BORN SEMICONDUCTOR

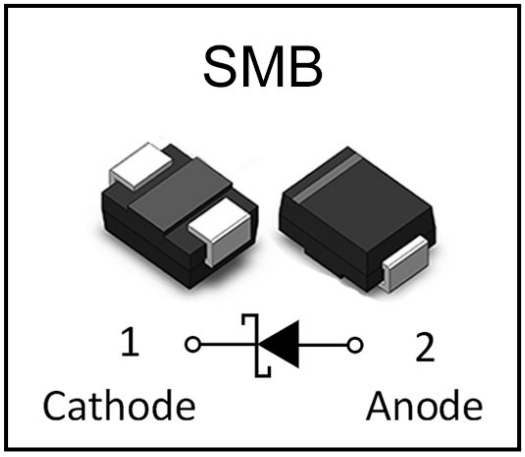
SS12-SS110

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

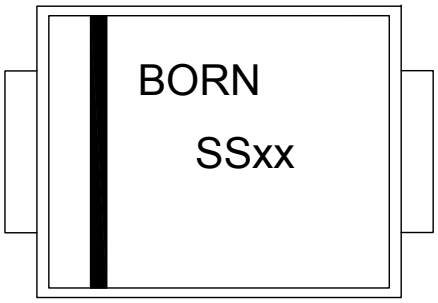
Package



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	SS12	SS13	SS14	SS15	SS16	SS18	SS110
Marking	SS12	SS13	SS14	SS15	SS16	SS18	SS110
Base qty	3K	3K	3K	3K	3K	3K	3K

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SS12-SS110

Schottky Barrier Diode

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

Symbol	Parameters	SS12	SS13	SS14	SS15	SS16	SS18	SS110	Units
V_{RRM}	Maximum Recurrent Peak Reverse Voltage	20	30	40	50	60	80	100	V
V_{RMS}	Maximum RMS Voltage	14	21	28	35	42	56	70	V
V_{DC}	Maximum DC Blocking Voltage	20	30	40	50	60	80	100	V
$I_{F(AV)}$	Maximum average forward Rectified Current	1.0							A
I_{FSM}	Non-repetitive peak forward surge current 8.3 ms singlehalf sine-wave	30							A
V_F	Maximum Forward Voltage at 1.0A DC	0.55			0.70		0.85		V
I_R	Maximum DC reverse current T_A=25°C	0.50					0.10		mA
	at rated DC blocking voltage T_A=100°C	10					5.0		
C_J	Typical Junction Capacitance	110			90				pF
T_J	Operating Junction Temperature Range	-55 to +150							°C
T_{STG}	Storage Temperature Range	-55 to +150							°C
$R_{\theta JA}$	Thermal Resistance(1)	88							°C/W
$R_{\theta JL}$		28							

Note:(1) Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B. with 0.2” x 0.2” (5.0 mm x 5.0 mm) copper pad areas

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SS12-SS110

Schottky Barrier Diode

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

Figure 1:I_O–T_L Curve

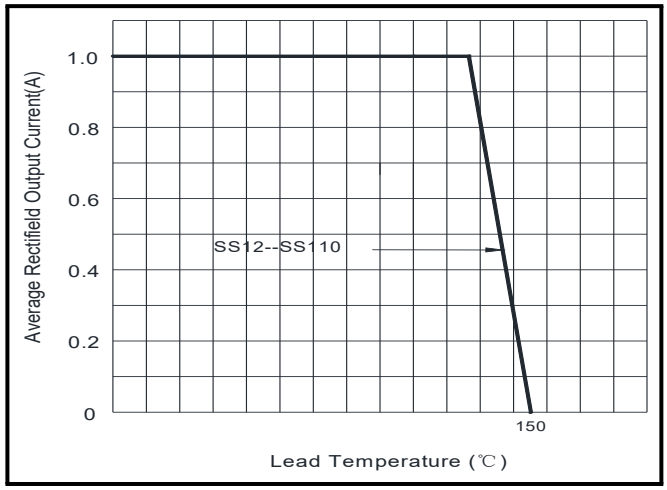


Figure 2:Surge Forward Current Capability

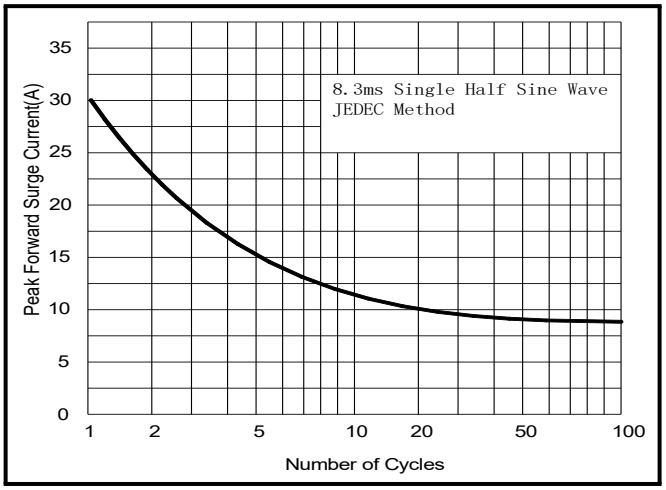


Figure 3:Typical Forward Characteristics

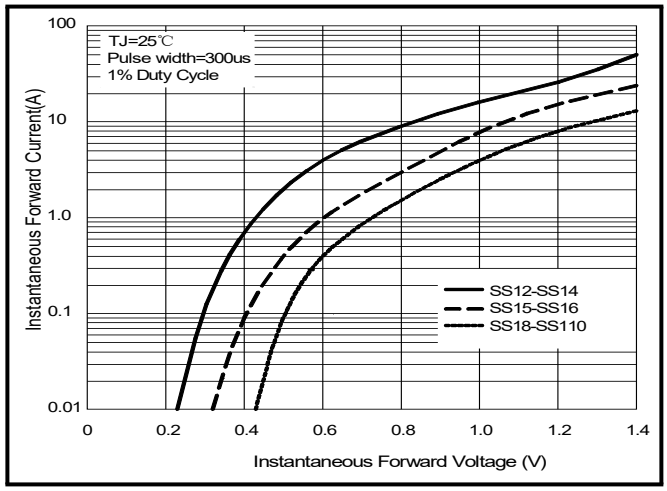
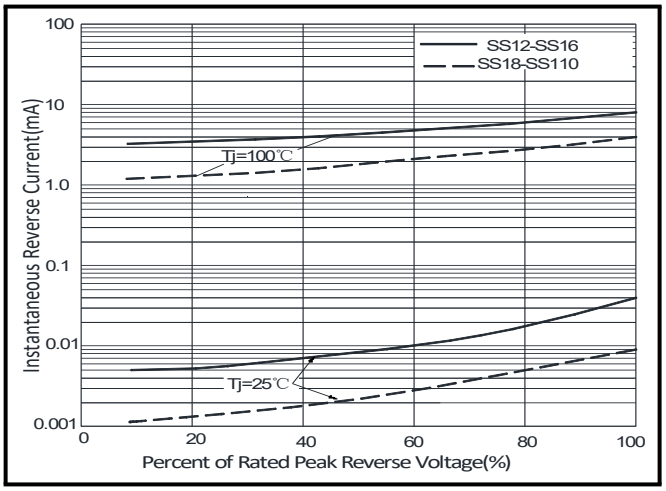


Figure 4: Typical Reverse Characteristics



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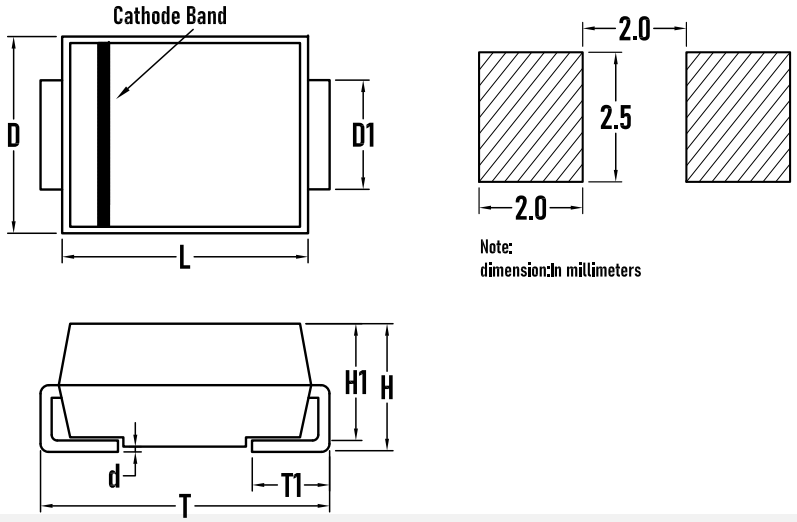
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SS12-SS110

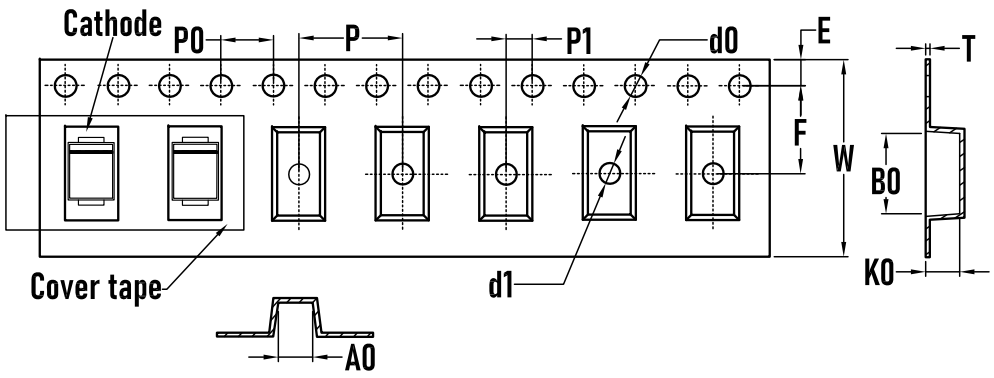
Schottky Barrier Diode

Outline Drawing - SMB



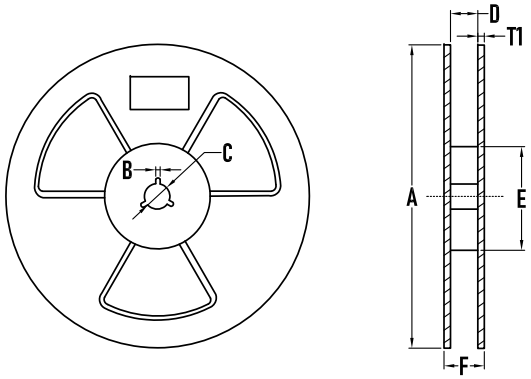
SYMBOL	MILLIMETER		Inches	
	MIN.	MAX.	MIN.	MAX.
D	3.3	3.9	0.130	0.154
D1	1.7	2.3	0.067	0.091
T	5.1	5.7	0.201	0.224
T1	0.8	1.6	0.031	0.063
d	–	0.3	–	0.012
H1	2.0	2.4	0.079	0.094
H	2.1	2.5	0.083	0.098
L	4.0	4.7	0.157	0.185

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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