

### **SPECIFICATION SHEET**

#### SMD SCHOTTKY BARRIER RECTIFER SMB SS2 SERIES

SPECIFICATION SHEET NO.	S0219 – SS26B00000S060						
ORIGINAL MFG/PART NO.	MDD Diodes/SS26B						
NEXTGEN PART CODE	SS26B00000S060 Indicate This Code For RFQ_/Order						
DATE	Feb. 19, 2025						
REVISION	A2 Updated With Most Recent Data						
DESCRIPTION AND	SMD Schottky Barrier Rectifier 2 Pads, Case DO-214AA/SMB, SS2 Series,						
MAIN PARAMETRICS	Average Forward Rectified Current 2.0A Max.  RMS Voltage 42V Max.  Repetitive Peak Reverse Voltage 60V Max.  Operating Junction Temperature Range TJ: -55°C ~+125°C  Package in Tape/Reel, 3000pcs/Reel  RoHS III/REACH Compliant and Halogen Free (HF)						
CUSTOMER							
CUSTOMER PART NUMBER							
CROSS REF. PART NUMBER							
МЕМО							

#### **VENDOR APPROVE**

Issued/Checked/Approved







Effective Date: Feb. 19, 2025

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Date:



## PART CODE: **\$\$26B0000\$5060**SMD SCHOTTKY BARRIER RECTIFER SMB SS2 SERIES

#### **MAIN FEATURE**

- The Plastic Package Carries Underwriters Laboratory Flammability
   Classification 94V-0
- Low Power Loss and High Efficiency
- Metal Silicon Junction and Majority Carrier Conduction
- Built-in Strain Relief and Ideal For Automated Placement
- · High Forward Surge Current Capability
- High Temperature Soldering Guaranteed: 250° C/10 Seconds At Terminals
- Surface Mount Package Ideally Suited for Automatic Insertion
- · REACH/RoHS III Complaint and Halogen Free
- · Cross Main Competitor Parts in Market

#### **APPLICATION**

For SMD Application

#### **ELECTRICAL CHARACTERISTICS**

- See Page 5 ~ Page 6
- All Products Parameters are Subject To NextGen Components' Final Confirmation.



Image shown is a representation only. Exact specifications should be obtained from the product dimension.





# PART CODE: **\$\$26B00000\$060**SMD SCHOTTKY BARRIER RECTIFER SMB SS2 SERIES

#### **HOW TO ORDER**

Please Follow Up Part Code Guide And Indicate NextGen Part Code <u>SS26B00000S060</u> For RFQ and Order.

#### **PART CODE GUIDE**

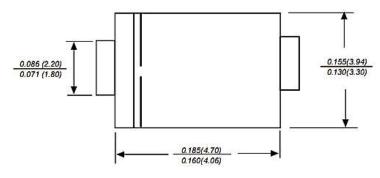


CODE	NAME	KEY SPECIFICATION OPTION
SS2	Product Series Code	SMD Schottky Barrier Rectifier, Forward Current 2.0A
6	Repetitive Peak Reverse  Voltage Code	2: 20V Max.; 3: 30V Max.; 4: 40V Max.; 5: 50V Max.; 6: 60V Max.; 8: 80V Max.; 10: 100V Max.; 150: 150V Max.; 200: 200V Max
во	Case Code	A0: Case DO-214AC/SMA; B0: Case DO-214AA/SMB; BF: Case SMBF; C0: Case SMC/DO-214AB; F0: Case SMAF; W0: Case SMF/SOD-123FL
0000S	Internal Control Code	0000S: Letter A~Z, a-z or Digits (0-9)
060	DC Blocking Voltage Code	020: 20V Max.; 030: 30V Max.; 040: 40V Max.; 050: 50V Max.; 060: 60V Max.; 080: 80V Max.; 100: 100V Max.; 150: 150V Max.; 200: 200V Max
xx	Special/Custom Parameters	Blank: N/A;  XX: Letter A~Z, a~z or digits (0~9) for Special/Custom Parameters

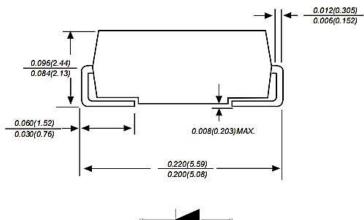


#### **DIMENSION** - Unit: Inch (mm), Case DO-214AA/SMB Outline

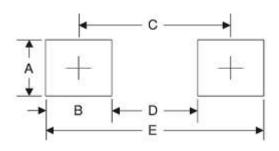
#### Top View



#### Side View



### Recommend Pad Layout



SYMBOL	А	В	С	D	E
Unit (inch)	0.110	0.094	0.181	0.086	0.276
Unit (mm)	2.80	2.40	4.60	2.20	7.00

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# PART CODE: **\$\$26B00005060**SMD SCHOTTKY BARRIER RECTIFER SMB SS2 SERIES

#### **MECHANICAL DATA**

CASE	TERMINALS	POLARITY	MOUNTING POSITION	WEIGHT PER PIECE
JEDEC	Solder plated, Solderable per	Color band	Any	0.0030 Ounce,
DO-214AA/SMB	MIL-STD-750,	denotes		0.0930 Grams
Molded Plastic Body	Method 2026	cathode end		
		Mounting		

#### MAX. RATINGS & ELECTRICAL CHARACTERISTICS

- Ratings at 25 °C ambient temperature unless otherwise specified.
- Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.

PARAMETER	SYMBOLS	VALUE	UNITS	
Maximum Average Forward F	Rectified Current	l (AV)	2.0	А
Peak Forward Surge Current 8.3ms Single Half Sine-wave Superimposed	@ V RRM 20V ~60V	l fsm	55	А
On Rated Load (JEDEC Method)	@ V RRM 80V ~200V	l fsm	45	А
Typical Thermal Resistance (N	R əja	60	°C/W	
Operating Junction Temperat	TJ	-55 to +125	°C	
Storage Temperature Range		T stg	-55 to +150	°C

#### Note:

- 1. Measured at 1MHz And Applied Reverse Voltage Of 4.0V D.C
- 2. P.C.B. Mounted With 0.2"x0.2"(5.0 x 5.0 mm) Copper Pad Areas

# PART CODE: **\$\$26B0000\$060**SMD SCHOTTKY BARRIER RECTIFER SMB \$\$2 SERIES

#### MAX. RATINGS & ELECTRICAL CHARACTERISTICS - FOR DIFFERENT PART CODE

- Ratings At 25 °C Ambient Temperature Unless Otherwise Specified.
- Single Phase Half-wave 60Hz, resistive Or Inductive Load, For Capacitive Load Current Derate By 20%.

PART CODE	Max.	Max.	Max.	Max.	Maximum		Typical	Marking
	Repetitive	RMS	DC	Inst.	DC Re	verse	Junction	List
	Peak	Voltage	Blocking	Forward	Curr	ent	Cap.	
	Reverse		Voltage	Voltage	At Ra	ited	(Note 1)	
	Voltage			@	D	С		
				2.0A	Block	king		
					Volta	age		
					@	@		
					25	100		
					°C	°C		
	V RRM	V RMS	V DC	VF	1	R	C 1	
	V	V	V	V	m	4	pF	
SS22B00000S020	20	14	20	0.55	0.5	5	220	SS22B
SS23B00000S030	30	21	30	0.55	0.5	5	220	SS23B
SS24B00000S040	40	28	40	0.55	0.5	5	220	SS24B
SS25B00000S050	50	35	50	0.70	0.5	5	220	SS25B
SS26B00000S060	60	42	60	0.70	0.5	5	220	SS26B
SS28B00000S080	80	56	80	0.85	0.3	3	110	SS28B
SS210B0000S100	100	70	100	0.85	0.3	3	110	SS210B
SS2150B000S150	150	105	150	0.95	0.3	3	110	SS2150B
SS2200B000S200	200	140	200	0.95	0.3	3	110	SS2200B

#### Note:

- 1. Measured at 1MHz And Applied Reverse Voltage Of 4.0V D.C
- 2. P.C.B. mounted with 0.20"x0.20" (5.0 x 5.0 mm) Copper Pad Areas

#### **RATINGS & CHARACTERISTIC CURVES** - For Reference Only

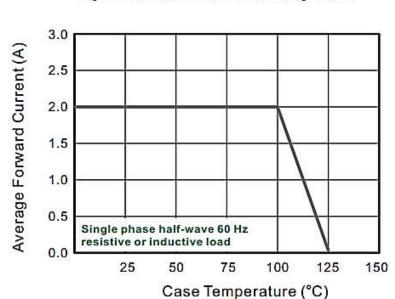
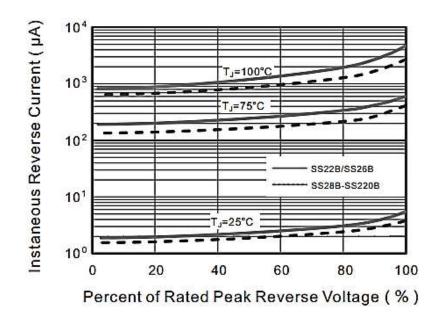


Fig.1 Forward Current Derating Curve





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#### **RATINGS & CHARACTERISTIC CURVES** - For Reference Only

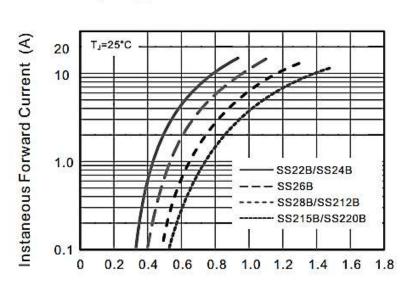
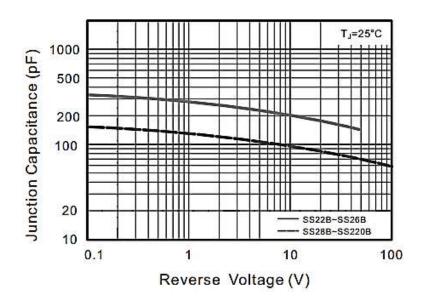


Fig.3 Typical Forward Characteristic



Instaneous Forward Voltage (V)



#### **RATINGS & CHARACTERISTIC CURVES** - For Reference Only

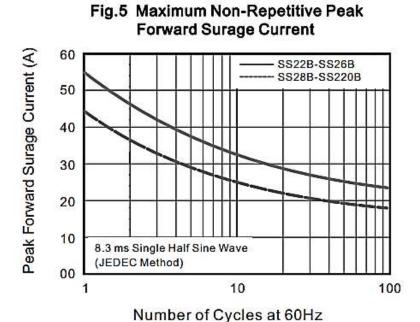
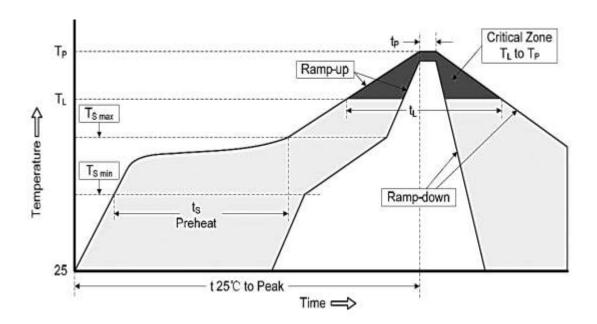


Fig.6- Typical Transient Thermal Impedance

100
100
100
100
100
100
100
100
1, Pulse Duration (sec)

### SUGGESTED REFLOW PROFILE - For Reference Only

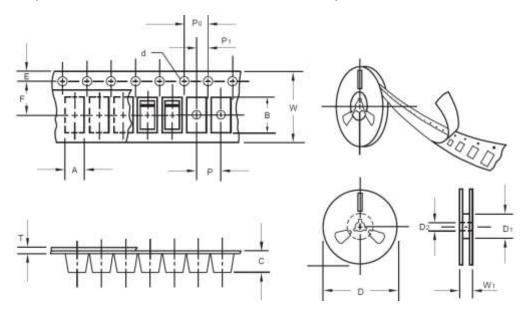


PROFILE FEATURE		PB-FREE ASSEMBLY			
Average Ramp-up Rate (Ts Max to Tp)		3°C/second Max			
Preheat	Temperature Min (Ts Min.)	150°C			
	Temperature Max (Ts Max.)	200°C			
	Time (ts Min. to ts Max.)	60 ~ 180 seconds			
Time maintained above	Temperature (TL)	217°C			
	Time (tL)	60 ~ 150 seconds			
Peak/Classification 1	Femperature (Tp)	260 °C			
Time within 5°C of a	ctual Peak Temperature (tp)	20 ~ 40 seconds			
Ramp-down rate		6 °C /Second Max.			
Time 25 °C to Peak Temperature		8 minutes Max.			
Suggest reflow time	s	3 Times Max.			

### SMD SCHOTTKY BARRIER RECTIFER SMB SS2 SERIES

#### TAPE AND REEL (Unit: mm)

• All Devices are packed in accordance with EIA standard RS-481-A and specifications.



ITEM	SYMBOL	TOLERANCE	SMB/DO-214AA
Carrier width	А	0.1	3.81
Carrier Length	В	0.1	5.41
Carrier Depth	С	0.1	2.42
Sprocket hole	d	0.05	1.50
13" Reel outside diameter	D	2.0	330.00
13" Reel inner diameter	D1	Min.	50.00
Feed hole diameter	D2	0.5	13.00
Sprocket hole position	Е	0.1	1.75
Punch hole position	F	0.1	5.55
Punch hole pitch	Р	0.1	8.00
Sprocket hole pitch	P0	0.1	4.00
Embossment center	P1	0.1	2.00
Overall tape thickness	Т	0.1	0.30
Tape width	W	0.3	12.00
Reel width	W1	1.0	12.30
MPQ/Reel	3000pcs/Reel		

## PART CODE: **\$\$26B00000\$060**

#### SMD SCHOTTKY BARRIER RECTIFER SMB SS2 SERIES

#### **IMPORTANT NOTES AND DISCLAIMER**

- ROHS COMPLIANCE: The levels of RoHS restricted materials in this product are below the maximum
  concentration values (also referred to as the threshold limits) permitted for such substances, or are used in an
  exempted application, in accordance with EU RoHS Directive (EU) 2015/863 EC (RoHS3). RoHS Test Report for
  this product can be obtained can be obtained at Download Center.
- REACH COMPLIANCE: REACH substances of high concern (SVHCs) information is available for this product.
   Since the European Chemical Agency (ECHA) has published notice of their intent to frequently revise the SVHC listing for the foreseeable future, REACH Test Report for this product can be obtained at Download Center.
- All Product parametric performance is indicated in the Electrical Characteristics for the listed herein test
  conditions, unless otherwise noted. Product performance may not be indicated by the Electrical
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