

# GSDSB5819D5F

## Schottky Diode

### Product Description

Schottky Barrier Diode 40V and 350mA


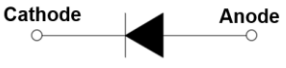
### Features

- Low Forward Voltage


### Mechanical Data

- SOD-523. Package
- RoHS Compliant and Halogen Free

### Package and Pin Assignment

SOD-523		Equivalent Circuit	
			
Pin	Description	Pin	Description
1	Anode	2	Cathode

### Ordering and Marking Information

GS P/N	Package	Marking	Quantity / Reel
GSDSB5819D5F	SOD-523	S4	5,000PCS
<b>GSDSB5819D5F</b>			
- <b>Product Code:</b> GSDSB5819	- <b>Package Code:</b> D5 for SOD-523	- <b>Green Level:</b> F for RoHS Compliant and Halogen Free	
Marking Information			
	- <b>Product Code:</b> □□ is S4		
	- Band denotes Cathode end		

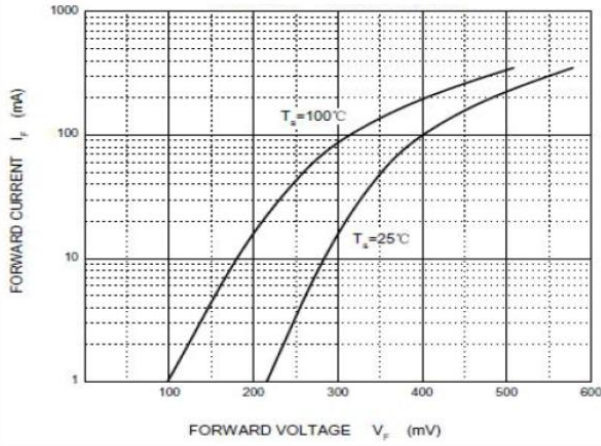
## Absolute Maximum Ratings (T<sub>A</sub>=25°C unless otherwise specified)

Symbol	Parameter	Value	Unit
V <sub>R</sub> RM	Peak Reverse Voltage	40	V
V <sub>R</sub> MS	Maximum RMS Voltage	28	V
I <sub>F</sub>	Forward Current	350	mA
I <sub>FSM</sub>	Non-Repetitive Peak Forward Current (8.3ms single half sin-wave)	1.5	A
P <sub>D</sub>	Power Dissipation	150	mW
T <sub>J</sub>	Junction Temperature	125	°C
T <sub>STG</sub>	Storage Temperature Range	-55 to +150	°C

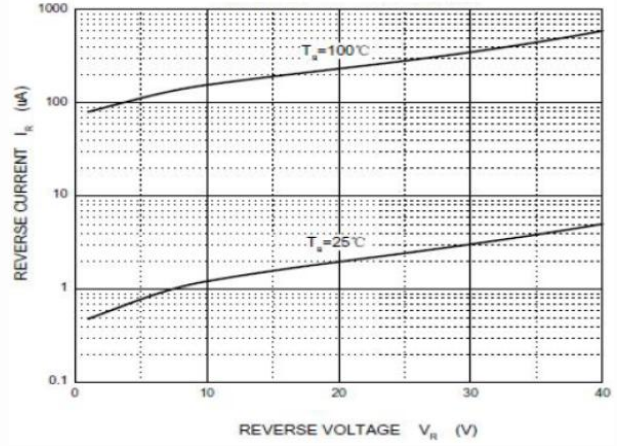
## Electrical Characteristics (T<sub>A</sub>=25°C unless otherwise specified)

Symbol	Parameter	Conditions	Min	Typ	Max	Unit
V <sub>F</sub>	Forward Voltage	I <sub>F</sub> =20mA			0.37	V
		I <sub>F</sub> =200mA			0.6	
I <sub>R</sub>	Reverse Current	V <sub>R</sub> =30V			5	μA
C <sub>J</sub>	Junction Capacitance	V <sub>R</sub> =4V, f=1MHz			50	pF
T <sub>rr</sub>	Reverse Recovery Time	I <sub>F</sub> = I <sub>R</sub> = 200mA I <sub>rr</sub> = 0.1 × I <sub>R</sub>			10	ns

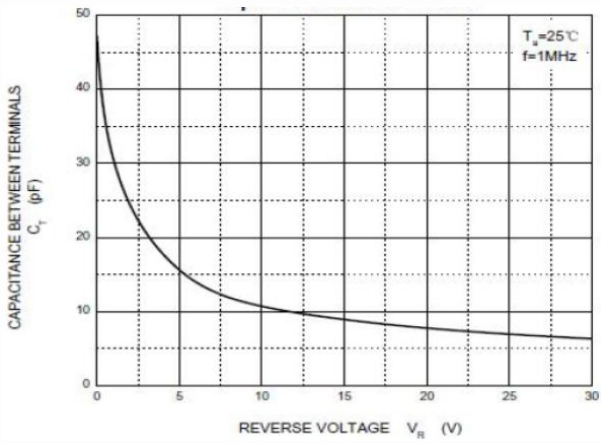
**Typical Characteristics** ( $T_A=25^\circ\text{C}$  unless otherwise specified)



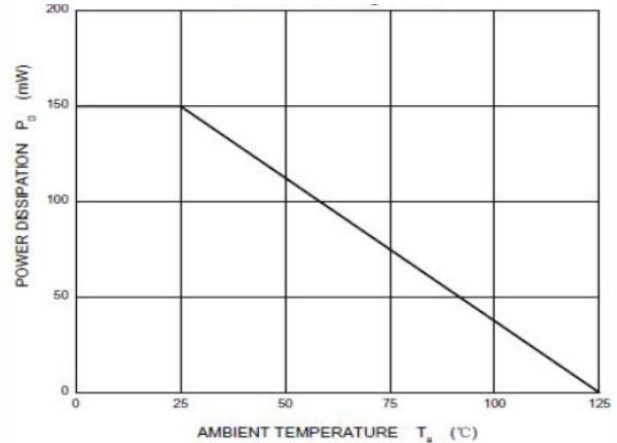
**Fig.1 Forward Characteristics**



**Fig.2 Reverse Characteristics**



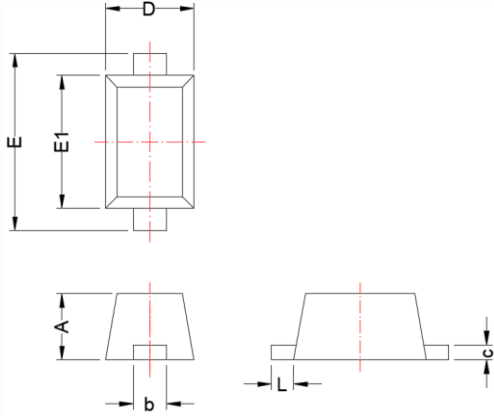
**Fig.3 Capacitance**



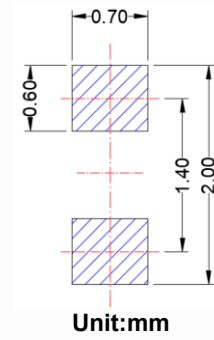
**Fig. 4: Power Derating Curve**

# SOD-523

## Package Dimension



## Recommended Land Pattern



Dimensions				
Symbol	Millimeters		Inches	
	MIN	MAX	MIN	MAX
A	0.50	0.77	0.020	0.030
b	0.25	0.40	0.010	0.016
c	0.07	0.20	0.003	0.008
D	0.70	0.90	0.028	0.035
E	1.50	1.70	0.059	0.067
E1	1.10	1.30	0.043	0.051
L	0.20 REF.		0.008 REF	





**NOTE:**



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

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