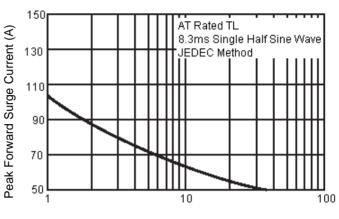


FIG.2- Maximum Non-Repetitive Peak Forward Surge Current



Number of Cycles at 60Hz

FIG.3- Typical Forward Characteristics

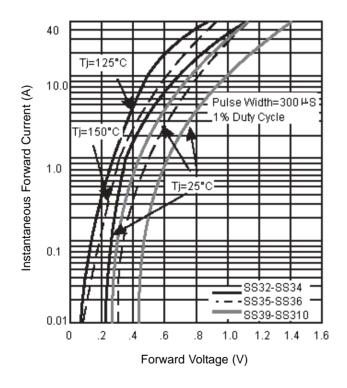
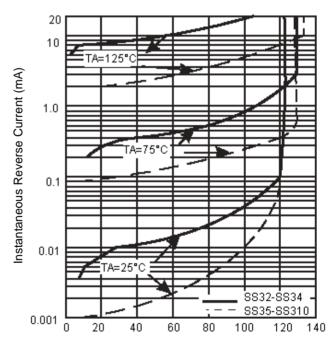


FIG.4- Typical Reverse Characteristics



Percent Rated Peak Reverse Voltage (%)



FIG.5- Typical Junction Capacitance

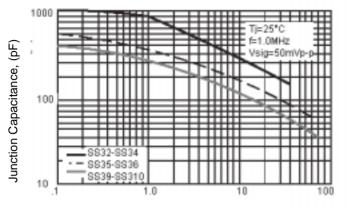
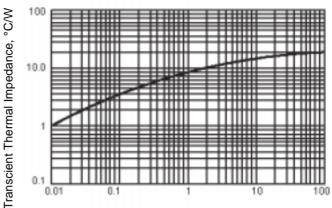


FIG.6- Typical Transient Termal Impdance



Reverse Voltage (V) t₁ Pulse Duration, (sec)

Part Number Table

Description	Part Number		
Diode, Schottky, 3A, 20V	SS32		
Diode, Schottky, 3A, 30V	SS33		
Diode, Schottky, 3A, 50V	SS35		
Diode, Schottky, 3A, 90V	SS39		

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