

**3.0AMPS Surface Mount Schottky Barrier Rectifiers  
SMC/DO-214AB**



**RoHS COMPLIANCE**

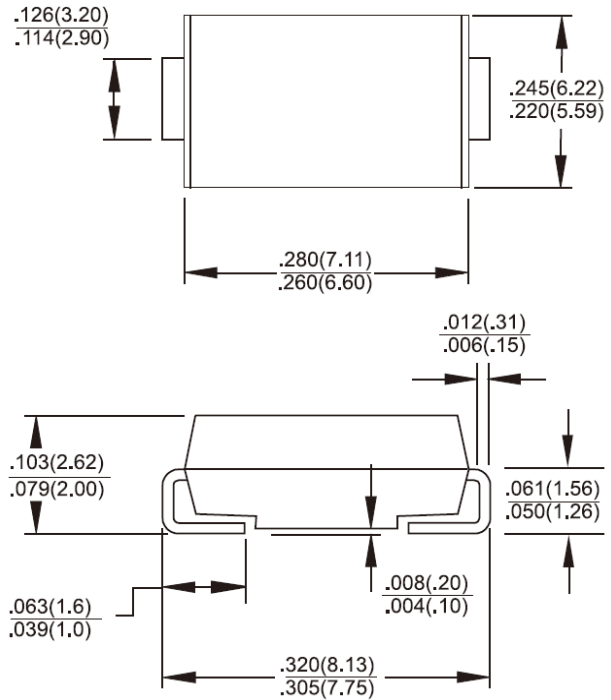


**Features**

- ✧ UL Recognized File # E-326243
- ✧ For surface mounted application
- ✧ Easy pick and place
- ✧ Metal to silicon rectifier, majority carrier conduction
- ✧ Low power loss, high efficiency
- ✧ High current capability, low VF
- ✧ High surge current capability
- ✧ Plastic material used carriers Underwriters Laboratory Classification 94V-0
- ✧ Epitaxial construction
- ✧ High temperature soldering: 260°C/10 seconds at terminals
- ✧ Green compound with suffix "G" on packing code & prefix "G" on datecode

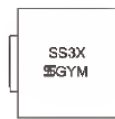
**Mechanical Data**

- ✧ Case: JEDEC DO-214AB Molded plastic
- ✧ Terminals: Pure tin plated, lead free
- ✧ Polarity: Indicated by cathode band
- ✧ Packaging: 16mm tape per EIA Std RS-481
- ✧ Weight: 0.21 gram



**Dimensions in inches and (millimeters)**

**Marking Diagram**



- SS3X = Specific Device Code
- G = Green Compound
- Y = Year
- M = Work Month

**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%

Type Number	Symbol	SS 32	SS 33	SS 34	SS 35	SS 36	SS 39	SS 310	SS 315	SS 320	Unit	
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	20	30	40	50	60	90	100	150	200	V	
Maximum RMS Voltage	$V_{RMS}$	14	21	28	35	42	63	70	105	140	V	
Maximum DC Blocking Voltage	$V_{DC}$	20	30	40	50	60	90	100	150	200	V	
Maximum Average Forward Rectified Current	$I_{F(AV)}$	3.0									A	
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	$I_{FSM}$	100			70						A	
Maximum Instantaneous Forward Voltage (Note 1) @ 3.0A $T_A=25^{\circ}C$ $T_A=100^{\circ}C$	$V_F$	0.5		0.75		0.85		0.95		V		
		0.4		0.65		0.70		0.80				
Maximum Reverse Current @ Rated VR $T_A=25^{\circ}C$ $T_A=100^{\circ}C$ $T_A=125^{\circ}C$	$I_R$	0.5			0.1			-			mA	
		10			5			-				
		-			0.5			-				
Typical Thermal Resistance	$R_{\theta JL}$ $R_{\theta JA}$	17					55					$^{\circ}C/W$
Operating Temperature Range	$T_J$	- 55 to + 125				- 55 to + 150						$^{\circ}C$
Storage Temperature Range	$T_{STG}$	- 55 to + 150										$^{\circ}C$

Note 1: Pluse Test with PW=300 usec, 1% Duty Cycle

# RATINGS AND CHARACTERISTIC CURVES (SS32 THRU SS320)

FIG. 1 FORWARD CURRENT DERATING CURVE

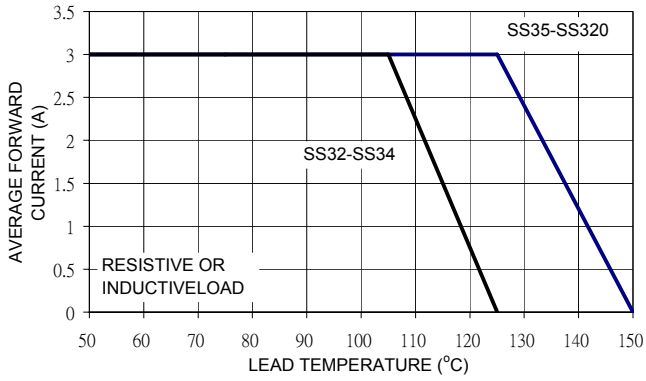


FIG. 2 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

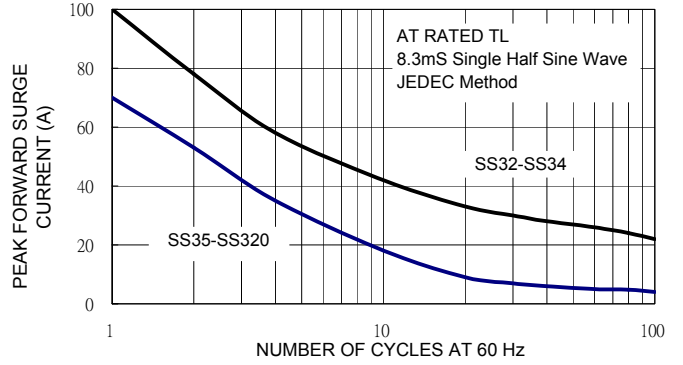


FIG. 3 TYPICAL FORWARD CHARACTERISTICS

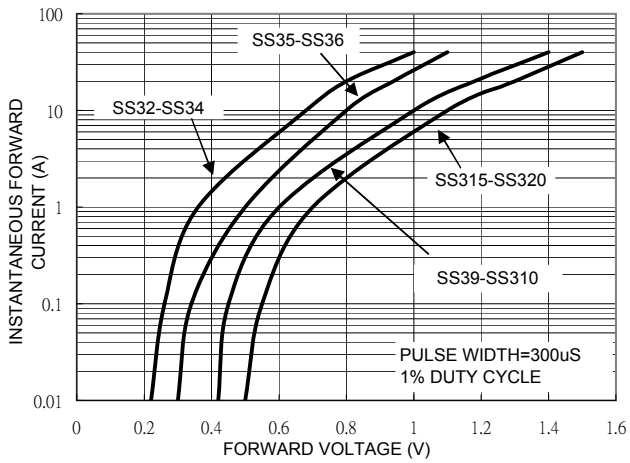


FIG. 4 TYPICAL REVERSE CHARACTERISTICS

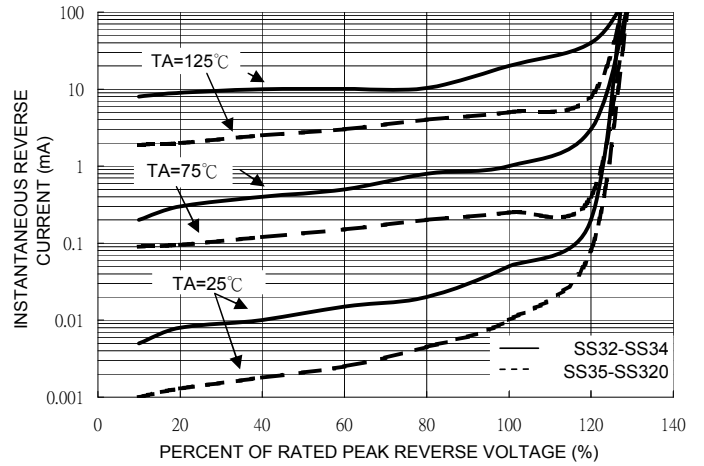


FIG. 5 TYPICAL JUNCTION CAPACITANCE

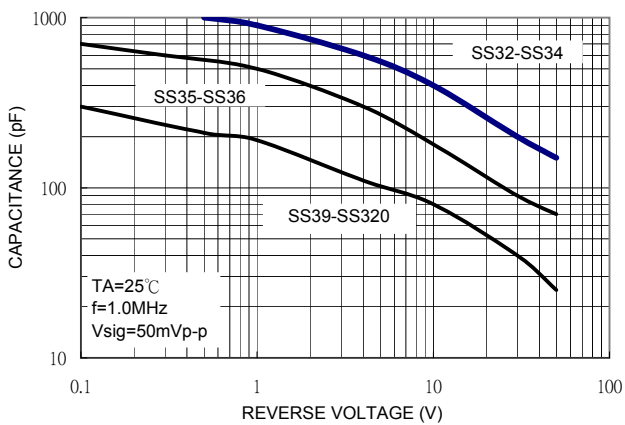


FIG. 6 TYPICAL TRANSIENT THERMAL IMPEDANCE

