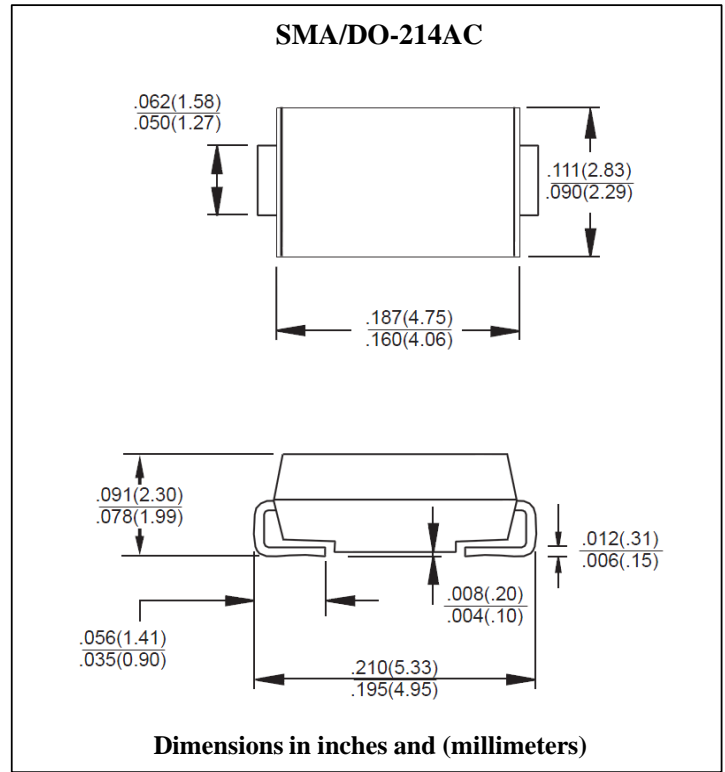
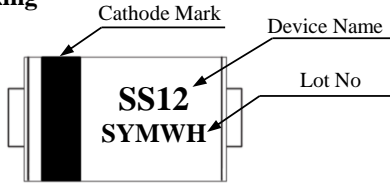


Surface Mount Schottky Barrier Rectifiers
Reverse Voltage 20 to 100 Volts Forward Current 1.0 Ampere
Features

- 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 carries 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 : 0.064gram

Marking

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	SS12	SS13	SS14	SS15	SS16	SS19	SS110	Unit	Remark
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	20	30	40	50	60	90	100	V	
Maximum RMS Voltage	V_{RMS}	14	21	28	35	42	63	70	V	
Maximum DC Blocking Voltage	V_{DC}	20	30	40	50	60	90	100	V	
Maximum Average Forward Rectified Current at T_L (See Fig.1)	$I_F(AV)$	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 @ 1.0A	V_F	0.50		0.75		0.80		V	Note 1	
Maximum DC Reverse Current at Rated DC Blocking Voltage	I_R	0.50					0.05		mA	$T_a=25^\circ C$
		10		5.0		0.5		mA	$T_a=100^\circ C$	
Typical Junction Capacitance	C_J	50							pF	Note 2
Typical Thermal Resistance	$R_{th(j-l)}$	28							$^\circ C /W$	Note 3
	$R_{th(j-a)}$	88							$^\circ C /W$	
Operation Junction Temperature Range	T_J	-55 to +125			-55 to +150				$^\circ C$	
Storage Temperature Range	T_{STG}	-55 to +150							$^\circ C$	

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

Note 2. Measured on P.C.Board with Size 0.2"×0.2" (5mm×5mm) Copper Pad Areas.

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



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

Fig.1 Forward Current Derating Curve

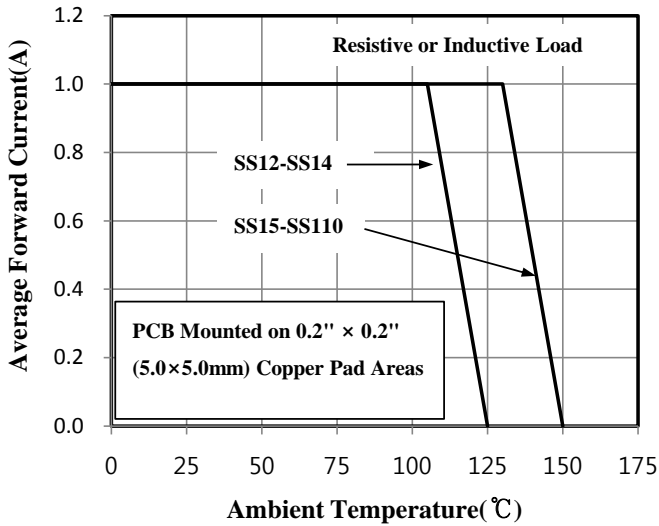


Fig.2 Maximum Non-Repetitive Peak Forward Surge Current

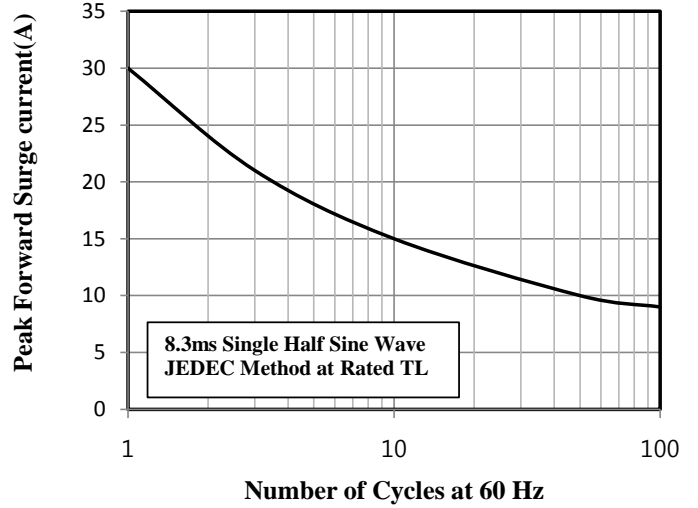


Fig.3 Typical Instantaneous Forward Characteristics

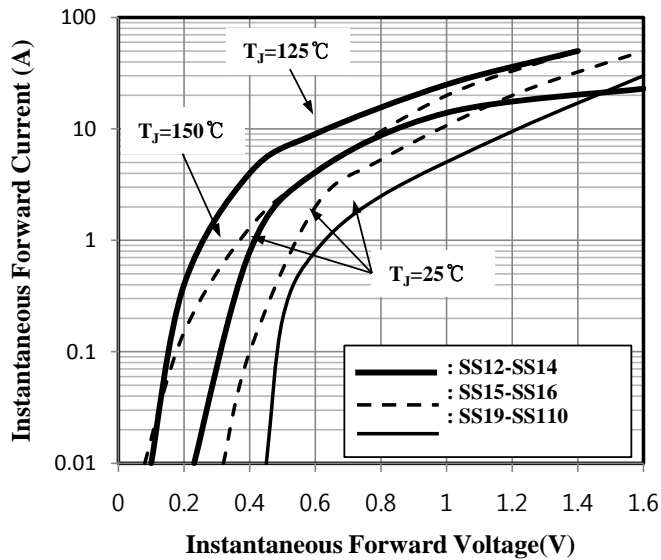


Fig.4 Typical Junction Capacitance

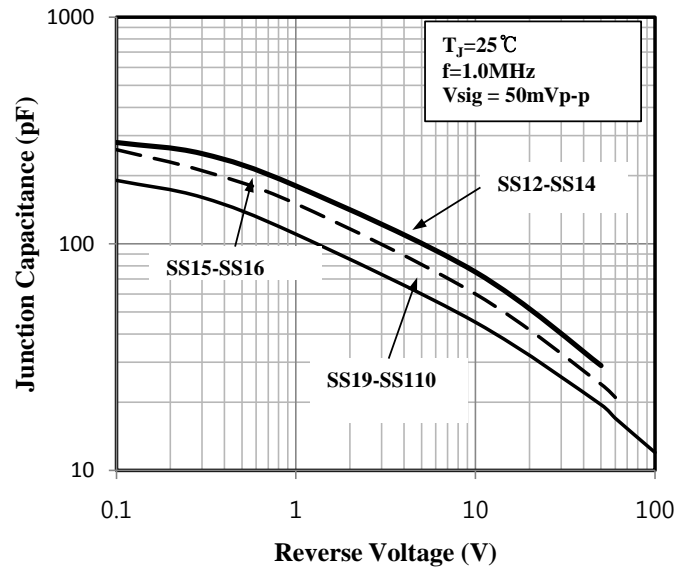


Fig.5 Typical Reverse Characteristics

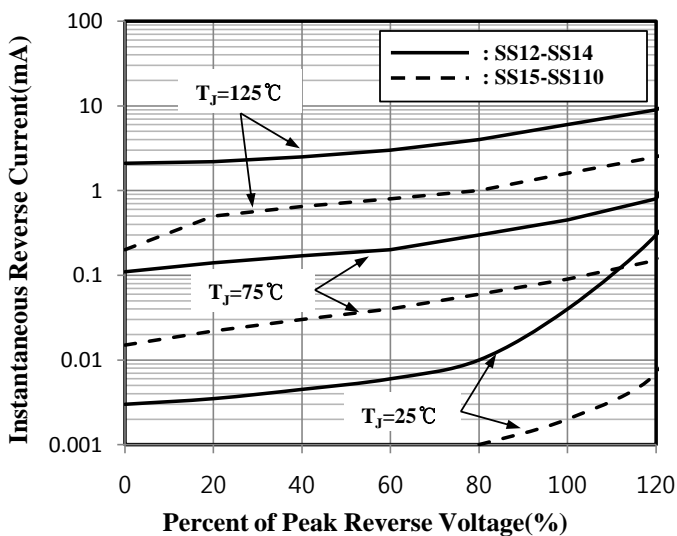


Fig.6 Typical Capacitance

