GSDSB5819WSF

Schottky Diode

Product Description

Schottky Barrier Diode 40V and 1A

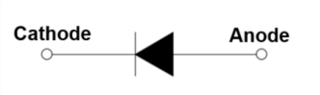
Features

- Low Forward Voltage

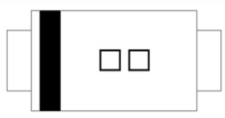
Mechanical Data

- SOD-323FL Package
- RoHS Compliant and Halogen Free

Package and Pin Assignment

<table>
<tr><th colspan="2">SOD-323FL</th><th colspan="2">Equivalent Circuit</th></tr>
<tr><td colspan="2"> </td><td colspan="2"> </td></tr>
<tr><th>Pin</th><th>Description</th><th>Pin</th><th>Description</th></tr>
<tr><td>1</td><td>Anode</td><td>2</td><td>Cathode</td></tr>
</table>

Ordering and Marking Information

<table>
<tr><th>GS P/N</th><th>Package</th><th>Marking</th><th>Quantity / Reel</th></tr>
<tr><td>GSDSB5819WSF</td><td>SOD-323FL</td><td>SL / $\overset{\text{SL}}{\bullet}$</td><td>3,000PCS</td></tr>
<tr><td colspan="4">GSDSB5819WSF
- Product Code: GSDS5014
- Package Code: WS for SOD-323FL
- Green Level: F for RoHS Compliant and Halogen Free</td></tr>
<tr><th colspan="4">Marking Information</th></tr>
<tr><td> </td><td colspan="2">- Product Code:
□□ is SL / $\overset{\text{SL}}{\bullet}$
- Band denotes Cathode end</td><td></td></tr>
</table>

Absolute Maximum Ratings (T$_A$=25ºC unless otherwise specified)

Symbol	Parameter	Value	Unit
V_{RRM}	Repetitive Peak Reverse Voltage	40	V
$V_{R(RMS)}$	RMS Reverse Voltage	28	V
I_O	Forward Current	1	A
I_{FSM}	Non-Repetitive Peak Forward Current (8.3ms single half sin-wave)	9	A
P_D	Power Dissipation	250	mW
T_J	Junction Temperature	125	ºC
T_{STG}	Storage Temperature Range	-55 to +125	ºC

Electrical Characteristics (T$_A$=25ºC unless otherwise specified)

Symbol	Parameter	Conditions	Min	Typ	Max	Unit
V_{BR}	Breakdown Voltage	I_R=1mA	40			V
V_F	Forward Voltage	I_F=1A			0.6	V
I_R	Reverse Current	V_R=40V			1	mA
C_J	Junction Capacitance	V_R=4V, f=1MHz			120	pF

Typical Characteristics (T$_A$=25℃ unless otherwise specified)

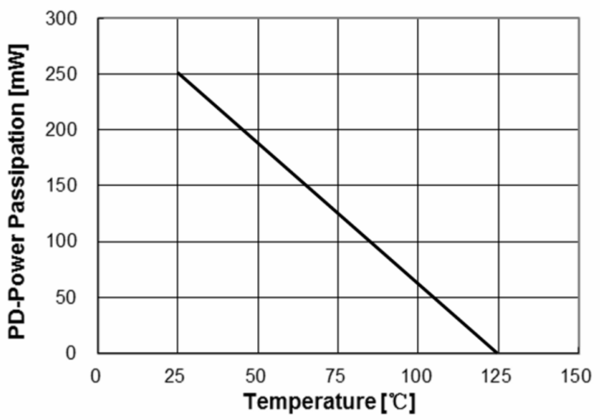


FIG.1 Power Derating Curve

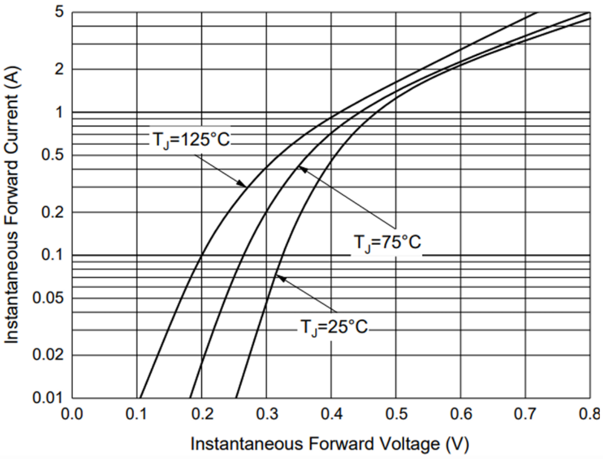
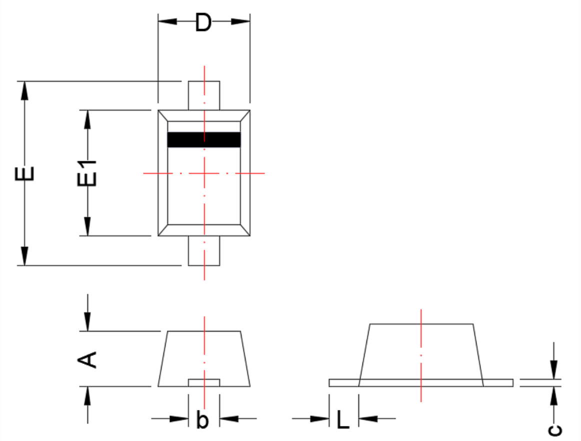


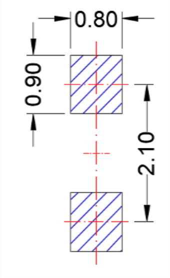
FIG.2 Instantaneous Forward Characteristics

SOD-323FL

Package Dimension



Recommended Land Pattern



Unit:mm

Dimensions				
Symbol	Millimeters		Inches	
	Min	Max	Min	Max
A	0.60	1.10	0.023	0.043
b	0.25	0.60	0.010	0.024
c	0.05	0.26	0.002	0.010
D	1.15	1.35	0.045	0.053
E	2.30	2.70	0.091	0.106
E1	1.60	1.80	0.063	0.071
L	0.30	0.50	0.012	0.020

NOTE:

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

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CONTACT US

GS Headquarter	
🏢	4F, NO.43-1, Lane 11, Sec. 6, Minquan E. Rd Neihu District, Taipei City 114761, 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