

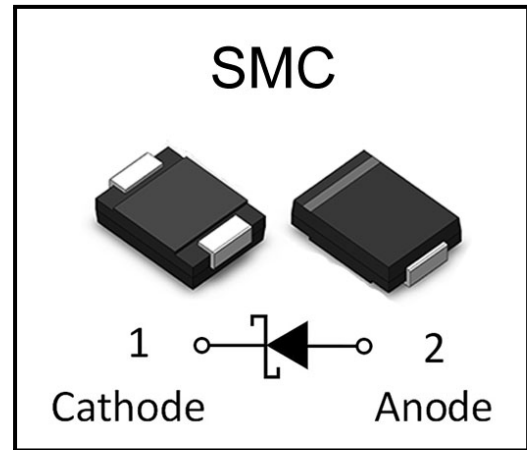
SS52-SS520

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

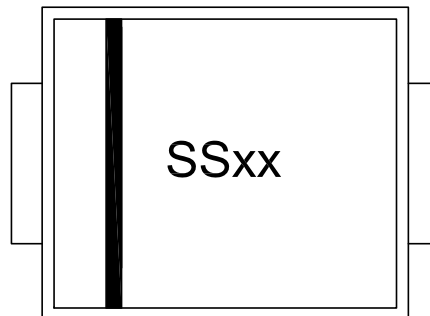
Package



Description

- Case: JEDEC DO-214AB 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	SS54	SS56	SS58	SS510	SS515	SS520
Marking	SS52	SS54	SS56	SS58	SS510	SS515	SS520
Base qty	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	SS54	SS56	SS58	SS510	SS515	SS520	Units
V _{RRM}	Maximum Repetitive Peak Reverse Voltage	20	40	60	80	100	150	200	V
V _{RMS}	Maximum RMS Voltage	14	28	42	56	70	105	140	V
V _{DC}	Maximum DC Blocking Voltage	20	40	60	80	100	150	200	V
I _{F(AV)}	Maximum average forward Rectified Current	5.0							A
I _{FSM}	Non-repetitive peak forward surge current 8.3 ms singlehalf sine-wave	100							A
V _F	Maximum Instantaneous Forward Voltage at 5.0A	0.55		0.70	0.85		0.95		V
I _R	Maximum DC Reverse current T _A =25°C at Rated DC Blocking Voltage T _A =100°C	0.5			0.1				mA
		10			5				
C _j	Typical junction capacitance	280		220	180		100		pF
R _{θJA}	Typical Thermal Resistance ⁽¹⁾	47							°C/W
T _J	Operating Temperature Range	-55 to +150							°C
T _{STG}	Storage Temperature Range	-55 to +150							
R _{θJA}	Thermal Resistance ⁽¹⁾	47							°C/W
R _{θJL}		13							

Note:(1) Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B. with 0.6" x 0.6" (16 mm x 16 mm) copper pad areas.



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

Figure 1: I_O - T_A Curve

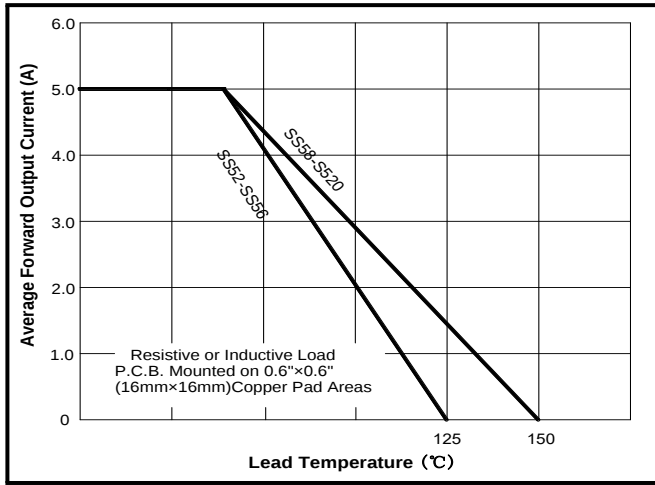


Figure 2: Forward Surge Current Capability

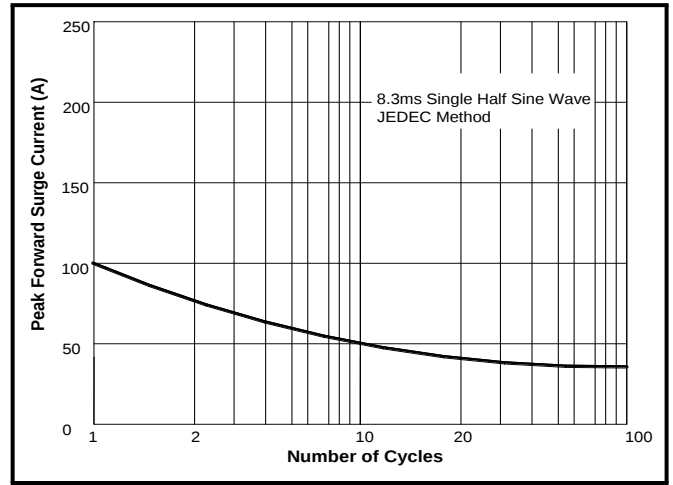


Figure 3: Forward Voltage

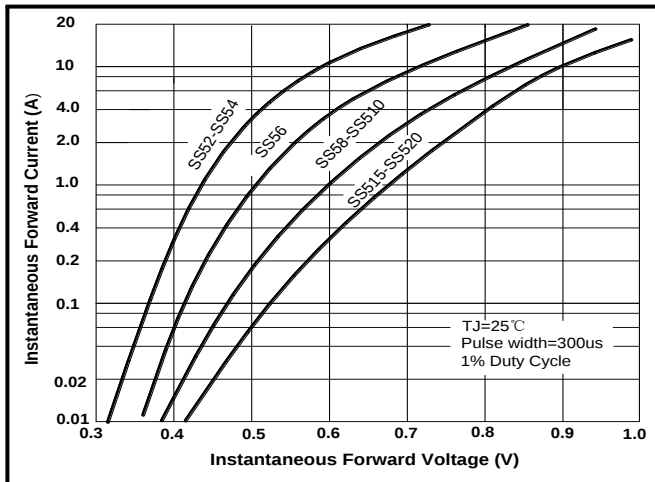
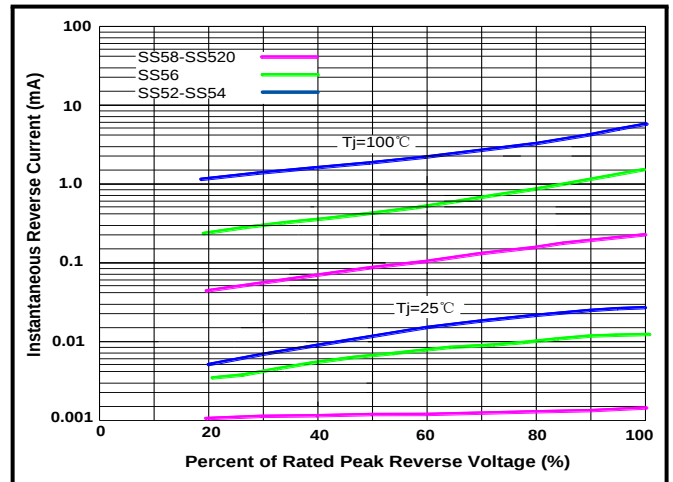


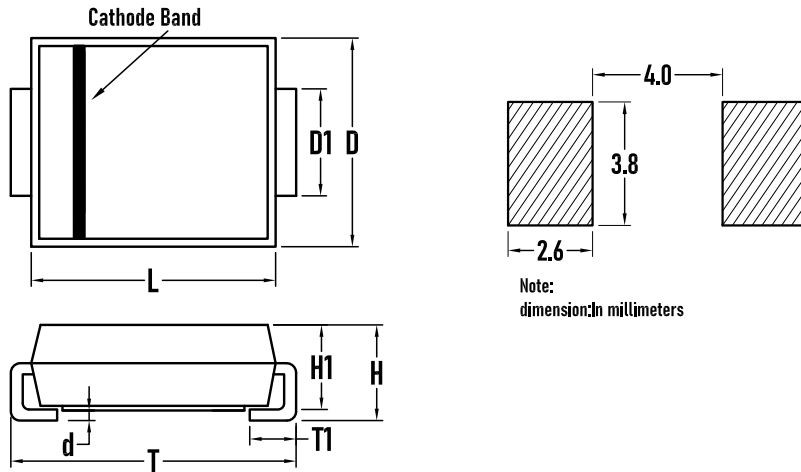
Figure 4: Typical Reverse Characteristics



SS52-SS520

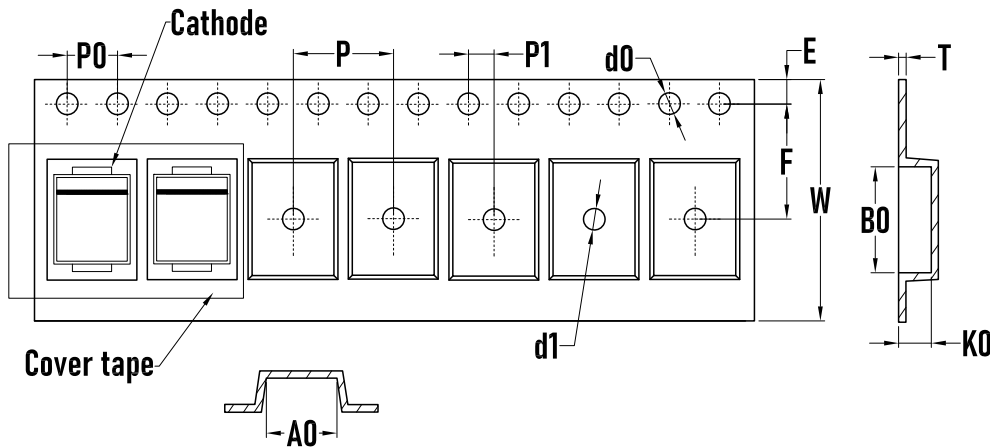
Schottky Barrier Diode

Package Mechanical Data - SMC



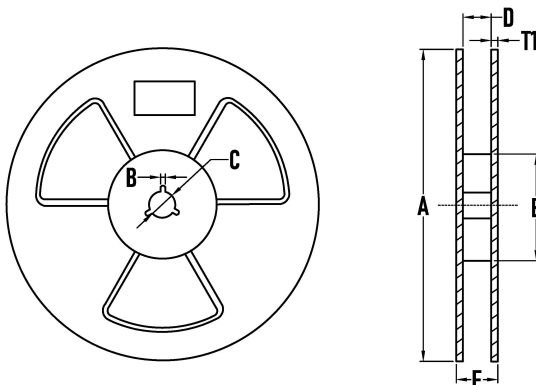
SYMBOL	MILLIMETER		Inches	
	MIN	MAX	MIN	MAX
D	5.5	6.1	0.217	0.240
D1	2.7	3.3	0.106	0.130
T	7.4	8.4	0.291	0.331
T1	0.8	1.6	0.031	0.063
d	—	0.3	—	0.012
H1	2.0	2.6	0.079	0.102
H	2.1	2.7	0.083	0.106
L	6.5	7.1	0.256	0.280

Packaging Tape - SMC



SYMBOL	MILLIMETER
A0	6.00±0.1
B0	8.25±0.02
d0	1.50±0.1
d1	1.50±0.1
E	1.75±0.1
F	7.50±0.1
K0	2.70±0.1
P	8.00±0.1
P0	4.00±0.1
P1	2.00±0.05
W	16.00±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	16±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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