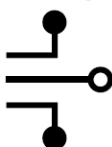


SS12A-SS120A

1.0AMP. Surface Mount Schottky Barrier Rectifiers

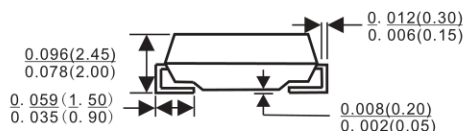
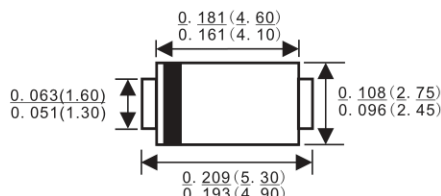
discretec 



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.

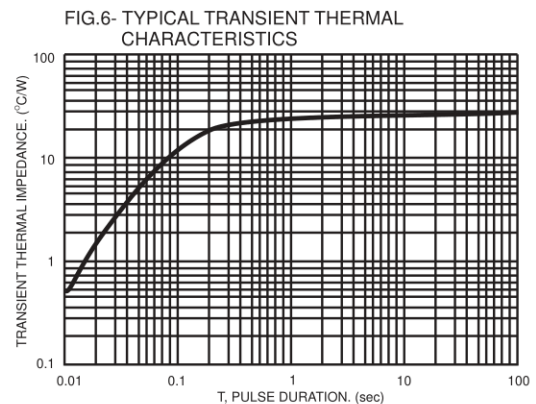
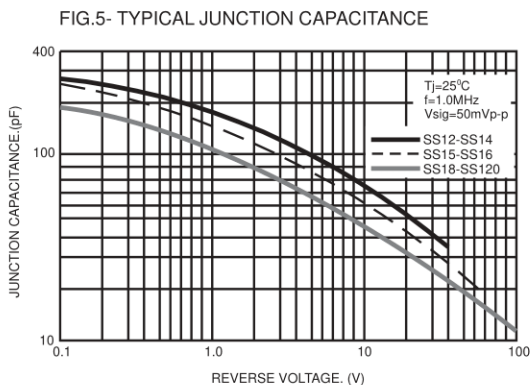
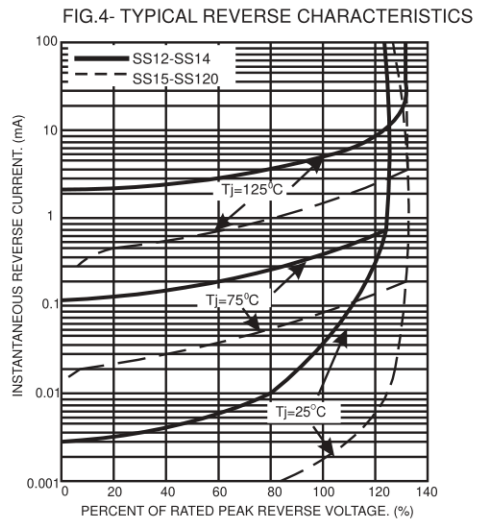
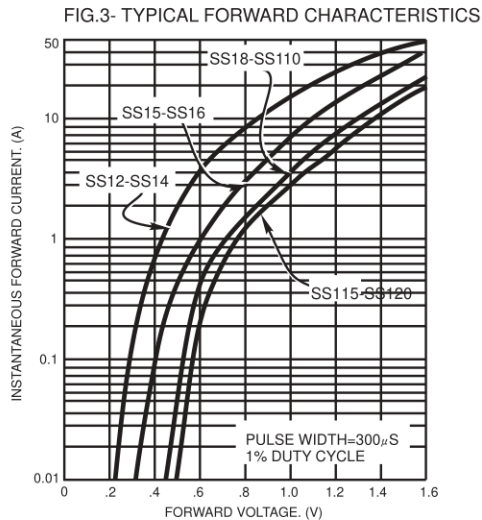
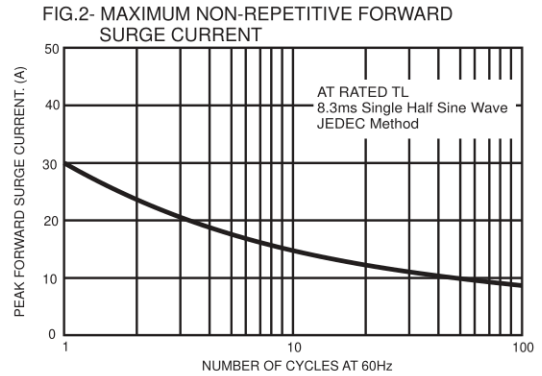
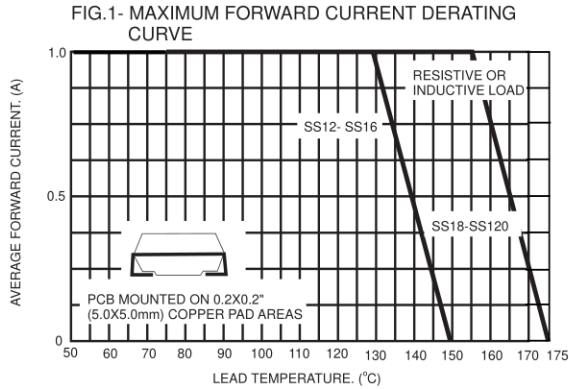
For capacitive load, derate current by 20%

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	90	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 atRated DC Blocking Voltage @ T _A =125°C	I _R	0.4					0.1			mA		
		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)	C _j	50										pF
Typical Thermal Resistance (Note 2)	R _{ΘJL}	28										°C/W
	R _{ΘJA}	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



RATINGS AND CHARACTERISTIC CURVES (SS12 THRU SS120)



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