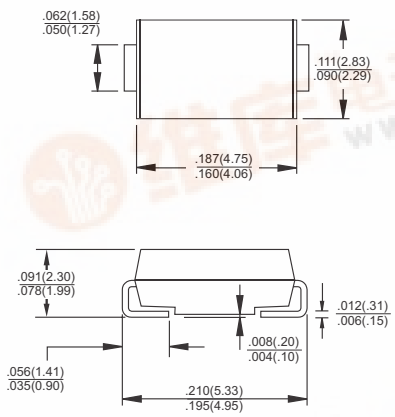
SS115

1.0 AMP. Surface Mount Schottky Barrier Rectifiers

Voltage Range
150 Volts
Current
1.0 Ampere

SMA/DO-214AC



Dimensions in inches and (millimeters)

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

Maximum Ratings and Electrical Characteristics

Rating at 25℃ 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) @ 25°C 1.0A @ 125°C 1.0A @ 25°C 2.0A @ 125°C 2.0A	V_F	0.82 0.67 0.89 0.75	V
Maximum DC Reverse Current @ T_A =25℃ at Rated DC Blocking Voltage @ T_A=125℃	I_R	0.05 0.5	mA mA
Typical Junction Capacitance (Note 3)	Cj	50	pF
Typical Thermal Resistance (Note 2)	$R_{\theta JL}$	20	℃/W
Operating Temperature Range	T_J	-65 to +150	℃
Storage Temperature Range	T_{STG}	-65 to +150	℃

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

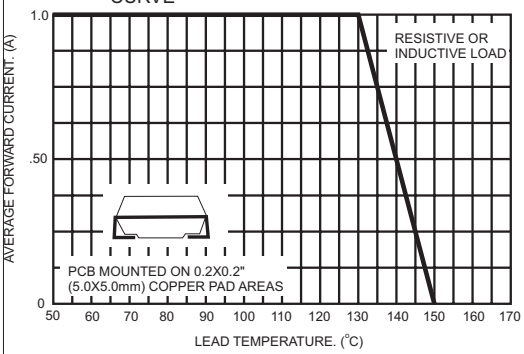


FIG.2- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

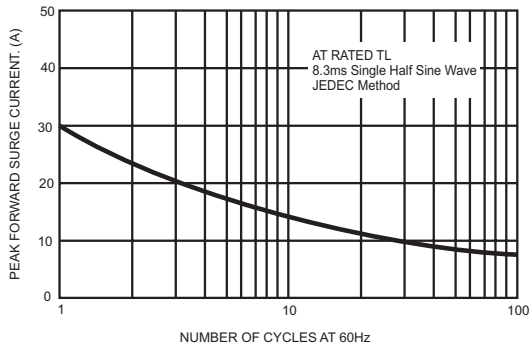


FIG.3- TYPICAL FORWARD CHARACTERISTICS

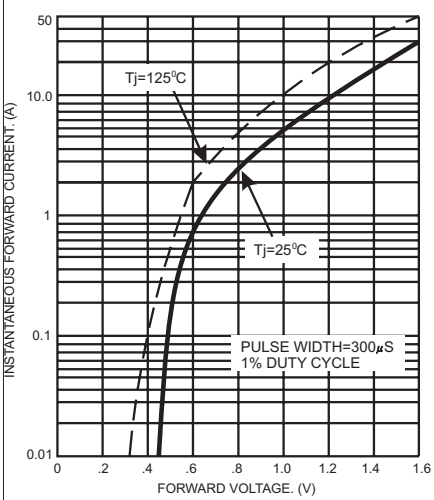


FIG.4- TYPICAL REVERSE CHARACTERISTICS

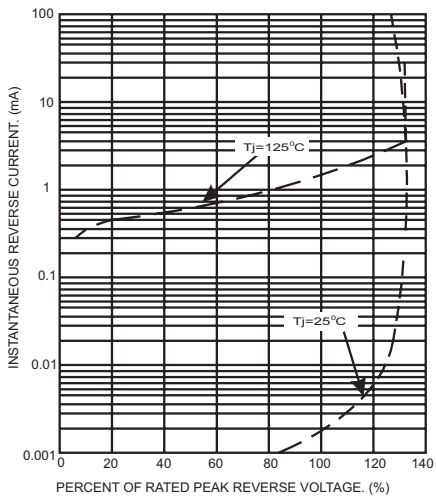


FIG.5- TYPICAL JUNCTION CAPACITANCE