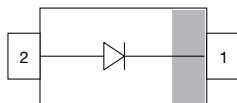
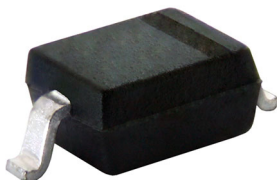


Small Signal Switching Diodes, High Voltage



FEATURES

- Silicon epitaxial planar diodes
- For general purpose
- AEC-Q101 qualified available
- Molding compound meets UL 94 V-0 flammability rating
- Moisture sensitivity level (MSL) 1
- Base P/N-G3 - RoHS-compliant, commercial grade
- Base P/N-HG3_A - RoHS-compliant, AEC-Q101 qualified (part number available on request)
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912

AUTOMOTIVE
GRADE
Available



RoHS
COMPLIANT
HALOGEN
FREE
GREEN
(5-2008)

LINKS TO ADDITIONAL RESOURCES



MECHANICAL DATA

Case: SOD-323

Weight: approx. 4 mg

Packaging codes / options:

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

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

PARTS TABLE

PART	ORDERING CODE	AEC-Q101 QUALIFIED	TYPE MARKING	CIRCUIT CONFIGURATION	TAPED UNITS PER REEL	MINIMUM ORDER QUANTITY
GSD2004WS	GSD2004WS-G3-08	No	6B	Single	3 000 (8 mm tape on 7" reel)	15 000
	GSD2004WS-HG3_A-08	Yes				
	GSD2004WS-G3-18	No			10 000 (8 mm tape on 13" reel)	10 000
	GSD2004WS-HG3_A-18	Yes				

ABSOLUTE MAXIMUM RATINGS (T_{amb} = 25 °C, unless otherwise specified)

PARAMETER	TEST CONDITION	SYMBOL	VALUE	UNIT
Continuous reverse voltage		V _R	240	V
Repetitive peak reverse voltage		V _{RRM}	300	V
DC Forward current ⁽¹⁾		I _F	250	mA
Repetitive peak forward current ⁽¹⁾	f ≥ 50 Hz, θ = 180°	I _{FRM}	625	mA
Surge forward current	t _p < 1 μs	I _{FSM}	4	A
Power dissipation ⁽¹⁾			200	mW

Note

⁽¹⁾ Infinite heatsink

THERMAL CHARACTERISTICS (T_{amb} = 25 °C, unless otherwise specified)

PARAMETER	TEST CONDITION	SYMBOL	VALUE	UNIT
Thermal resistance junction to lead	Infinite heat sink	R _{thJL}	625	K/W
Junction temperature		T _j	150	°C
Storage temperature range		T _{stg}	-65 to +150	°C
Operating temperature range		T _{op}	-55 to +150	°C

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

PARAMETER	TEST CONDITION	SYMBOL	MIN.	TYP.	MAX.	UNIT
Reverse breakdown voltage	$I_R = 100\text{ }\mu\text{A}$	V_{BR}	300			V
Leakage current	$V_R = 240\text{ V}$	I_R			100	nA
	$V_R = 240\text{ V}, T_J = 150\text{ }^{\circ}\text{C}$	I_R			100	μA
Forward voltage	$I_F = 20\text{ mA}$	V_F		0.83	0.87	V
	$I_F = 100\text{ mA}$	V_F			1	V
Diode capacitance	$V_F = V_R = 0, f = 1\text{ MHz}$	C_D			5	pF
Reverse recovery time	$I_F = I_R = 30\text{ mA}, I_R = 3\text{ mA}, R_L = 100\text{ }\Omega$	t_{rr}			50	ns

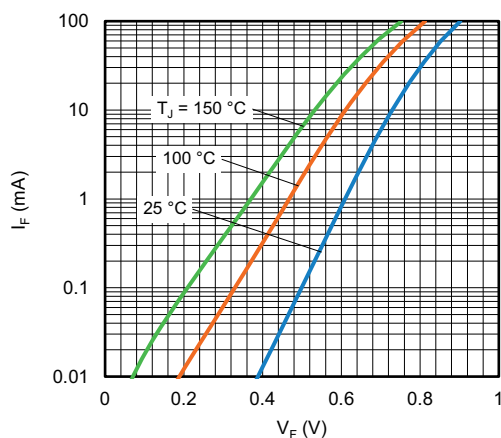
TYPICAL CHARACTERISTICS ($T_{amb} = 25\text{ }^{\circ}\text{C}$, unless otherwise specified)

Fig. 1 - Typical Forward Current vs. Forward Voltage

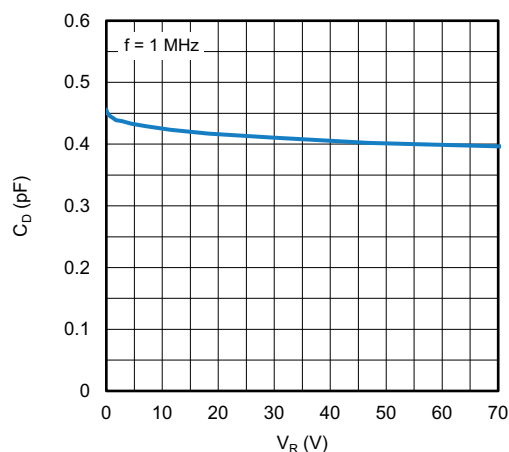


Fig. 3 - Typical Capacitance vs. Reverse Voltage

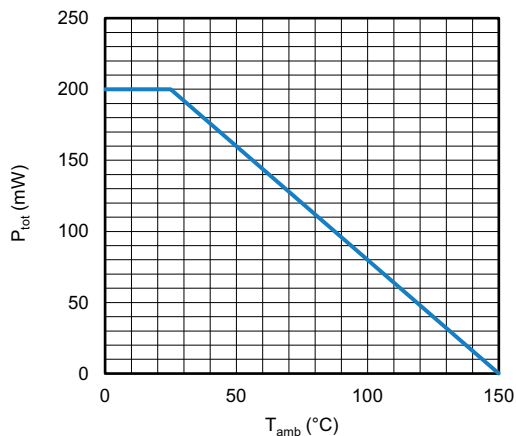


Fig. 2 - Admissible Power Dissipation vs. Ambient Temperature

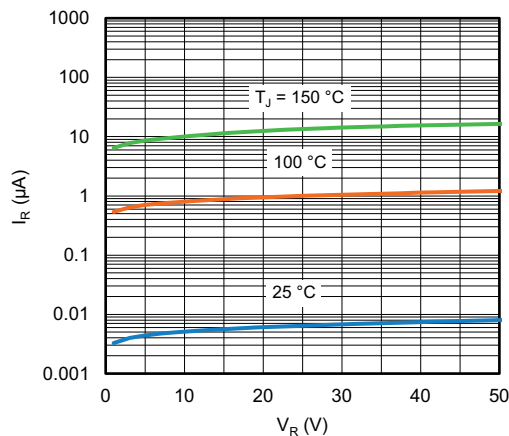
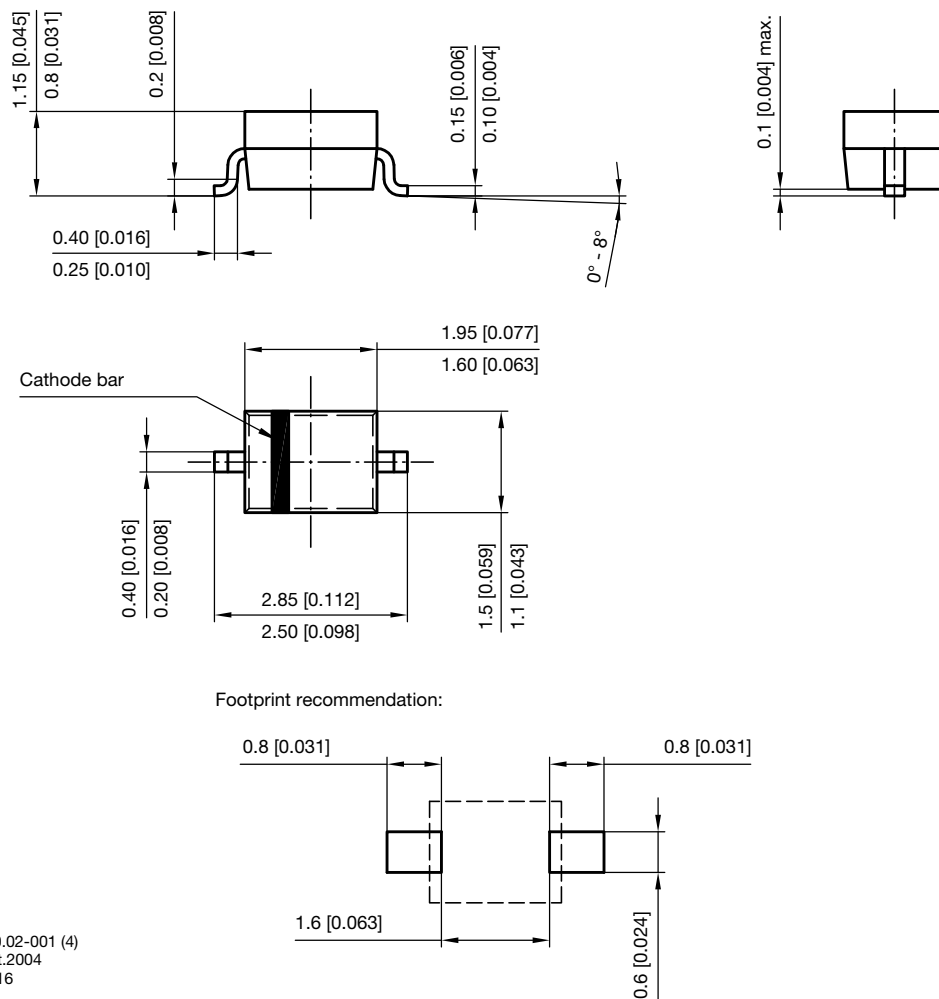


Fig. 4 - Typical Reverse Leakage Current vs. Reverse Voltage



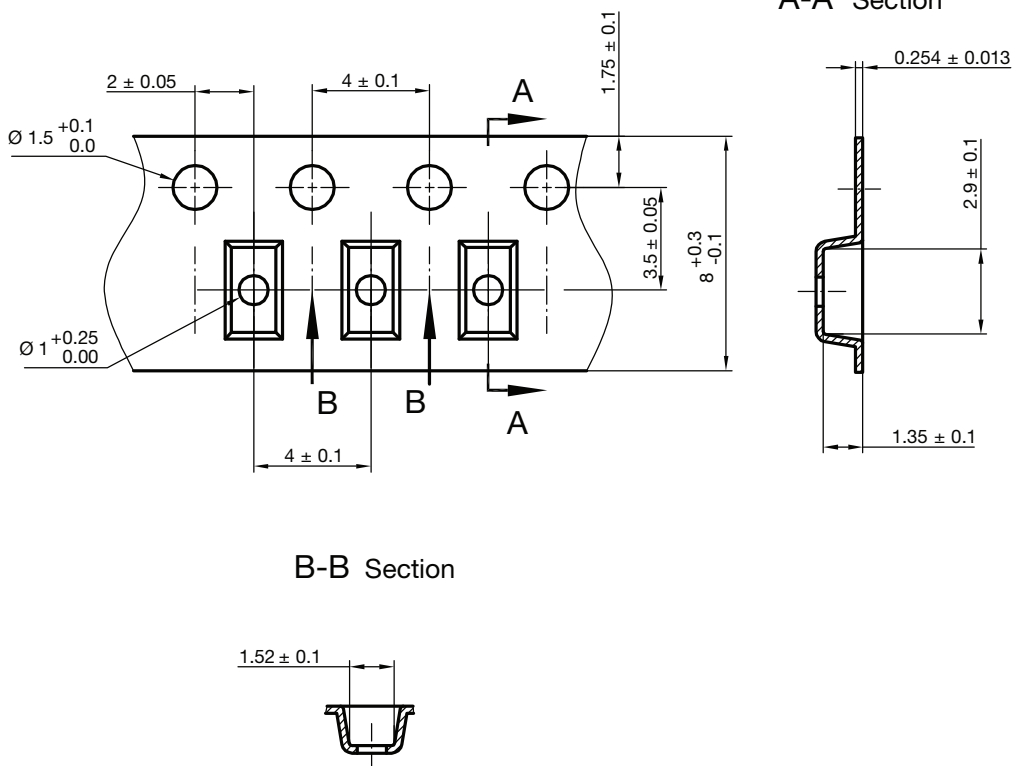
PACKAGE DIMENSIONS in millimeters (inches) **SOD-323**



Document no.: S8-V-3910.02-001 (4)
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Rev. 6 - Date: 23.Sept.2016
22771

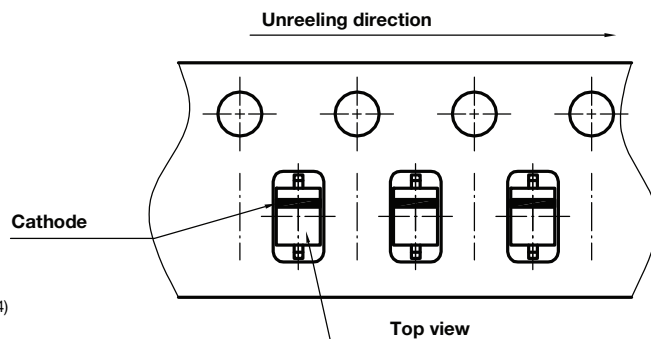


CARRIER TAPE SOD-323



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22824

ORIENTATION IN CARRIER TAPE SOD-323



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