

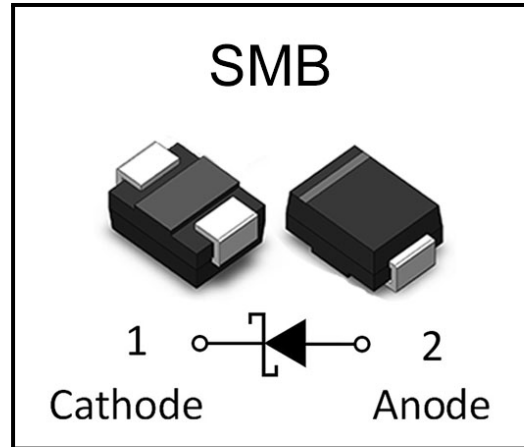
SS52-SS520

Schottky Barrier Diode

Features

- For surface mounted applications
- Metal silicon junction, majority carrier conduction
- Low power loss, high efficiency
- Built-in strain relief, ideal for automated placement
- High forward surge current capability
- High temperature soldering guaranteed:
250°C/10 seconds at terminals

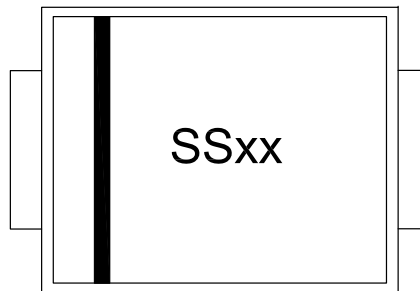
Package



Description

- Case: JEDEC DO-214AA molded plastic
- Terminals: Axial leads. Solderable per MIL-STD-750 Method 2026
- Polarity: Color band denotes cathode
- Mounting Position: Any

Marking



Ordering information

Part Number	SS52	SS53	SS54	SS55	SS56	SS58	SS510	SS515	SS520
Marking	SS52	SS53	SS54	SS55	SS56	SS58	SS510	SS515	SS520
Base qty	3K	3K	3K	3K	3K	3K	3K	3K	3K



SS52-SS520

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Maximum Ratings and Electrical Characteristics@T_A=25°C unless otherwise noted

Symbol	Parameters	SS52	SS53	SS54	SS55	SS56	SS58	SS510	SS515	SS520	Units
V _{RRM}	Maximum Repetitive Peak Reverse Voltage	20	30	40	50	60	80	100	150	200	V
V _{RMS}	Maximum RMS Voltage	14	21	28	35	42	56	70	105	140	V
V _{DC}	Maximum DC Blocking Voltage	20	30	40	50	60	80	100	150	200	V
I _(AV)	Maximum Average Forward Rectified Current at T _L	5.0									A
I _{FSM}	Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load(JEDEC Method)	150									A
V _F	Maximum Instantaneous Forward Voltage at 5.0A	0.45	0.55	0.70			0.85				V
I _R	Maximum DC Reverse current T _A =25°C at Rated DC Blocking Voltage T _A =100°C	0.5									mA
		20			10						
C _J	Typical Junction Capacitance (Note1)	800			500						pF
R _{θJA}	Typical Thermal Resistance(Note2)	55.0									°C/W
T _J	Operating Temperature Range	-55 to +125			-55 to +150						°C
T _{STG}	Storage Temperature Range	-55 to +150									°C

Note: Measured at 1MHZ and applied reverse voltage of 4.0V D.C.





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Typical Performance Characteristics ($T_J = 25^\circ\text{C}$, unless otherwise noted)

Figure 1: Forward Current Derating Curve

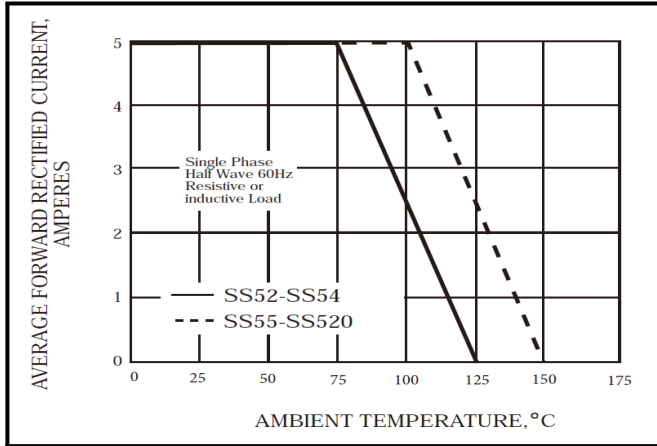


Figure 2: Maximum Non-Repetitive Peak Forward Surge Current

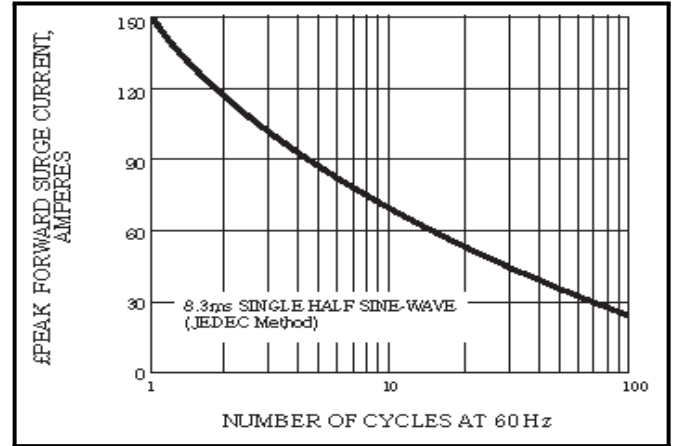


Figure 3: Instantaneous Forward Characteristics

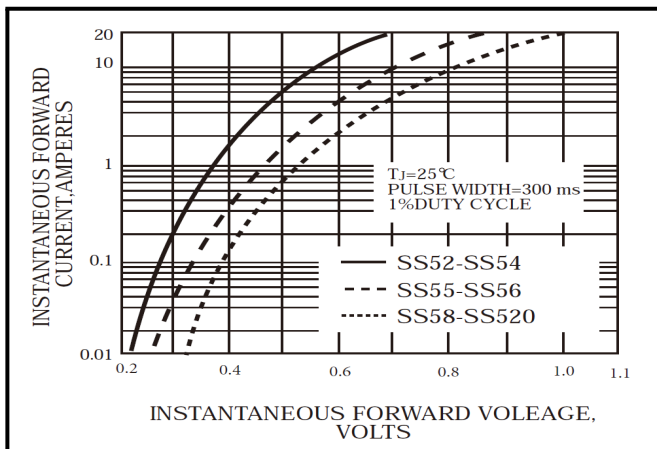


Figure 4: Reverse Characteristics

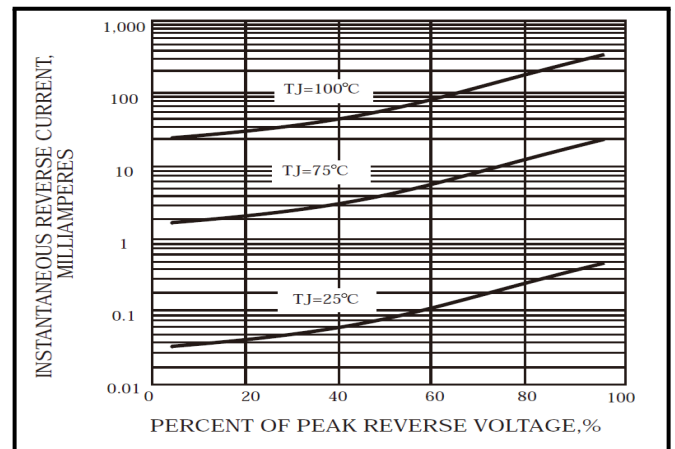


Figure 5: Junction Capacitance

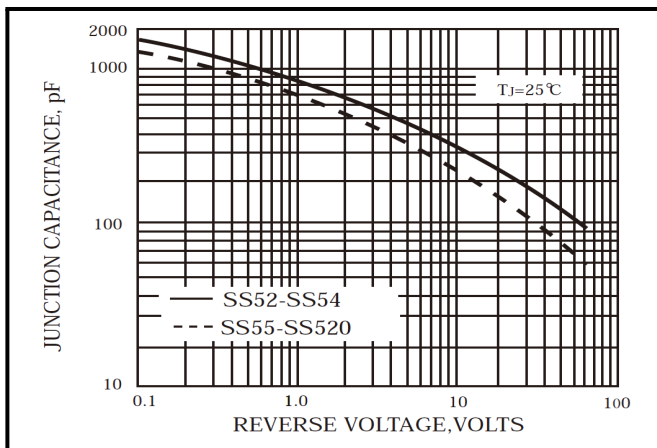
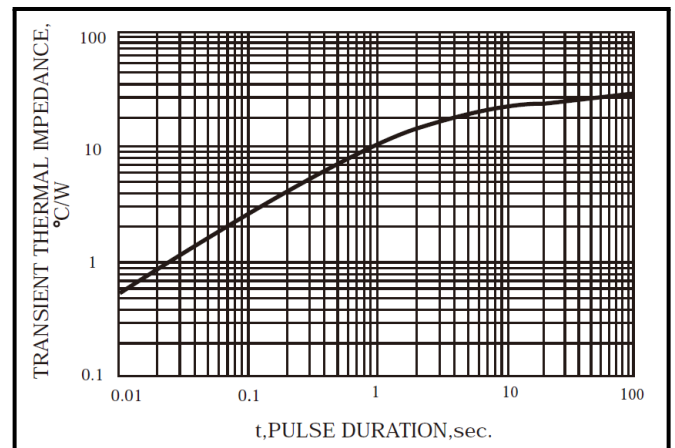


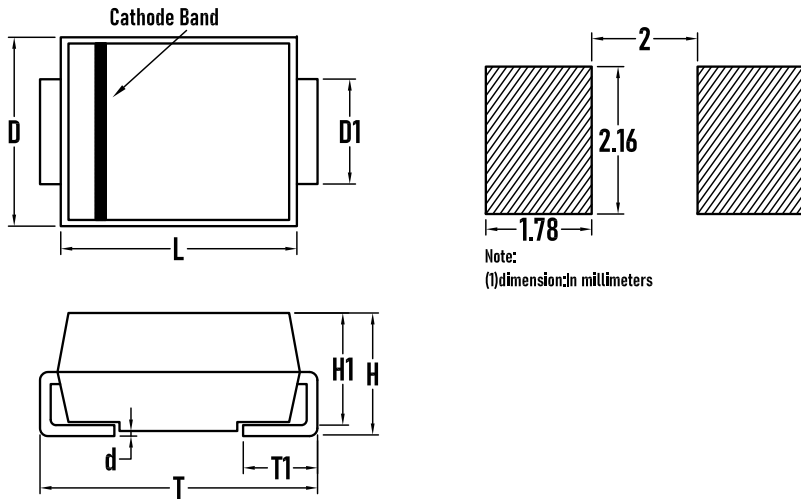
Figure 6: Transient Thermal Impedance



SS52-SS520

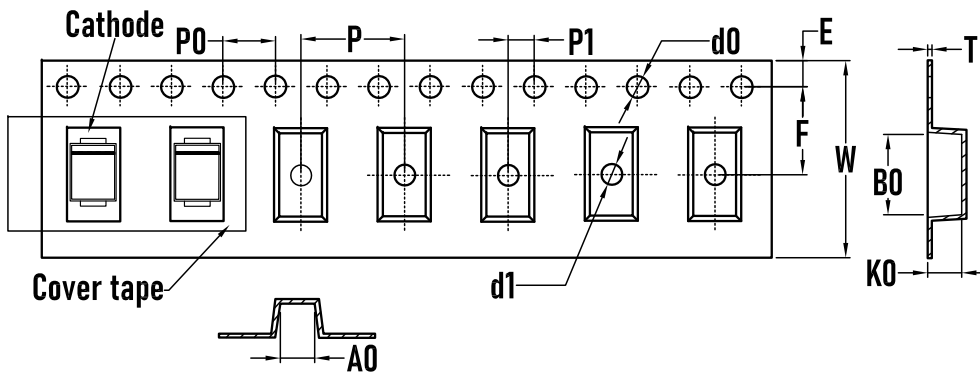
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Outline Drawing - SMB



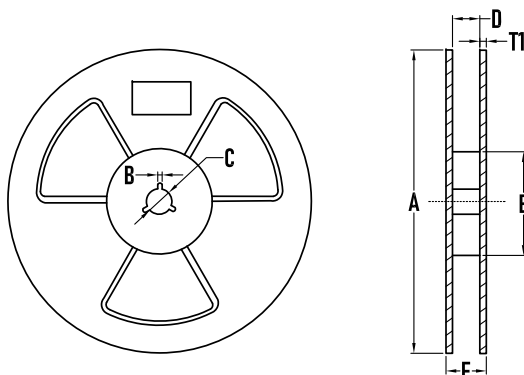
SYMBOL	MILLIMETER		Inches	
	MIN	MAX	MIN	MAX
D	3.5	3.7	0.138	0.146
D1	1.9	2.1	0.075	0.083
T	5.1	5.48	0.201	0.216
T1	1.0	1.6	0.039	0.063
d	—	0.002	—	0.008
H1	2.15	2.35	0.085	0.093
H	2.2	2.45	0.087	0.096
L	4.4	4.6	0.173	0.181

Packaging Tape - SMB



SYMBOL	MILLIMETER
A0	3.60±0.1
B0	5.45±0.1
d0	1.50±0.1
d1	1.50±0.1
E	1.75±0.1
F	5.50±0.1
K0	2.30±0.1
P	8.00±0.1
P0	4.00±0.1
P1	2.00±0.1
W	12.00±0.1
T	0.22±0.02

Packaging Reel



SYMBOL	MILLIMETER
A	323±2
B	3.0±0.2
C	15.0±0.5
D	13±2
E	73±2
T1	2.2±0.2
Quantity	3000PCS

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Specifications are subject to change without notice.

Please refer to <http://www.born-tw.com> for current information.

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