



SSC SSS12DA THRU SSC SSS120DA

Schottky Barrier Diode

● Features

- ✧ Reverse Voltage - 20 to 200 V
- ✧ Forward Current - 1.0A
- ✧ Low profile package
- ✧ Ideal for automated placement
- ✧ Ultrafast reverse recovery time
- ✧ Low power losses, high efficiency
- ✧ Low forward voltage
- ✧ High surge capability
- ✧ UL Flammability Classification Rating 94V-0
- ✧ High temperature soldering: 260°C/10 seconds at terminals

● PIN configuration



SMA/DO-214AC



Circuit Diagram

● Applications

- ✧ Low Voltage
- ✧ High-Frequency Inverters
- ✧ Free Wheeling
- ✧ Polarity Protection



Marking

(SS14:SSC SSS14DA Marking Code)

● Absolute maximum rating @T_A=25°C

Parameter	Symbol	SSCSSS							Unit
		12DA	14DA	16DA	18DA	110DA	115DA	120DA	
Maximum Peak Repetitive Peak Reverse Voltage	V _{RRM}	20	40	60	80	100	150	200	V
Maximum RMS Voltage	V _{RMS}	14	28	42	56	70	105	140	V
Maximum DC Blocking Voltage	V _{DC}	20	40	60	80	100	150	200	V
Maximum Average Forward Rectified Current	I _{F(AV)}	1.0							A
Non-repetitive Peak Forward Surge Current @t=8.3ms	I _{FSM}	30.0							A
Max Instantaneous Forward Voltage at 1 A	V _F	0.55		0.75	0.85		0.95		V
Maximum DC Reverse Current Ta = 25 °C at Rated DC Blocking Voltage Ta =125 °C	I _R	0.2 10			0.05 5			mA	
Operating Temperature	T _J	-55 ~ +125			-55 ~ +150				°C
Storage Temperature	T _{STG}	-55 ~ +150							°C



● Typical Performance Characteristics

FIG. 1- DERATING CURVE OUTPUT RECTIFIED CURRENT

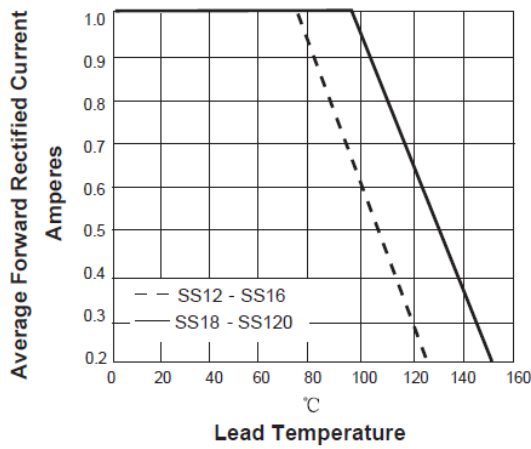


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG

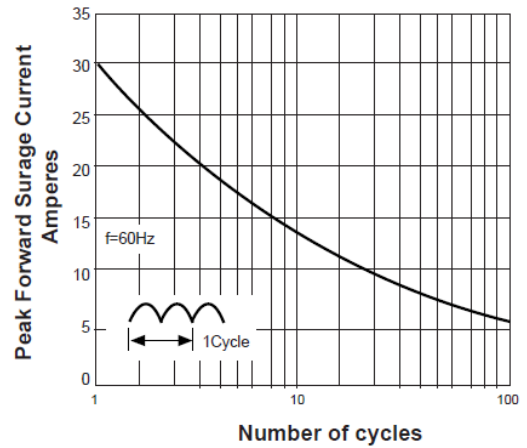


FIG. 3-TYPICAL FORWARD VOLTAGE CHARACTERISTICS

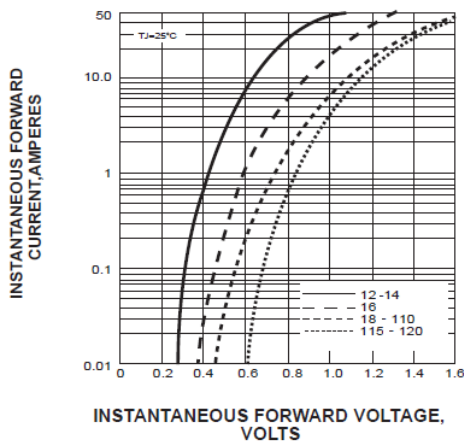
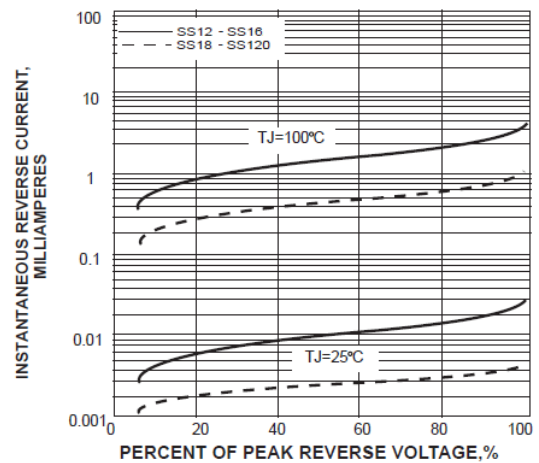


FIG. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS





● Package Information

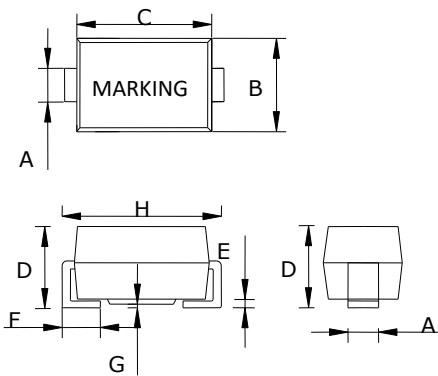
Ordering Information

Device	Package	Marking	Qty per Reel	Reel Size
SSC SSS12DA	SMA/DO-214AC	SS12	5000	11 Inch
SSC SSS14DA	SMA/DO-214AC	SS14	5000	11 Inch
SSC SSS16DA	SMA/DO-214AC	SS16	5000	11 Inch
SSC SSS18DA	SMA/DO-214AC	SS18	5000	11 Inch
SSC SSS110DA	SMA/DO-214AC	SS110	5000	11 Inch
SSC SSS115DA	SMA/DO-214AC	SS115	5000	11 Inch
SSC SSS120DA	SMA/DO-214AC	SS120	5000	11 Inch

Mechanical Data

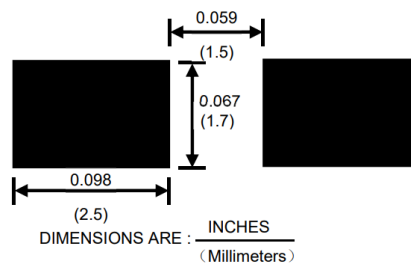
Case: SMA/DO-214AC

Case Material: Molded Plastic. UL Flammability



DIM	Millimeters		
	Min	Nom	Max
A	1.40	1.50	1.60
B	2.50	2.67	2.90
C	4.00	4.40	4.50
D	2.00	2.25	2.45
E	0.05	0.200	0.203
F	0.76	1.14	1.52
G	-	-	0.203
H	4.90	5.0	5.30

Recommended Pad outline





DISCLAIMER

SSCSEMI RESERVES THE RIGHT TO MAKE CHANGES WITHOUT FURTHER NOTICE TO ANY PRODUCTS HEREIN TO IMPROVE RELIABILITY, FUNCTION OR DESIGN. SSCSEMI DOES NOT ASSUME ANY LIABILITY ARISING OUT OF THE APPLICATION OR USE OF ANY PRODUCT OR CIRCUIT DESCRIBED HEREIN; NEITHER DOES IT CONVEY ANY LICENCE UNDER ITS PATENT RIGHTS, NOR THE RIGHTS OF OTHERS.

THE GRAPHS PROVIDED IN THIS DOCUMENT ARE STATISTICAL SUMMARIES BASED ON A LIMITED NUMBER OF SAMPLES AND ARE PROVIDED FOR INFORMATIONAL PURPOSE ONLY. THE PERFORMANCE CHARACTERISTICS LISTED IN THEM ARE NOT TESTED OR GUARANTEED. IN SOME GRAPHS, THE DATA PRESENTED MAY BE OUTSIDE THE SPECIFIED OPERATING RANGE (E.G. OUTSIDE SPECIFIED POWER SUPPLY RANGE) AND THEREFORE OUTSIDE THE WARRANTED RANGE.

OUR PRODUCT SPECIFICATIONS ARE ONLY VALID IF OBTAINED THROUGH THE COMPANY'S OFFICIAL WEBSITE, CRM SYSTEM, OR OUR SALES PERSONNEL CHANNELS. IF CHANGES OR SPECIAL VERSIONS ARE INVOLVED, THEY MUST BE STAMPED WITH A QUALITY SEAL AND MARKED WITH A SPECIAL VERSION NUMBER TO BE VALID.