



# SS115

## 1.0 AMP. Surface Mount Schottky Barrier Rectifiers



Voltage Range  
150 Volts  
Current  
1.0 Ampere

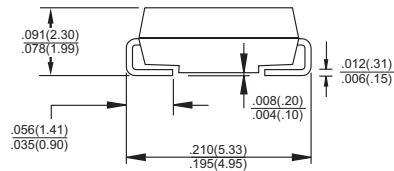
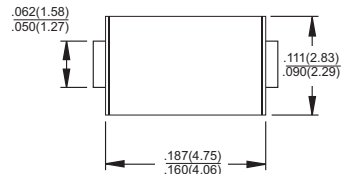
### Features

- ✦ 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 used carriers Underwriters Laboratory Classification 94V-O
- ✦ Epitaxial construction
- ✦ High temperature soldering: 260°C/ 10 seconds at terminals

### Mechanical Data

- ✦ Case: Molded plastic
- ✦ Terminals: Solder plated
- ✦ Polarity: Indicated by cathode band
- ✦ Packaging: 12mm tape per EIA STD RS-481
- ✦ Weight: 0.064 gram

### SMA/DO-214AC



Dimensions in inches and (millimeters)

### Maximum Ratings and Electrical Characteristics

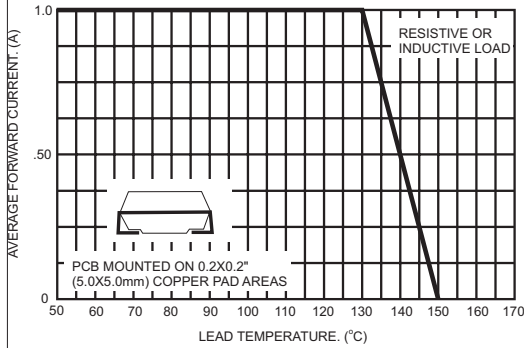
Rating at 25°C ambient temperature unless otherwise specified.  
 Single phase, half wave, 60 Hz, resistive or inductive load.  
 For capacitive load, derate current by 20%

Type Number	Symbol	SS115	Units		
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	150	V		
Maximum RMS Voltage	$V_{RMS}$	105	V		
Maximum DC Blocking Voltage	$V_{DC}$	150	V		
Maximum Average Forward Rectified Current at $T_L$ (See Fig. 1)	$I_{(AV)}$	1.0	A		
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	$I_{FSM}$	30	A		
Maximum Instantaneous Forward Voltage (Note 1)	$V_F$	@ 25°C 1.0A @ 125°C 1.0A @ 25°C 2.0A @ 125°C 2.0A	V		
Maximum DC Reverse Current @ $T_A=25^\circ\text{C}$ at Rated DC Blocking Voltage @ $T_A=125^\circ\text{C}$		$I_R$		0.05	mA
				0.5	mA
Typical Junction Capacitance (Note 3)		$C_j$		50	pF
Typical Thermal Resistance ( Note 2 )	$R_{\theta JL}$	20	°C/W		
Operating Temperature Range	$T_J$	-65 to +150	°C		
Storage Temperature Range	$T_{STG}$	-65 to +150	°C		

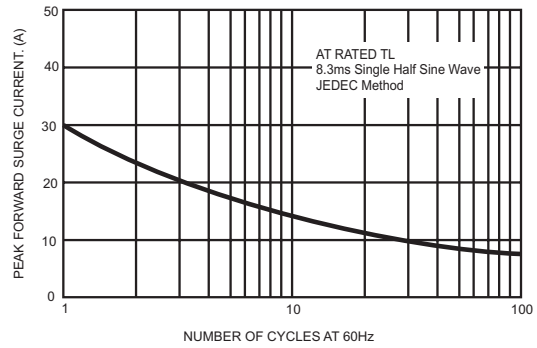
- Notes: 1. Pulse Test with PW=300 usec, 1% Duty Cycle  
 2. Measured on P.C.Board with 0.2 x 0.2"(5.0 x 5.0mm) Copper Pad Areas.  
 3. Measured at 1 MHz and Applied Reverse Voltage of 4.0V D.C

## RATINGS AND CHARACTERISTIC CURVES (SS115)

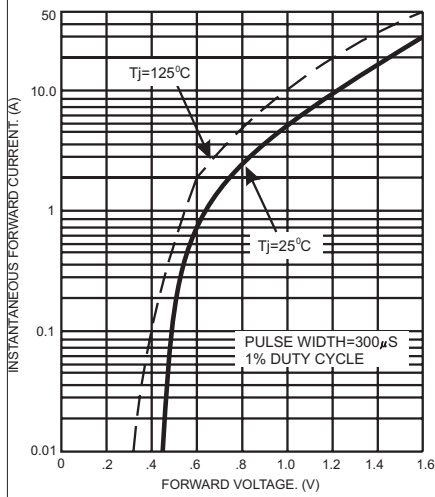
**FIG. 1- MAXIMUM FORWARD CURRENT DERATING CURVE**



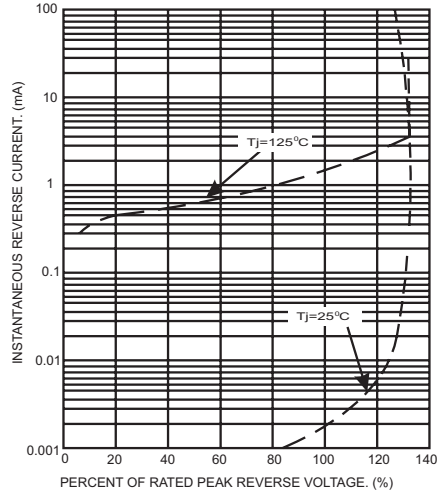
**FIG. 2- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT**



**FIG. 3- TYPICAL FORWARD CHARACTERISTICS**



**FIG. 4- TYPICAL REVERSE CHARACTERISTICS**



**FIG. 5- TYPICAL JUNCTION CAPACITANCE**

