

# GSDBAR64-02VF

## PIN Diode

### Product Description

It is a general purpose PIN diode.



### Features

- Low Diode Capacitance
- Low Diode Forward Resistance


### Mechanical Data

- SOD-523 (SC-79) Package
- The Color Band denotes Cathode End
- RoHS Compliant and Halogen Free

### Package and Pin Assignment

SOD-523 (SC-79)		Equivalent Circuit	
			
Pin	Description	Pin	Description
1	Anode	2	Cathode

### Ordering and Marking Information

Ordering Information			
Part Number	Marking Code	Package	Quantity/Reel
GSDBAR64-02VF	O	SOD-523 (SC-79)	8,000
Marking Information			
	Product Code - O  *The Color Band denotes Cathode End		

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

Symbol	Parameter	Value	Unit
V <sub>R</sub>	Reverse Voltage	150	V
I <sub>F</sub>	Forward Current	100	mA
P <sub>D</sub>	Power Dissipation	150	mW
R <sub>θJA</sub>	Thermal Resistance – Junction to Ambient	833	°C/W
R <sub>θJS</sub>	Thermal Resistance – Junction to Soldering Point	85	°C/W
T <sub>J</sub>	Operating Junction Temperature Range	-55 to +150	°C
T <sub>STG</sub>	Storage Temperature Range	-55 to +150	°C

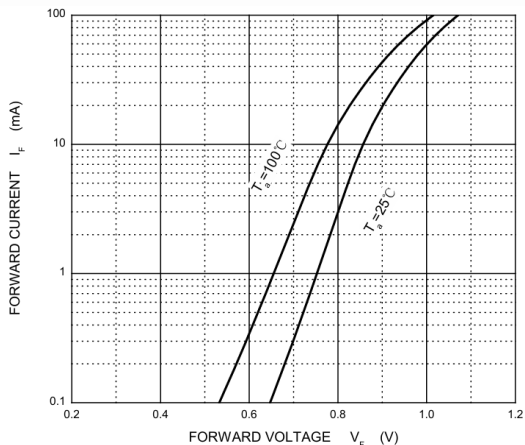
## Electrical Characteristics (T<sub>A</sub>=25°C unless otherwise specified)

Symbol	Parameter	Test Conditions	Min.	Typ.	Max.	Unit
V <sub>R</sub>	Reverse Voltage	I <sub>R</sub> =10μA	150	-	-	V
V <sub>F</sub>	Forward Voltage	I <sub>F</sub> =50mA	-	-	1.1	V
I <sub>R</sub>	Reverse Current	V <sub>R</sub> =150V	-	-	10	μA
C <sub>d</sub>	Capacitance <sup>1</sup>	V <sub>R</sub> =0V, f=1MHz	-	0.4	-	pF
		V <sub>R</sub> =1V, f=1MHz	-	-	0.55	
		V <sub>R</sub> =5V, f=1MHz	-	-	0.35	
R <sub>F</sub>	Forward Resistance <sup>1</sup>	I <sub>F</sub> =0.5mA, f=100MHz	-	-	9	Ω
		I <sub>F</sub> =1mA, f=100MHz	-	-	6.5	
		I <sub>F</sub> =10mA, f=100MHz	-	-	2.5	

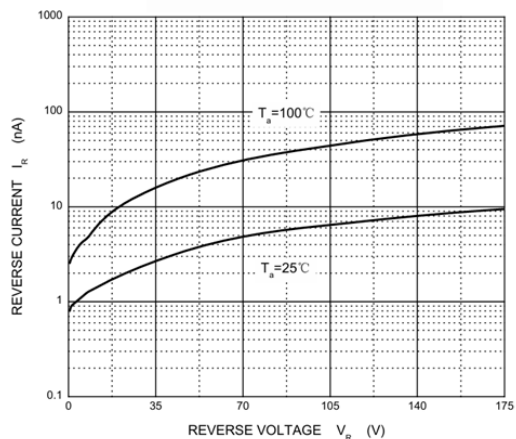
**NOTE:**

- Guaranteed on AQL basis: inspection level S4,AQL 1.0.

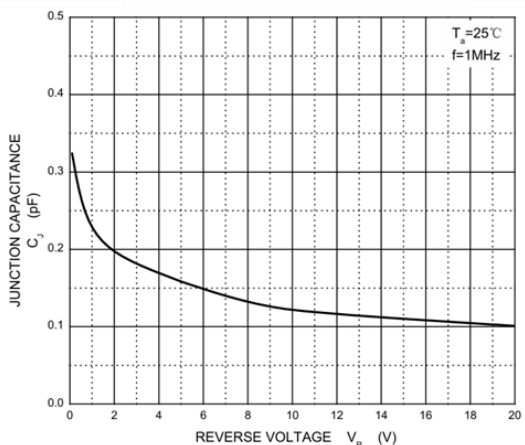
**Typical Characteristics** ( $T_A=25^\circ\text{C}$  unless otherwise specified)



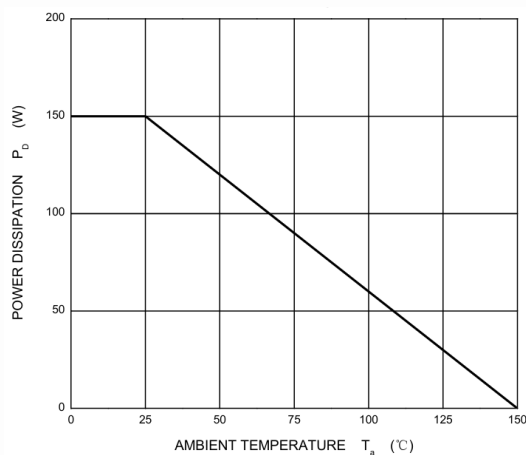
**FIG.1 Forward Characteristics**



**FIG.2 Reverse Characteristics**



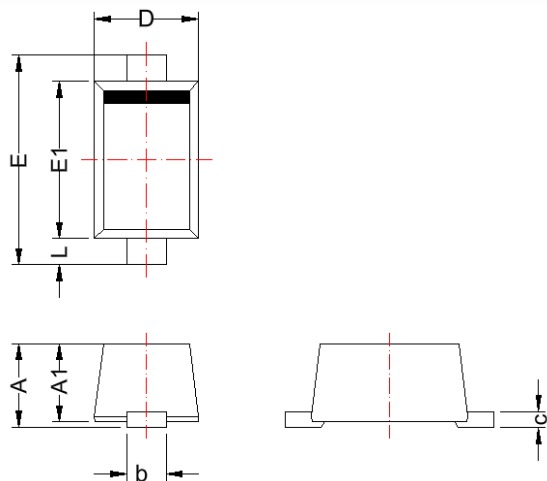
**FIG.3 Capacitance Characteristics**



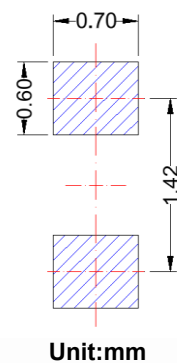
**FIG.4 Power Derating Curve**

# SOD-523 (SC-79)

## Package Dimension



## Recommended Land Pattern



Dimensions				
SYMBOL	Millimeters		Inches	
	MIN	MAX	MIN	MAX
A	0.51	0.77	0.020	0.030
A1	0.50	0.70	0.020	0.028
b	0.25	0.35	0.010	0.014
c	0.08	0.15	0.003	0.006
D	0.75	0.85	0.030	0.033
E	1.50	1.70	0.059	0.067
E1	1.10	13.00	0.043	0.512
L	0.20 REF		0.008 REF	





**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
	<a href="mailto:sales_twn@gs-power.com">sales_twn@gs-power.com</a>

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