SS12A-SS120A

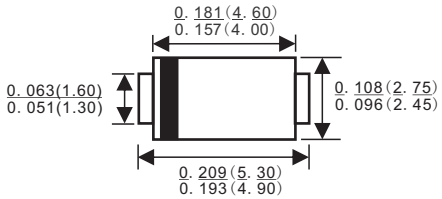
1.0AMP. Surface Mount Schottky Barrier Rectifiers

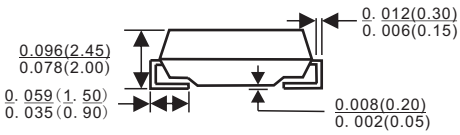


Features

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

SMA/DO-214AC





Dimensions in inches and(millimeters)

Mechanical Data

- Case: JEDEC SMA/DO-214AC Molded plastic
- Terminals: Pure tin plated, lead free
- Polarity: Indicated by cathode band
- Packaging: 12mm tape
- 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%

Parameter	Symbol	SS 12A	SS 13A	SS 14A	SS 15A	SS 16A	SS 18A	SS 110A	SS 115A	SS 120A	Units
Marking code		**SS 12**	**SS 13**	**SS 14**	**SS 15**	**SS 16**	**SS 18**	**SS 110**	**SS 115**	**SS 120**	
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	20	30	40	50	60	80	100	150	200	V
Maximum RMS Voltage	V_{RMS}	14	21	28	35	42	56	70	105	150	V
Maximum DC Blocking Voltage	V_{DC}	20	30	40	50	60	80	100	150	200	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) IF= 1.0A @ 25°C	V_F	0.55			0.70		0.85				V
Maximum DC Reverse Current @ T_A =25 °C	I_R	0.2					0.01				mA
atRated DC Blocking Voltage @ T_A=125 °C		10			5.0		2.0				mA
Maximum DC Reverse Current at VR=33V & T_A=50 °C	HT_{IR}	–				5.0					uA
Typical Junction Capacitance (Note 3)	Cj	50									pF
Typical Thermal Resistance (Note 2)	$R_{\Theta JL}$	28									°C/W
	$R_{\theta JA}$	88									
Operating Temperature Range	T_J	-55 to +150					-55 to +175				°C
Storage Temperature Range	T_{STG}	-55 to +150					-55 to +175				°C

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

SS12A-SS120A

1.0AMP. Surface Mount Schottky Barrier Rectifiers

RATINGS AND CHARACTERISTIC CURVES (SS12 THRU SS120)

FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

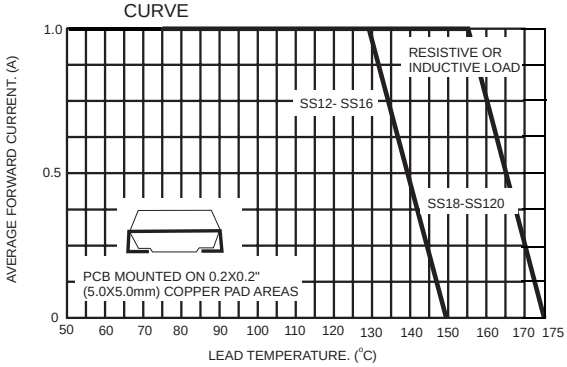


FIG.2- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

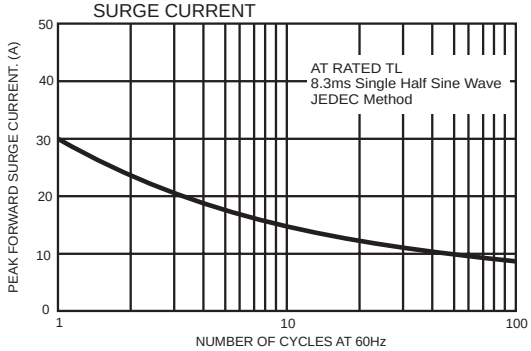


FIG.3- TYPICAL FORWARD CHARACTERISTICS

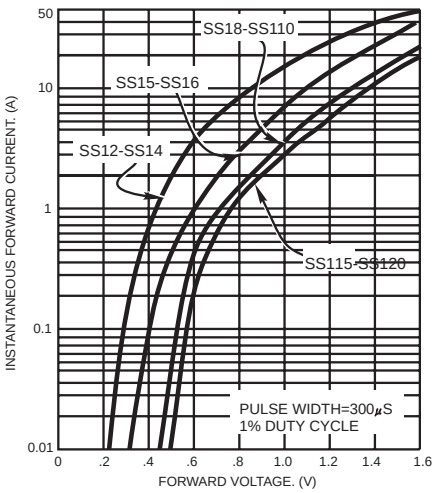


FIG.4- TYPICAL REVERSE CHARACTERISTICS

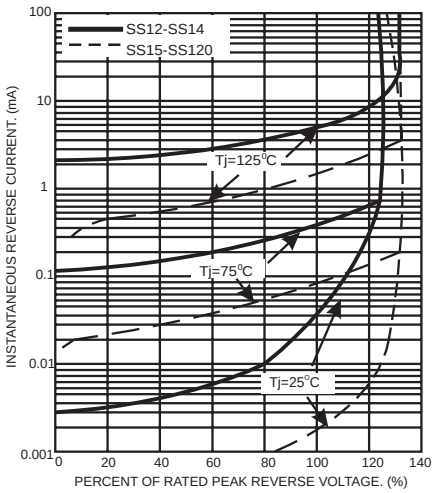


FIG.5- TYPICAL JUNCTION CAPACITANCE

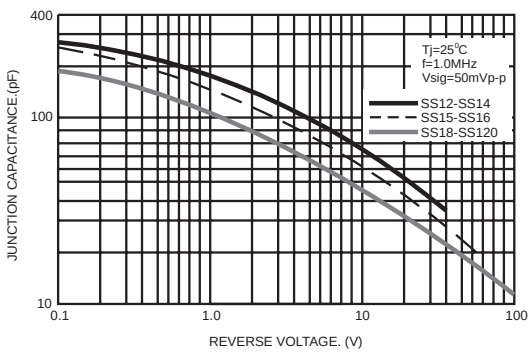
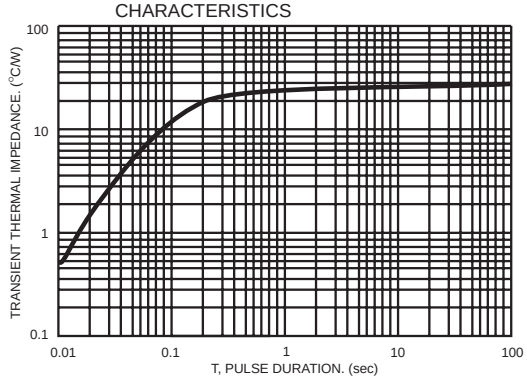


FIG.6- TYPICAL TRANSIENT THERMAL CHARACTERISTICS



PACKAGE	SPQ/PCS	CARTON SPQ/PCS	CARTON SIZE/CM	CARTON GW/KG	CARTON NW/KG
SMA	5000/REEL	80000	36X30.6X31	12.00	11.00