

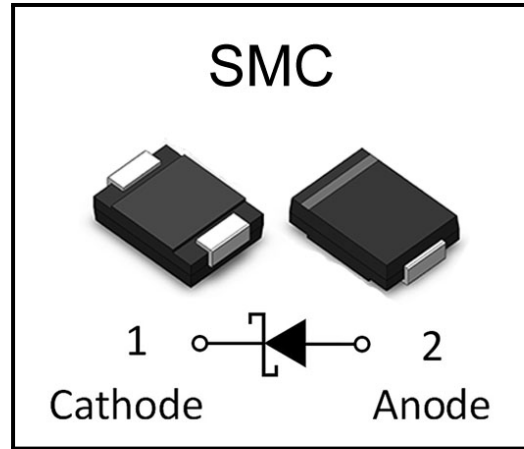
SS1020-SS10200

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

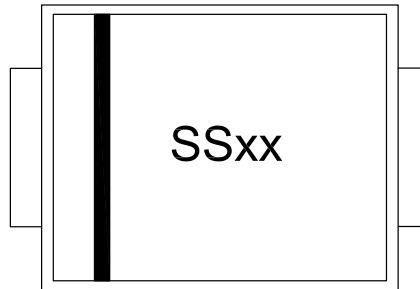
Package



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	SS1020	SS1030	SS1040	SS1050	SS1060	SS1080	SS10100	SS10150	SS10200
Marking	SS1020	SS1030	SS1040	SS1050	SS1060	SS1080	SS10100	SS10150	SS10200
Base qty	3K	3K	3K	3K	3K	3K	3K	3K	3K





SS1020-SS10200

Schottky Barrier Diode

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

Symbol	Parameters	SS 1020	SS 1030	SS 1040	SS 1050	SS 1060	SS 1080	SS 10100	SS 10150	SS 10200	Units	
V _{RRM}	Maximum Recurrent 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	10.0									A	
I _{FSM}	Peak Forward Surge Current 8.3ms single half sine-wave on rated	120									A	
V _F	Maximum Forward Voltage at 10A DC	0.55			0.70		0.85		0.95		V	
I _R	Maximum DC reverse current@T _A =25°C	0.2				0.10				mA		
	Maximum DC reverse current@T _A =100°C	20				5						
R _{θJA} ⁽¹⁾	Typical Thermal Resistance	65									°C/W	
T _J	Operating Junction Temperature Range	-55 to +150					-55 to +175					°C
T _{STG}	Storage Temperature Range	-55 to +150									°C	

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





SS1020-SS10200

Schottky Barrier Diode

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

Figure 1: $I_{AV}-T_L$ Curve

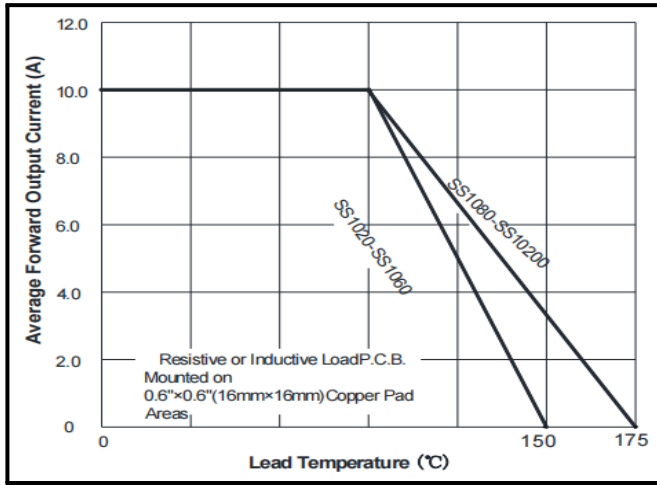


Figure 2: Surge Forward Current Capability

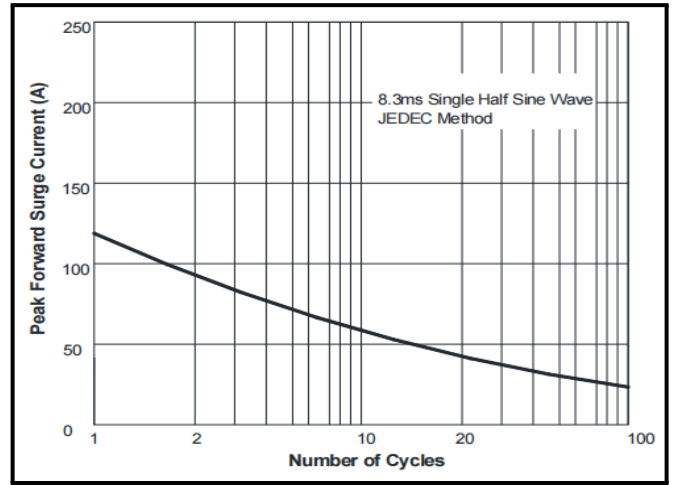


Figure 3: Forward Voltage

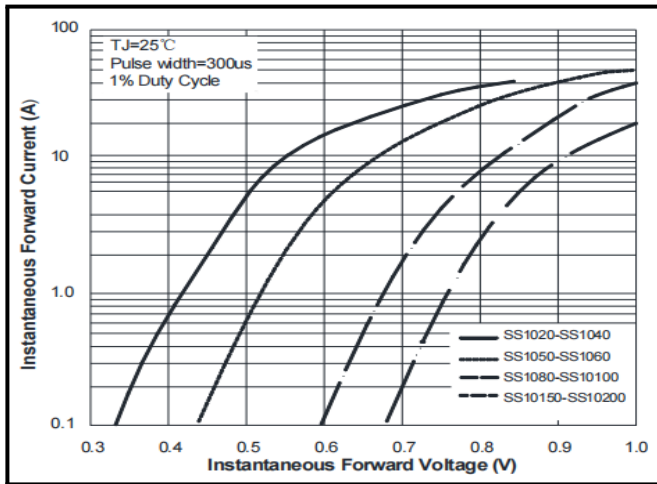
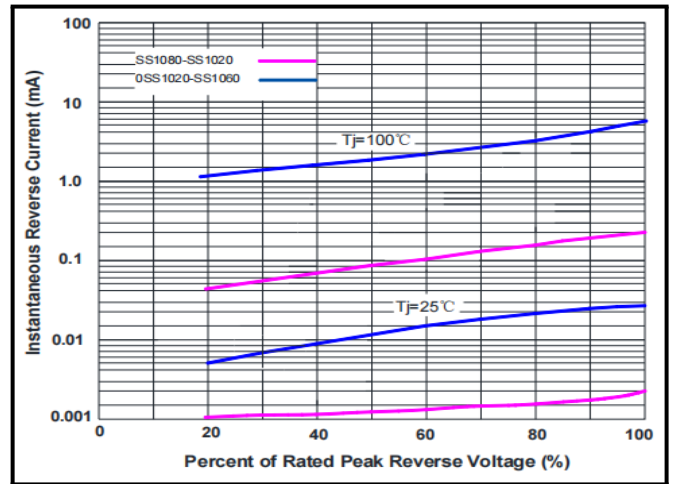


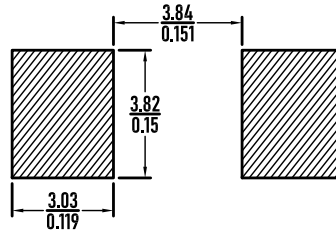
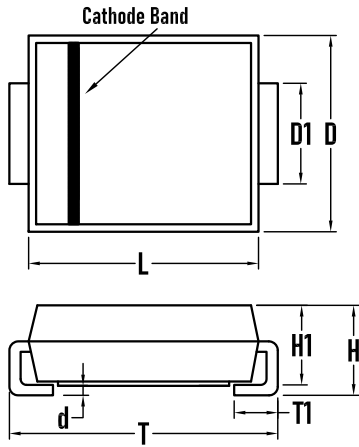
Figure 4: Typical Reverse Characteristics



SS1020-SS10200

Schottky Barrier Diode

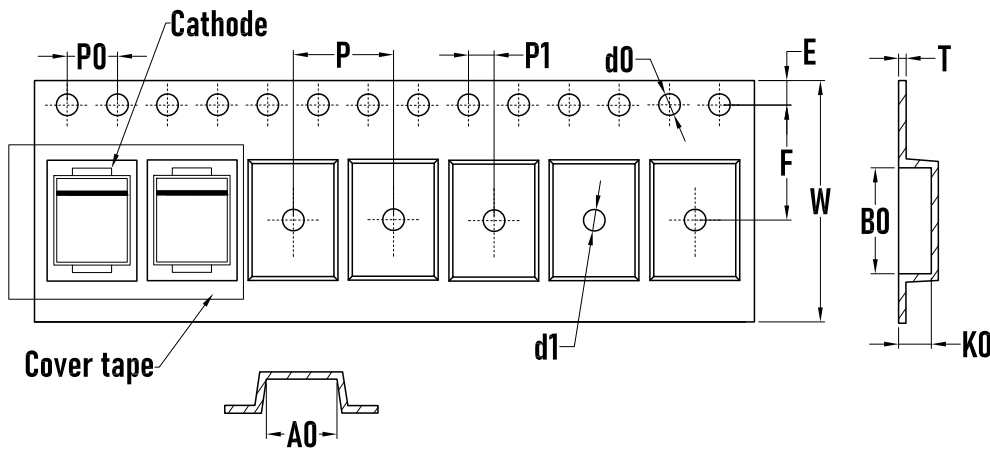
Package Mechanical Data - SMC



Note:
dimensions: $\frac{\text{mm}}{\text{inch}}$

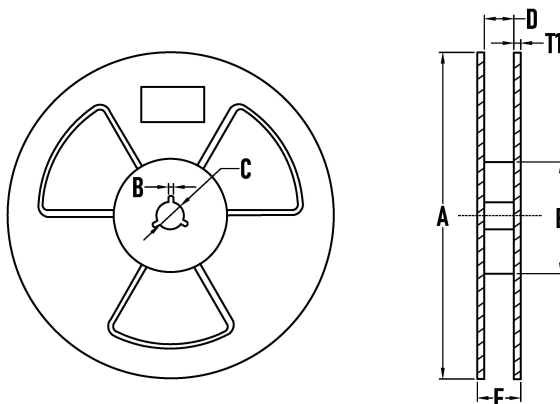
SYMBOL	MILLIMETER	
	MIN	MAX
D	5.75	6.15
D1	2.70	3.30
T	7.65	8.25
T1	0.90	1.50
d	—	0.3
H1	2.07	2.47
H	2.20	2.60
L	6.70	7.10

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

