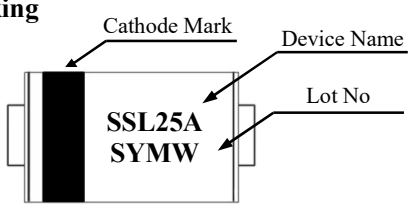
Surface Mount Low VF Schottky Barrier Rectifier
Reverse Voltage 50 Volts Forward Current 2.0 Ampere

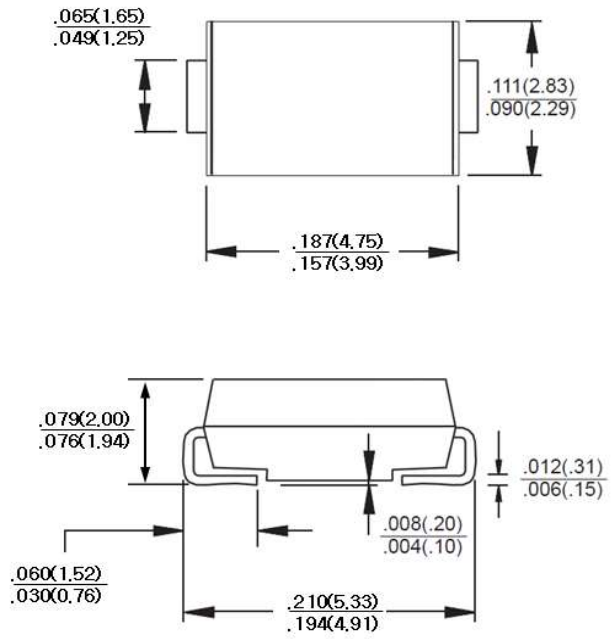
Features
- For surface mounted application
- Low forward voltage drop
- Metal to silicon rectifier, majority carrier conduction
- Easy pick and place
- High surge current capability
- Plastic material used carriers Underwriters Laboratory Classification 94V-0
- Epitaxial construction
- High temperature soldering: 260°C / 10 seconds at terminals

Mechanical Data
- Case : DO-214AC Molded plastic
- Terminals : Solder plated
- Polarity : Color band denotes cathode end
- Packaging : 12mm tape per EIA STD RS-481
- Weight : 0.064gram

Marking



SMA/DO-214AC



Dimensions in inches and (millimeters)

Maximum Ratings & Electrical Characteristics

Ratings 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%

Parameter	Symbol	Rated Value	Unit	Remark
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	50	V	
Maximum RMS Voltage	V_{RMS}	35	V	
Maximum DC Blocking Voltage	V_{DC}	50	V	
Maximum Average Forward Rectified Current	$I_F(AV)$	2.0	A	
Peak Forward Surge Current 8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	50	A	
Maximum Instantaneous Forward Voltage at 2.0A	V_F	0.50	V	Note 1
Maximum DC Reverse Current at Rated DC Blocking Voltage	I_R	0.5	mA	Ta=25°C
		10	mA	Ta=100°C
Typical Thermal Resistance	Rth(j-l)	17	°C/W	Note 2
	Rth(j-a)	75	°C/W	
Typical Junction Capacitance	C_J	130	pF	Note 3
Operation Junction Temperature Range	T_J	-55 to +150	°C	
Storage Temperature Range	T_{STG}	-55 to +150	°C	

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

Note 2. Measured on P.C.Board with 0.4"×0.4"(10mm×10mm) Copper Pad Areas.

Note 3. Measured at 1.0MHz and applied reverse voltage of 4.0 volts

Ratings and Characteristics Curves (Ta=25°C unless otherwise noted)

Fig.1 Forward Current Derating Curve

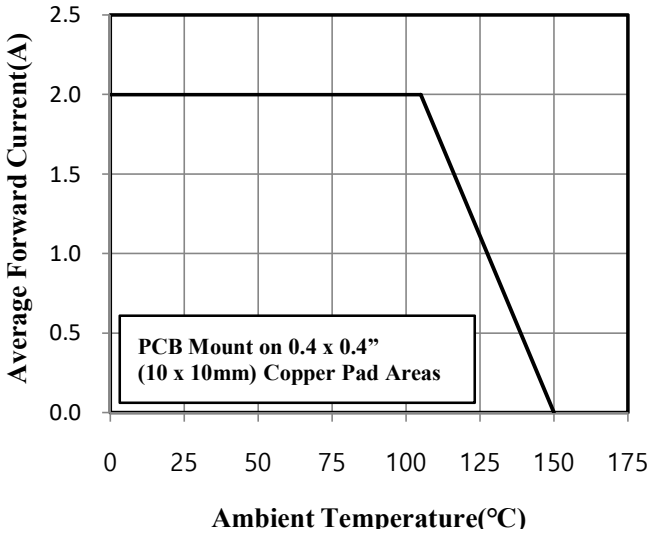


Fig.2 Maximum Non-Repetitive Peak Forward Surge Current

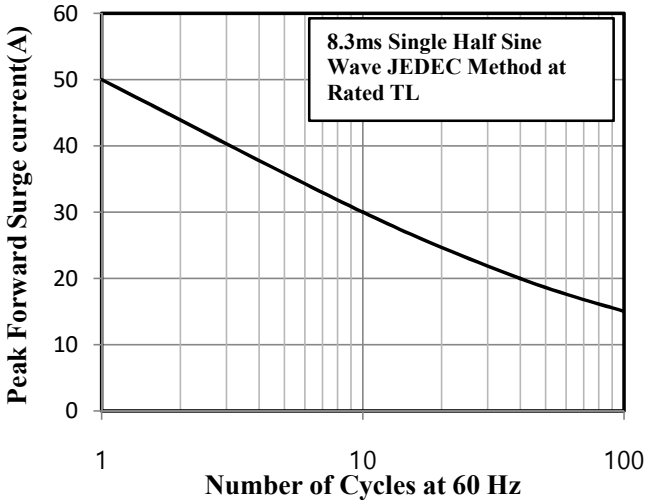


Fig.3 Typical Instantaneous Forward Characteristics

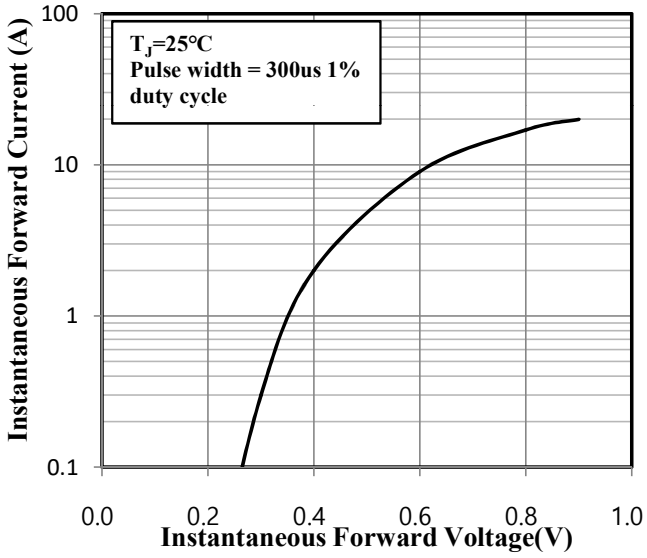


Fig.4 Typical Junction Capacitance

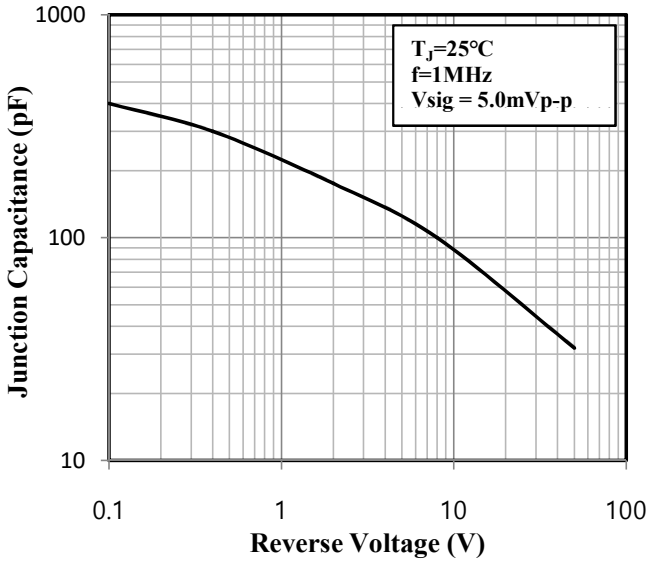


Fig.5 Typical Reverse Charateristics