

GSDS103XW Series

Schottky Barrier Diodes

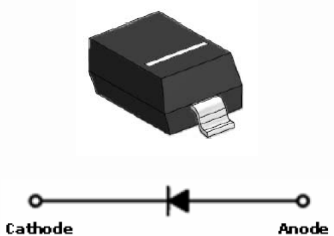
Product Description

Schottky Barrier Diodes 400mW / 20V~40V.

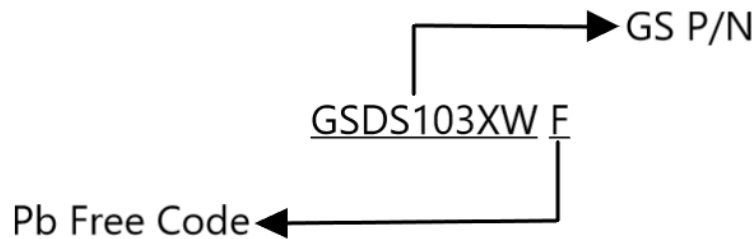
Features

- Low Forward Voltage Drop
- Gull Wing Lead SOD-123 Small Outline Plastic Package
- Surface Device Type Mounting
- RoHS Compliant
- Green EMC
- Matte Tin(Sn) Lead Finish
- Band Indicates Cathode
- Weight: approx. 0.01g

Marking Information

Part Number	Package	Part Marking	Equivalent Circuit diagram
GSDS103AWF	SOD-123	S4	
GSDS103BWF	SOD-123	S5	
GSDS103CWF	SOD-123	S6	

Ordering Information



Part Number	Package	Quantity
GSDS103AWF	SOD-123	3000 PCS
GSDS103BWF	SOD-123	
GSDS103CWF	SOD-123	

Absolute Maximum Rating (TA=25°C Unless otherwise noted)

Symbol	Parameter	Value	Units	
P _D	Power Dissipation	400	mW	
T _{STG}	Storage Temperature Range	-65 to +125	°C	
T _J	Operating Junction Temperature	+125	°C	
V _{RM}	Repetitive Peak Reverse Voltage	GSDS103AW GSDS103BW GSDS103CW	40 30 20	V
I _{F(AV)}	Average Forward Rectified Current	200	mA	
I _{FSM}	Peak Forward Surge Current (10uS square wave)	2	A	

These ratings are limiting values above which the serviceability of the diode may be impaired.

Electrical Characteristics (TA=25°C Unless otherwise noted)

Symbol	Parameter	Test Condition	Limits	Unit	
I _R	Reverse Leakage Current	GSDS103AW GSDS103BW GSDS103CW	V _R =30V V _R =20V V _R =10V	5	μA
V _F	Forward Voltage	I _F =20mA I _F =200mA	0.37 0.60	Volts	
C _t	Junction Capacitance	f=1MHZ, V _R =0V	50	pF	

Typical Characteristics

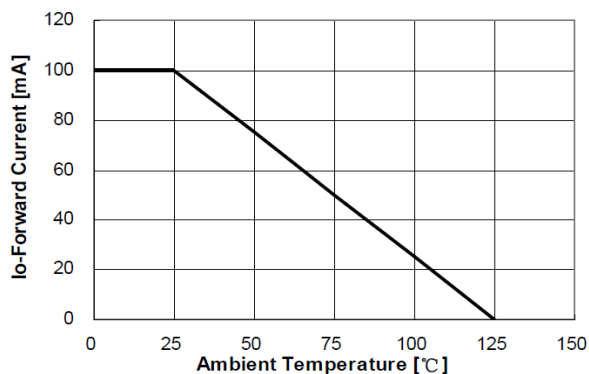


Figure 1. Forward Current Derating Curve

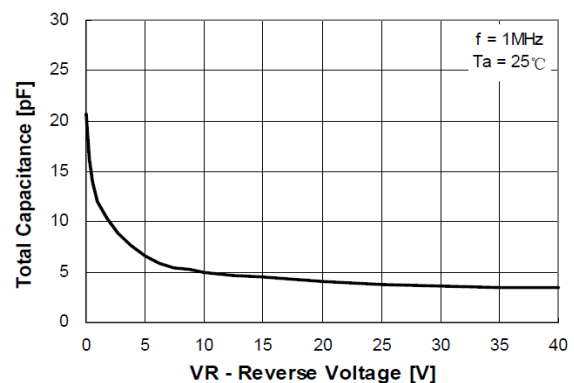


Figure 2. Total Capacitance

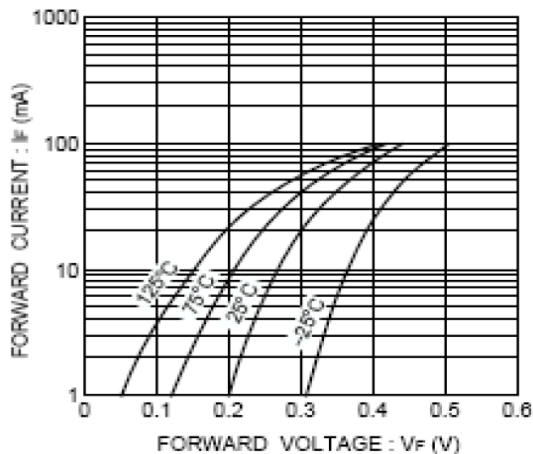


Figure 3. Forward Characteristics

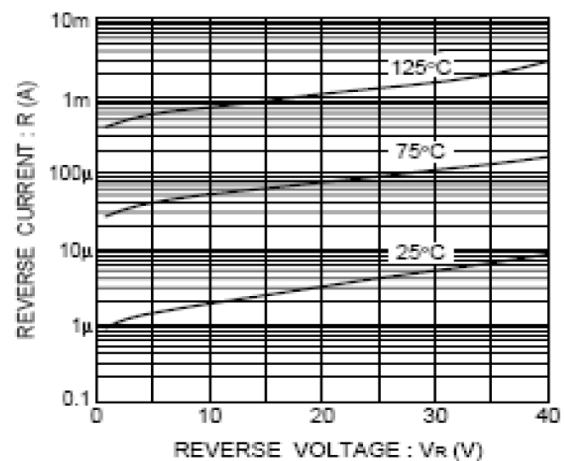
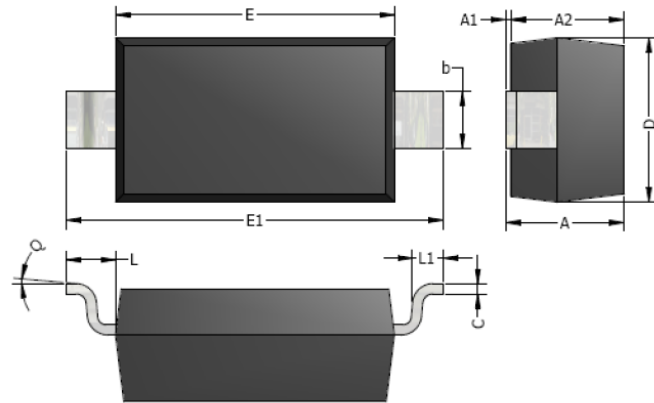


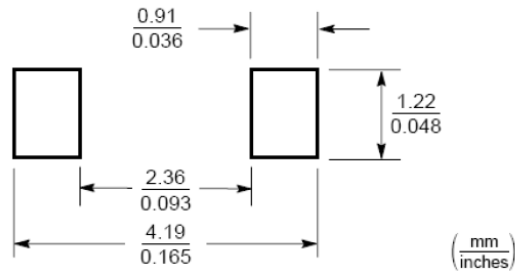
Figure 4. Reverse Characteristics

Package Dimension

SOD-123



Typical Soldering Pattern:



DIM	MILLIMETERS		INCHES	
	MIN	MAX	MIN	MAX
A	1.05	1.25	0.041	0.049
A1	0.00	0.10	0.000	0.004
A2	1.05	1.15	0.041	0.045
b	0.50	0.70	0.020	0.028
c	0.08	0.15	0.003	0.006
D	1.50	1.70	0.059	0.067
E	2.60	2.80	0.102	0.110
E1	3.55	3.85	0.140	0.152
L	0.50 REF.		0.020 REF.	
L1	0.25	0.45	0.010	0.018
θ	0°	8°	0°	8°





Note:



Dimensions are exclusive of Burrs, Mold Flash & Tie Bar extrusions.

NOTICE

Information furnished is believed to be accurate and reliable. However Globaltech Semiconductor assumes no responsibility for the consequences of use of such information nor for any infringement of patents or other rights of third parties, which may result from its use. No license is granted by implication or otherwise under any patent or patent rights of Globaltech Semiconductor. Specifications mentioned in this publication are subject to change without notice. This publication supersedes and replaces all information without express written approval of Globaltech Semiconductor.

CONTACT US

GS Headquarter	
	4F.,No.43-1,Lane11,Sec.6,Minquan E.Rd Neihu District Taipei City 114, Taiwan (R.O.C)
	886-2-2657-9980
	886-2-2657-3630
	sales_twn@gs-power.com

RD Division	
	824 Bolton Drive Milpitas. CA. 95035
	1-408-457-0587