



## SSC5552DB THRU SSC55520DB

### Schottky Barrier Diode

#### ● Features

- ✧ Reverse Voltage - 20 to 200 V
- ✧ Forward Current - 5.0A
- ✧ 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



**SMB/DO-214AA**



**Circuit Diagram**



**Marking**

(SS54:SSC5554DB Marking Code)

#### ● Applications

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

#### ● Mechanical data

- ✧ Device meets MSL 3 requirements

#### ● Absolute maximum rating @T<sub>A</sub>=25°C

Parameter	Symbol	SSC555								Unit
		52DB	54DB	545DB	56DB	58DB	510DB	515DB	520DB	
Maximum Peak Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	20	40	45	60	80	100	150	200	V
Maximum RMS Voltage	V <sub>RMS</sub>	14	28	31.5	42	56	70	105	140	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	20	40	45	60	80	100	150	200	V
Maximum Average Forward Rectified Current	I <sub>F(AV)</sub>	5.0								A
Non-repetitive Peak Forward Surge Current @t=8.3ms	I <sub>FSM</sub>	120.0								A



# SSCSS5XDB

Maximum instantaneous forward voltage at 8.0A	V <sub>F</sub>	0.55	0.70	0.85	0.95	V
Maximum DC Reverse Current T <sub>a</sub> = 25 °C at Rated DC Blocking Voltage T <sub>a</sub> = 125 °C	I <sub>R</sub>	0.2			0.05	mA
		10			5	
Operating Temperature	T <sub>J</sub>	-55 ~ +125				°C
Storage Temperature	T <sub>STG</sub>	-55 ~ +150				°C

## ● Typical Performance Characteristics

FIG. 1- DERATING CURVE OUTPUT RECTIFIED CURRENT

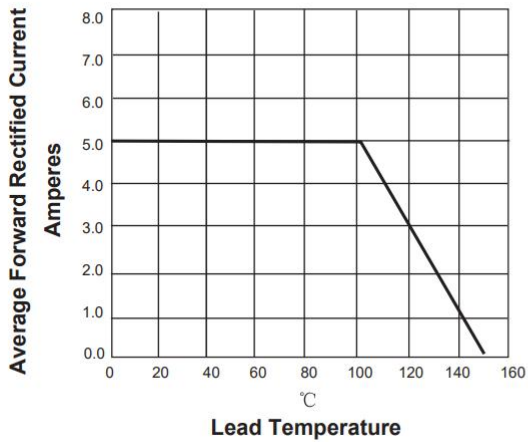


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG

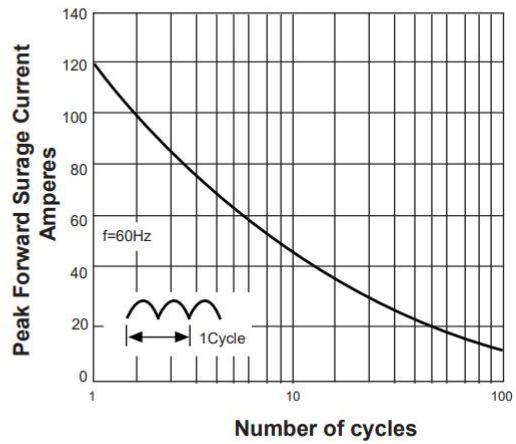


FIG. 3-TYPICAL FORWARD VOLTAGE CHARACTERISTICS

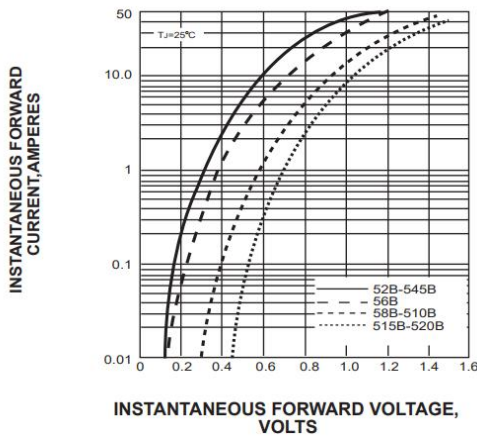
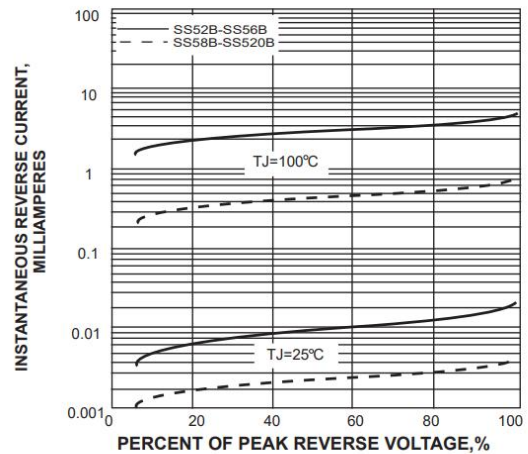


FIG. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS





## ● Package Information

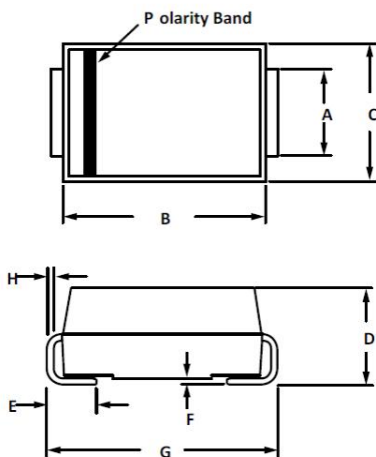
### Ordering Information

Device	Package	Marking	Qty per Reel	Reel Size
SSCSS52DB	SMB/DO-214AA	SS52	3000	13 Inch
SSCSS54DB	SMB/DO-214AA	SS54	3000	13 Inch
SSCSS545DB	SMB/DO-214AA	SS54	3000	13 Inch
SSCSS56DB	SMB/DO-214AA	SS56	3000	13 Inch
SSCSS58DB	SMB/DO-214AA	SS58	3000	13 Inch
SSCSS510DB	SMB/DO-214AA	SS510	3000	13 Inch
SSCSS515DB	SMB/DO-214AA	SS515	3000	13 Inch
SSCSS520DB	SMB/DO-214AA	SS520	3000	13 Inch

### Mechanical Data

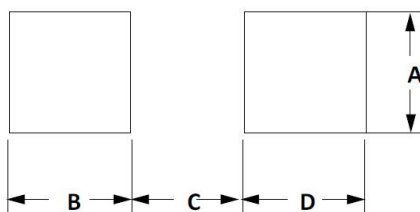
Case: SMB/DO-214AA

Case Material: Molded Plastic. UL Flammability



DIM	Millimeters	
	Min	Max
A	1.90	2.1
B	4.22	4.70
C	3.40	3.94
D	2.00	2.50
E	0.90	1.42
F	0.00	0.23
G	5.21	5.59
H	0.15	0.31

### Recommended Pad outline



DMI	Millimeters	
	Min	Max
A	2.15	
B	1.45	
C	-	2.55
D	1.45	



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