BORN SEMICONDUCTOR

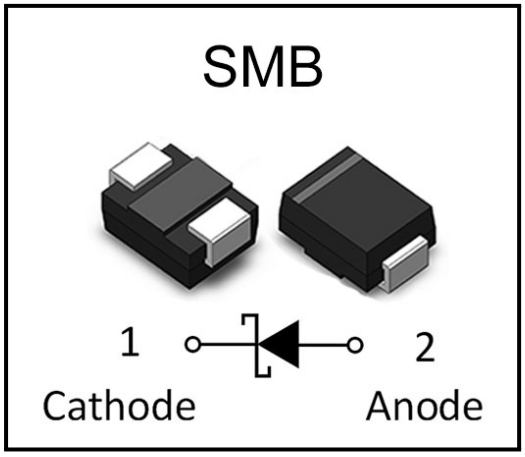
SS52-SS520

Schottky Barrier Diode

Features

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

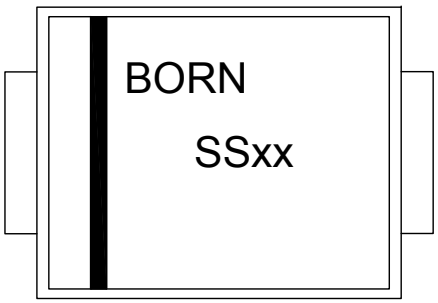
Package



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

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SS52-SS520

Schottky Barrier Diode

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

Symbol	Parameters	SS 52	SS 53	SS 54	SS 55	SS 56	SS 58	SS 510	SS 515	SS 520	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
$I_{F(AV)}$	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	0.5					0.1				mA
	at Rated DC Blocking Voltage T_A=100°C	10					5				
C_J	Typical Junction Capacitance	800			500						pF
T_J	Operating Temperature Range	-55 to +150									°C
T_{STG}	Storage Temperature Range	-55 to +150									°C
$R_{\theta JA}$	Thermal Resistance(1)	58									°C/W
$R_{\theta JL}$		20									

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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SS52-SS520

Schottky Barrier Diode

Typical Performance Characteristics(T_J = 25 °C, unless otherwise noted)

Figure 1:I_O-T_L Curve

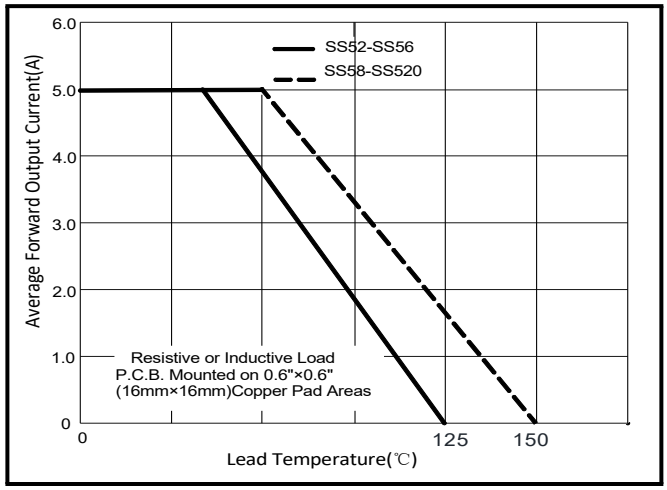


Figure 2:Surge Forward Current Capability

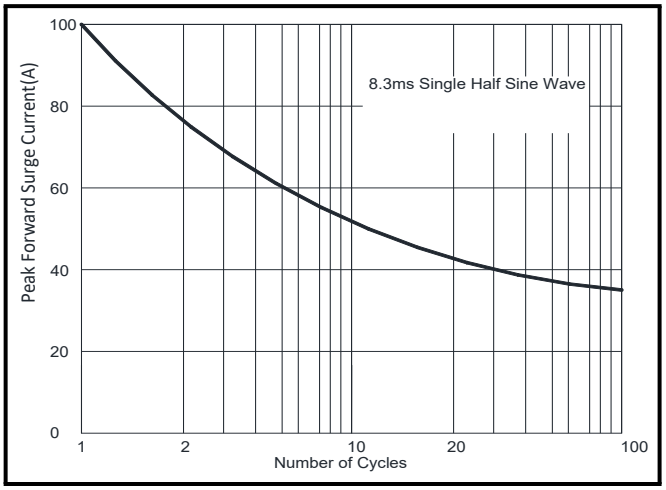


Figure 3:Forward Voltage

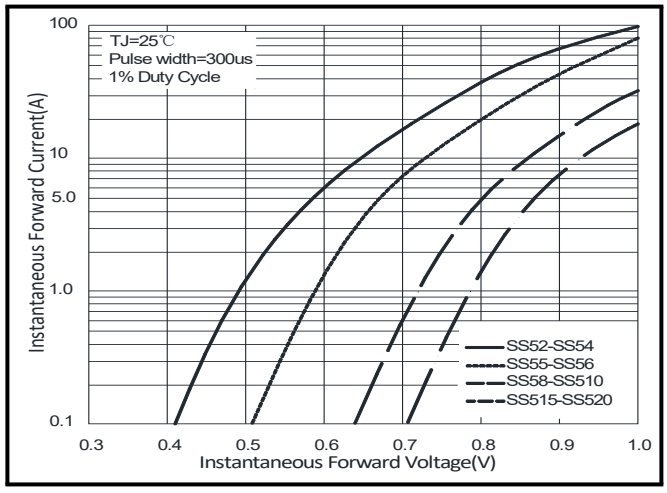
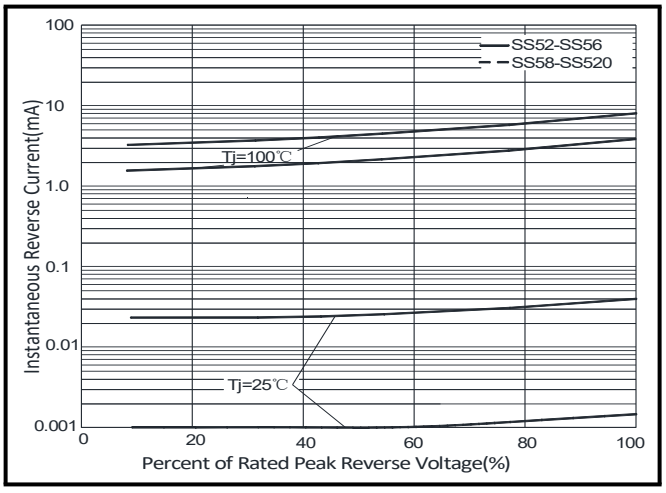


Figure 4:Typical Reverse Characteristics



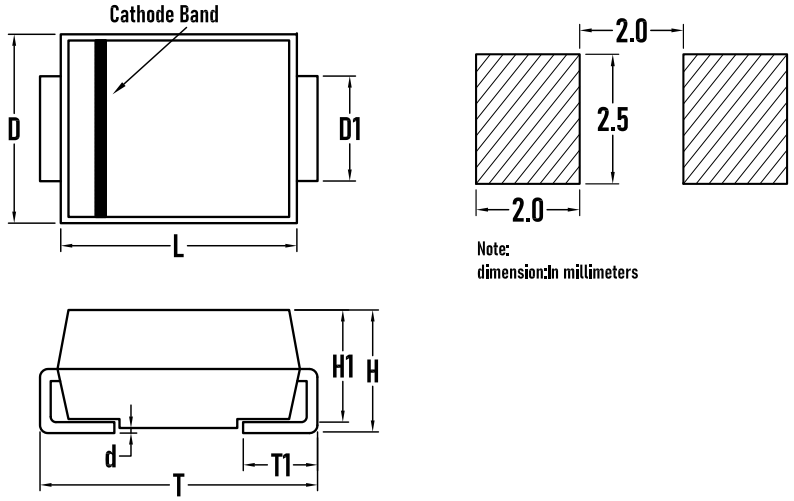
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SS52-SS520

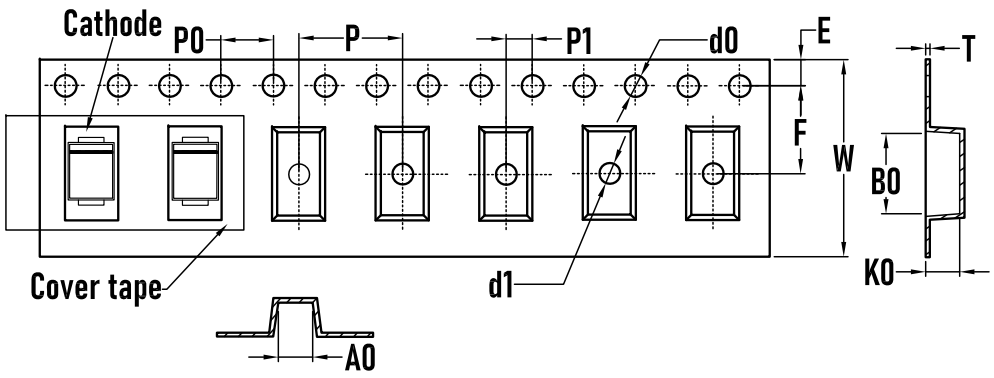
Schottky Barrier Diode

Outline Drawing - SMB



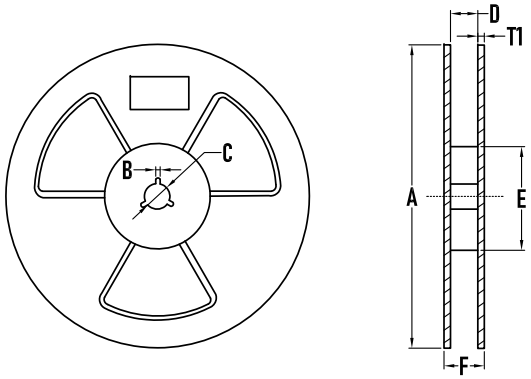
SYMBOL	MILLIMETER		Inches	
	MIN.	MAX.	MIN.	MAX.
D	3.3	3.9	0.130	0.154
D1	1.7	2.3	0.067	0.091
T	5.1	5.7	0.201	0.224
T1	0.8	1.6	0.031	0.063
d	–	0.3	–	0.012
H1	2.0	2.4	0.079	0.094
H	2.1	2.5	0.083	0.098
L	4.0	4.7	0.157	0.185

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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