

SPECIFICATION SHEET

SMD SCHOTTKY BARRIER RECTIFER SOD-123FL DSK2 SERIES

SPECIFICATION SHEET NO.	S0129 – DSK26W0000S060			
ORIGINAL MFG/PART NO.	MDD Diodes/DSK26			
NEXTGEN PART CODE	DSK26W0000S060	Indicate This Code For RFQ /Order		
DATE	Jan. 29, 2025			
REVISION	A4 Updated With Most Recent Data			
DESCRIPTION AND	SMD Schottky Barrier Rectifier 2 Pads, Case SOD-123FL, DSK2 Series,			
MAIN PARAMETRICS	Average Forward Rectified Current 2.0A Max. RMS Voltage 42V Max. Repetitive Peak Reverse Voltage 60V Max. Operating Junction & Storage Temperature Range TJ,TSTG: -55°C ~+150°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: Jan. 29, 2025

CUSTOMER APPROVE				
Date:				

1/29/2025

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PART CODE: **DSK26W0000S060**

SMD SCHOTTKY BARRIER RECTIFER SOD-123FL DSK2 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 (HF)
- · 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: **DSK26W0000S060**SMD SCHOTTKY BARRIER RECTIFER SOD-123FL DSK2 SERIES

HOW TO ORDER

Please Follow Up Part Code Guide And Indicate NextGen Part Code <u>DSK26W0000S060</u> For RFQ and Order.

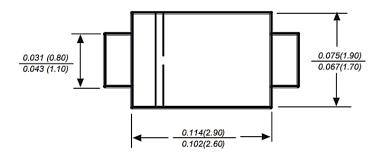
PART CODE GUIDE



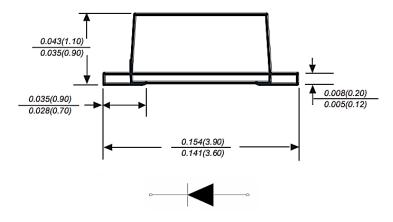
CODE	NAME	KEY SPECIFICATION OPTION
DSK2	Product Series Code	SMD Schottky Barrier Rectifier, Forward Current 2.0A
5	Repetitive Peak Reverse Voltage Code	2: 20V Max.; 3: 30V Max.; 4: 40V Max.; 5: 50V Max.; 6: 60V Max.; 8: 80V Max.; 10: 100V Max.; 15: 150V Max.; 20: 200V Max
wo	Case Code	A0: Case DO-214AC/SMA; B0: Case DO-214AA/SMB; BF: Case SMBF; C0: Case SMC/DO-214AB; F0: Case SMAF; W0: Case SMF/SOD-123FL
000S	Internal Control Code	000S: Letter A~Z, a-z or Digits (0-9)
050	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), SOD-123FL Outline

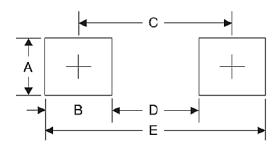




Side View



Recommend Pad Layout



SYMBOL	А	В	С	D	E
Unit (inch)	0.047	0.047	0.126	0.079	0.173
Unit (mm)	1.2	1.2	3.1	2.0	4.4

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MECHANICAL DATA

CASE	TERMINALS	POLARITY	MOUNTING POSITION	WEIGHT PER PIECE
JEDEC	Solder plated, Solderable per	Polarity Symbol	Any	0.0007 Ounce,
SOD-123FL	MIL-STD-750,	Marking On Case		0.0200 Grams
Molded Plastic Body	Method 2026			

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 Rectified Current at TL (see fig.1)	l av	2.0	А
Peak Forward Surge Current 8.3ms Single Half Sine-wave Superimposed On Rated Load (JEDEC Method)	I FSM	50	А
Typical Thermal Resistance	R ⊖JA	85	°C/W
Operating Junction e Temperature Range	ΤJ	-55 to +150	°C
Storage Temperature Range	T stg	-55 to +150	°C

Note: Measured at 1MHz And Applied Reverse Voltage Of 4.0V D.C

PART CODE: **DSK26W0000S060**

SMD SCHOTTKY BARRIER RECTIFER SOD-123FL DSK2 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. Repetitive Peak Reverse Voltage	Max. RMS Vol.	Max. DC Blocking Voltage	Max. Inst. Forward Voltage @ 2.0A	Ma DC Re Curr At Ra D Block	verse ent ated C king	Typical Junction Cap. (Note 1)	Marking List
					@ 25 °C	@ 100 °C		
	V RRM	V RMS	V DC	V F	1	R	Cı	
	V	V	V	V	m	A	pF	
DSK22W0000S020	20	14	20	0.55	0.5	5.0	220	K22
DSK24W0000S040	40	28	40	0.55	0.5	5.0	220	K24
DSK25W0000S050	50	35	50	0.70	0.5	5.0	80	K25
DSK26W0000S060	60	42	60	0.70	0.5	5.0	80	K26
DSK28W0000S080	80	56	80	0.85	0.3	3.0	80	K28
DSK210W000S100	100	70	100	0.85	0.3	3.0	80	K210
DSK215W000S150	150	105	150	0.95	0.3	3.0	80	K215
DSK220W000S200	200	140	200	0.95	0.3	3.0	80	K220

Note: 1. Measured at 1MHz And Applied Reverse Voltage Of 4.0V D.C

SMD SCHOTTKY BARRIER RECTIFER SOD-123FL DSK2 SERIES

RATINGS & CHARACTERISTIC CURVES - For Reference Only

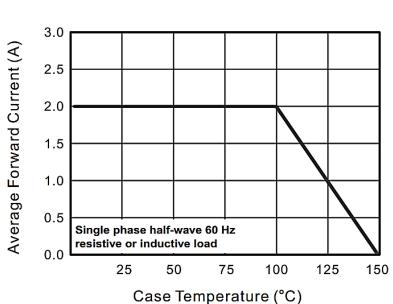
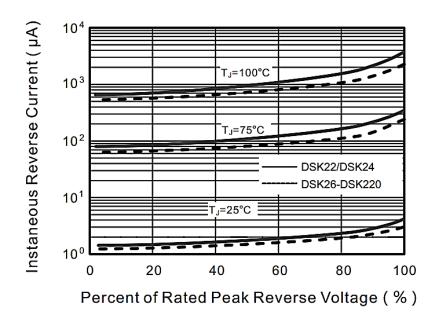


Fig.1 Forward Current Derating Curve







RATINGS & CHARACTERISTIC CURVES - For Reference Only



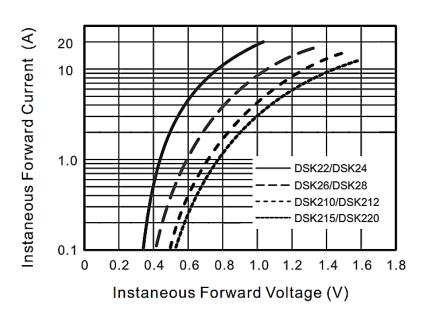
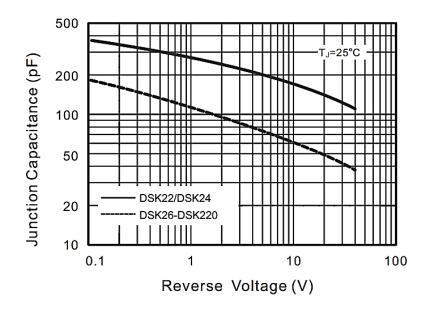


Fig.4 Typical Junction Capacitance



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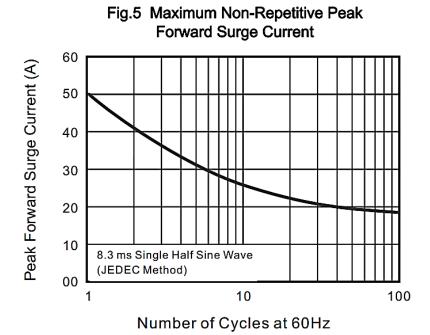
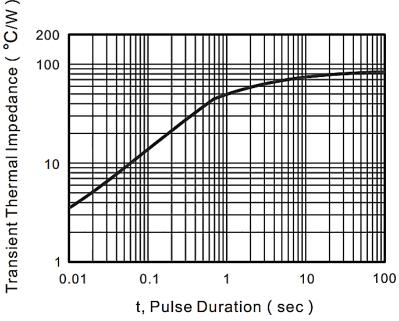
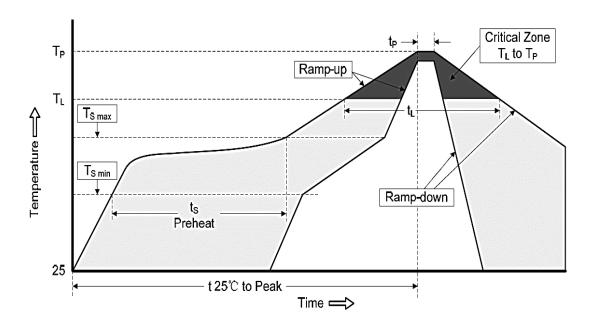


Fig.6- Typical Transient Thermal Impedance





SUGGESTED REFLOW PROFILE - For Reference Only

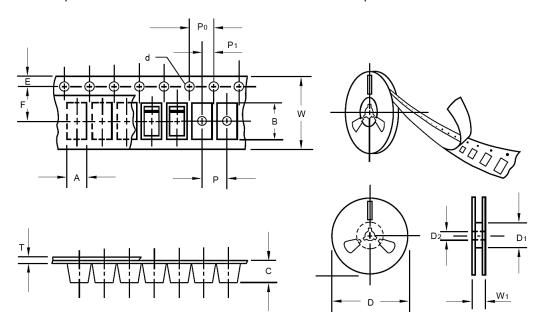


PROFILE FEATURE		PB-FREE ASSEMBLY
Average Ramp-up Rate (Ts Max to Tp)		3°C/second Max
Preheat	Temperature Min (Ts Min.)	150°C
	Temperature Max (Ts Max.)	200°C
	Time (ts Min. to ts Max.)	60 ~ 180 seconds
Time maintained above	Temperature (TL)	217°C
	Time (tı)	60 ~ 150 seconds
Peak/Classification Temperature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

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TAPE AND REEL (Unit: mm)

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



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Average Ramp-up Rate (Ts Max to Tp)		3°C/second Max	
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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
 Characteristics if operated under different conditions.
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