

# SS115

## 1.0 AMP. Surface Mount Schottky Barrier Rectifiers



Voltage Range

150 Volts

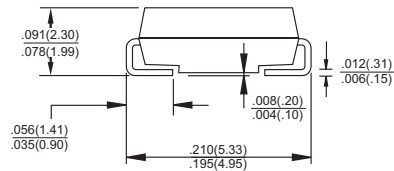
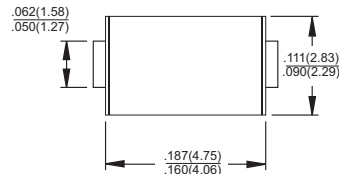
Current

1.0 Ampere

**SMA/DO-214AC**

### 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



Dimensions in inches and (millimeters)

### 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

### Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60 Hz, resistive or inductive load.

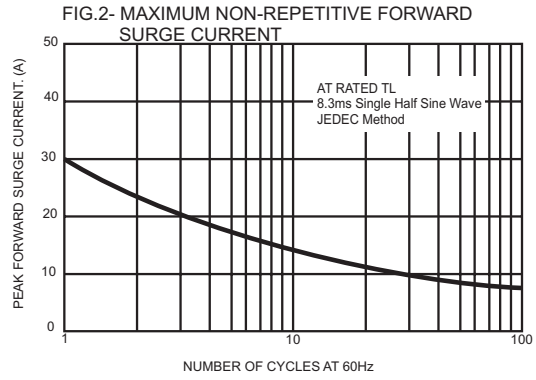
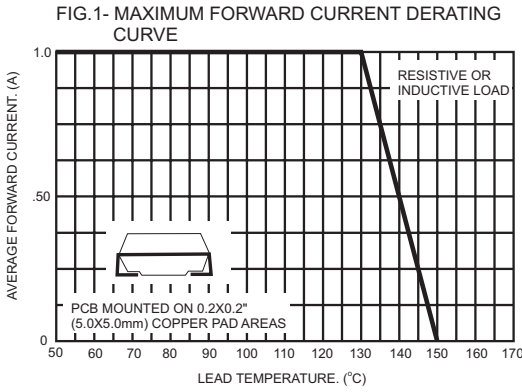
For capacitive load, derate current by 20%

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 0.82	V
@ 125°C 1.0A		0.67	
@ 25°C 2.0A		0.89	
@ 125°C 2.0A		0.75	
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

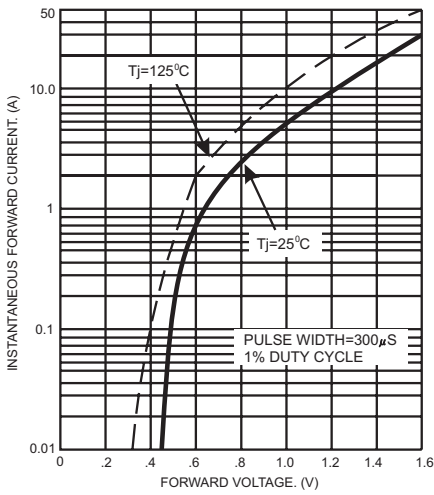
Notes: 1. Pulse Test with PW=300 usec, 1% Duty Cycle

2. Measured on P.C.Board with 0.2 x 0.2"(5.0 x 5.0mm) Copper Pad Areas.

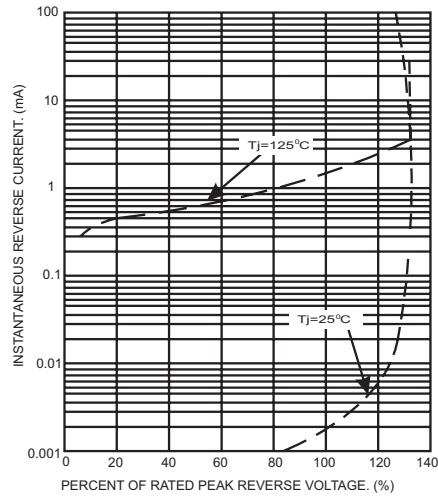
3. Measured at 1 MHz and Applied Reverse Voltage of 4.0V D.C



**FIG.3- TYPICAL FORWARD CHARACTERISTICS**



**FIG.4- TYPICAL REVERSE CHARACTERISTICS**



**FIG.5- TYPICAL JUNCTION CAPACITANCE**

