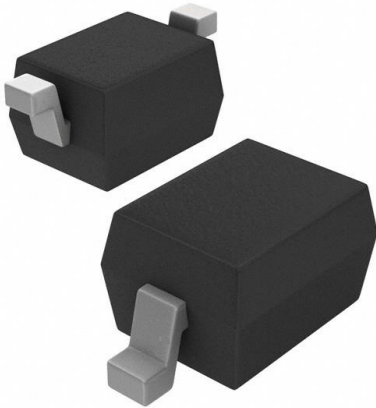


SD101CWS-G3-08 Datasheet

www.digi-electronics.com



<https://www.DiGi-Electronics.com>

DiGi Electronics Part Number	SD101CWS-G3-08-DG
Manufacturer	Vishay General Semiconductor - Diodes Division
Manufacturer Product Number	SD101CWS-G3-08
Description	DIODE SCHOTTKY 40V 30MA SOD323
Detailed Description	Diode 40 V 30mA Surface Mount SOD-323

This model SD101CWS-G3-08 is available at DiGi Electronics.

DiGi Electronics offers a global database of semiconductor and electronic component datasheets.

We welcome your inquiries regarding pricing, lead time, or other product-related questions.

 [Request a Quote](#)

 [Datasheet Search](#)



Tel: +00 852-30501935

RFQ Email: Info@DiGi-Electronics.com

DiGi is a global authorized distributor of electronic components.

Purchase and inquiry

Manufacturer Product Number:

SD101CWS-G3-08

Series:

-

Technology:

Schottky

Current - Average Rectified (Io):

30mA

Speed:

Small Signal \leq 200mA (Io), Any Speed

Current - Reverse Leakage @ Vr:

200 nA @ 30 V

Mounting Type:

Surface Mount

Supplier Device Package:

SOD-323

Base Product Number:

SD101

Manufacturer:

Vishay General Semiconductor - Diodes Division

Product Status:

Active

Voltage - DC Reverse (Vr) (Max):

40 V

Voltage - Forward (Vf) (Max) @ If:

900 mV @ 15 mA

Reverse Recovery Time (trr):

1 ns

Capacitance @ Vr, F:

2.2pF @ 0V, 1MHz

Package / Case:

SC-76, SOD-323

Operating Temperature - Junction:

-55°C ~ 125°C

Environmental & Export classification

RoHS Status:

ROHS3 Compliant

REACH Status:

REACH Unaffected

HTSUS:

8541.10.0070

Moisture Sensitivity Level (MSL):

1 (Unlimited)

ECCN:

EAR99


www.vishay.com

SD101AWS-G, SD101BWS-G, SD101CWS-G

Vishay Semiconductors

Small Signal Schottky Diodes


DESIGN SUPPORT TOOLS click logo to get started


MECHANICAL DATA

Case: SOD-323

Weight: approx. 4.0 mg

Packaging codes/options:

18/10K per 13" reel (8 mm tape), 10K/box

08/3K per 7" reel (8 mm tape), 15K/box

FEATURES

- For general purpose applications
- The SD101 series is a metal-on-silicon Schottky barrier device which is protected by a PN junction guardring
- The low forward voltage drop and fast switching make it ideal for protection of MOS devices, steering, biasing and coupling diodes for fast switching and low logic level applications
- AEC-Q101 qualified available (part number on request)
- Base P/N-G3 - green, commercial grade
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912


RoHS
 COMPLIANT
 HALOGEN
FREE
GREEN
 (5-2008)

PARTS TABLE				
PART	ORDERING CODE	CIRCUIT CONFIGURATION	TYPE MARKING	REMARKS
SD101AWS-G	SD101AWS-G3-08 or SD101AWS-G3-18	Single	SK	Tape and reel
SD101BWS-G	SD101BWS-G3-08 or SD101BWS-G3-18	Single	SL	
SD101CWS-G	SD101CWS-G3-08 or SD101CWS-G3-18	Single	SM	

ABSOLUTE MAXIMUM RATINGS ($T_{amb} = 25\text{ }^{\circ}\text{C}$, unless otherwise specified)					
PARAMETER	TEST CONDITION	PART	SYMBOL	VALUE	UNIT
Repetitive peak reverse voltage		SD101AWS-G	V_{RRM}	60	V
		SD101BWS-G	V_{RRM}	50	V
		SD101CWS-G	V_{RRM}	40	V
Power dissipation (infinite heatsink) ⁽¹⁾			P_{tot}	150	mW
Forward continuous current			I_F	30	mA
Maximum single cycle surge	10 μ s square wave		I_{FSM}	2	A

Note
⁽¹⁾ Valid provided that electrodes are kept at ambient temperature

THERMAL CHARACTERISTICS ($T_{amb} = 25\text{ }^{\circ}\text{C}$, unless otherwise specified)				
PARAMETER	TEST CONDITION	SYMBOL	VALUE	UNIT
Thermal resistance junction to ambient air ⁽¹⁾		R_{thJA}	650	K/W
Junction temperature ⁽¹⁾		T_j	125	$^{\circ}\text{C}$
Operating temperature range		T_{op}	-55 to +125	$^{\circ}\text{C}$
Storage temperature range		T_{stg}	-65 to +150	$^{\circ}\text{C}$

Note
⁽¹⁾ Valid provided that electrodes are kept at ambient temperature


www.vishay.com

SD101AWS-G, SD101BWS-G, SD101CWS-G

Vishay Semiconductors

ELECTRICAL CHARACTERISTICS ($T_{amb} = 25\text{ }^{\circ}\text{C}$, unless otherwise specified)							
PARAMETER	TEST CONDITION	PART	SYMBOL	MIN.	TYP.	MAX.	UNIT
Reverse breakdown voltage	$I_R = 10\text{ }\mu\text{A}$	SD101AWS-G	$V_{(BR)}$	60			V
		SD101BWS-G	$V_{(BR)}$	50			V
		SD101CWS-G	$V_{(BR)}$	40			V
Leakage current	$V_R = 50\text{ V}$	SD101AWS-G	I_R			200	nA
	$V_R = 40\text{ V}$	SD101BWS-G	I_R			200	nA
	$V_R = 30\text{ V}$	SD101CWS-G	I_R			200	nA
Forward voltage drop	$I_F = 1\text{ mA}$	SD101AWS-G	V_F			410	mV
		SD101BWS-G	V_F			400	mV
		SD101CWS-G	V_F			390	mV
	$I_F = 15\text{ mA}$	SD101AWS-G	V_F			1000	mV
		SD101BWS-G	V_F			950	mV
		SD101CWS-G	V_F			900	mV
Junction capacitance	$V_R = 0\text{ V}, f = 1\text{ MHz}$	SD101AWS-G	C_D			2.0	ns
		SD101BWS-G	C_D			2.1	ns
		SD101CWS-G	C_D			2.2	ns
Reverse recovery time	$I_F = I_R = 5\text{ mA}$, recover to $0.1 I_R$		t_{rr}			1	ns

TYPICAL CHARACTERISTICS ($T_{amb} = 25\text{ }^{\circ}\text{C}$, unless otherwise specified)

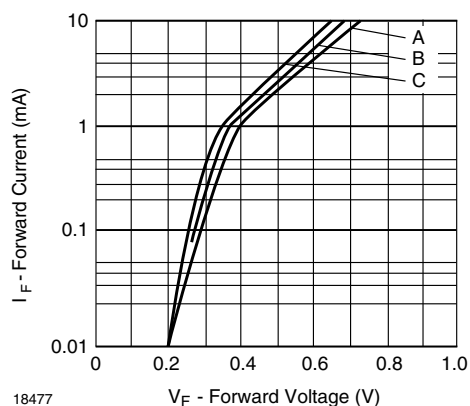


Fig. 1 - Typical Variation of Forward Current vs. Forward Voltage

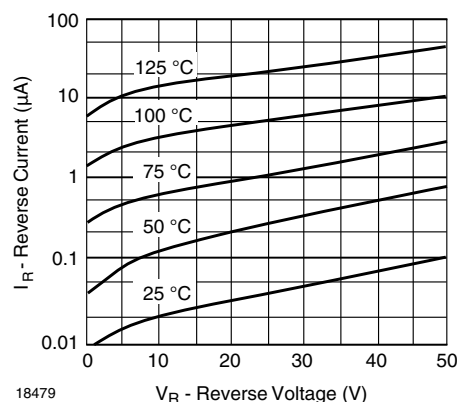


Fig. 3 - Typical Variation of Reverse Current at Various Temperatures

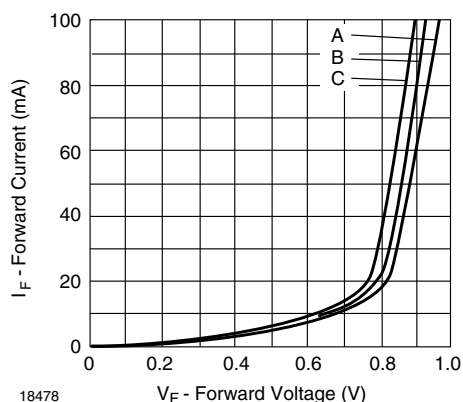


Fig. 2 - Typical Forward Conduction Curve

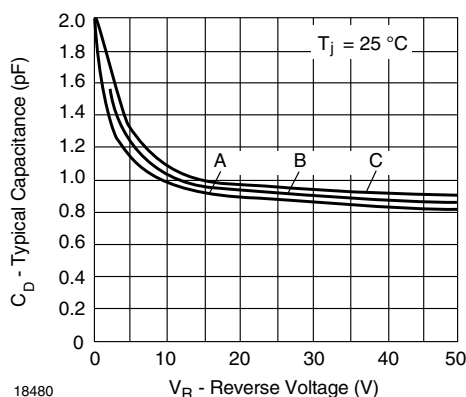


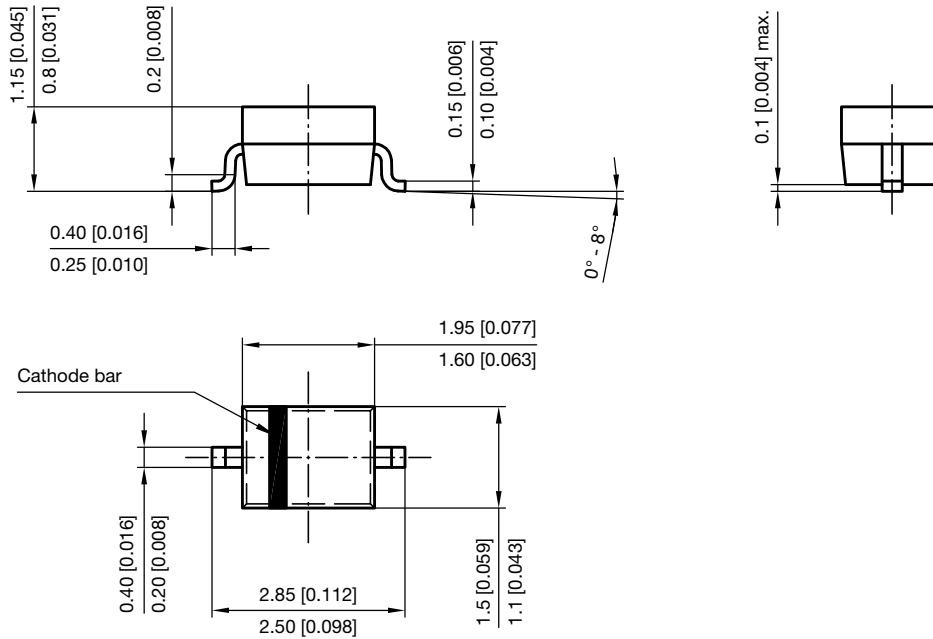
Fig. 4 - Typical Capacitance Curve as a Function of Reverse Voltage


www.vishay.com

SD101AWS-G, SD101BWS-G, SD101CWS-G

Vishay Semiconductors

PACKAGE DIMENSIONS in millimeters (inches): SOD-323



Document no.: S8-V-3910.02-001 (4)
 Created - Date: 24.August.2004
 Rev. 6 - Date: 23.Sept.2016
 17443



Disclaimer

ALL PRODUCT, PRODUCT SPECIFICATIONS AND DATA ARE SUBJECT TO CHANGE WITHOUT NOTICE TO IMPROVE RELIABILITY, FUNCTION OR DESIGN OR OTHERWISE.

Vishay Intertechnology, Inc., its affiliates, agents, and employees, and all persons acting on its or their behalf (collectively, "Vishay"), disclaim any and all liability for any errors, inaccuracies or incompleteness contained in any datasheet or in any other disclosure relating to any product.

Vishay makes no warranty, representation or guarantee regarding the suitability of the products for any particular purpose or the continuing production of any product. To the maximum extent permitted by applicable law, Vishay disclaims (i) any and all liability arising out of the application or use of any product, (ii) any and all liability, including without limitation special, consequential or incidental damages, and (iii) any and all implied warranties, including warranties of fitness for particular purpose, non-infringement and merchantability.

Statements regarding the suitability of products for certain types of applications are based on Vishay's knowledge of typical requirements that are often placed on Vishay products in generic applications. Such statements are not binding statements about the suitability of products for a particular application. It is the customer's responsibility to validate that a particular product with the properties described in the product specification is suitable for use in a particular application. Parameters provided in datasheets and / or specifications may vary in different applications and performance may vary over time. All operating parameters, including typical parameters, must be validated for each customer application by the customer's technical experts. Product specifications do not expand or otherwise modify Vishay's terms and conditions of purchase, including but not limited to the warranty expressed therein.

Hyperlinks included in this datasheet may direct users to third-party websites. These links are provided as a convenience and for informational purposes only. Inclusion of these hyperlinks does not constitute an endorsement or an approval by Vishay of any of the products, services or opinions of the corporation, organization or individual associated with the third-party website. Vishay disclaims any and all liability and bears no responsibility for the accuracy, legality or content of the third-party website or for that of subsequent links.

Vishay products are not designed for use in life-saving or life-sustaining applications or any application in which the failure of the Vishay product could result in personal injury or death unless specifically qualified in writing by Vishay. Customers using or selling Vishay products not expressly indicated for use in such applications do so at their own risk. Please contact authorized Vishay personnel to obtain written terms and conditions regarding products designed for such applications.

No license, express or implied, by estoppel or otherwise, to any intellectual property rights is granted by this document or by any conduct of Vishay. Product names and markings noted herein may be trademarks of their respective owners.

OUR CERTIFICATE

DiGi provide top-quality products and perfect service for customer worldwide through standardization, technological innovation and continuous improvement. DiGi through third-party certification, we strictly control the quality of products and services. Welcome your RFQ to

Email: Info@DiGi-Electronics.com



Tel: +00 852-30501935

RFQ Email: Info@DiGi-Electronics.com

DiGi is a global authorized distributor of electronic components.