

# GSDSS1□□D2F Series

## Schottky Barrier Diode

### Product Description

Reverse Voltage 40V to 100V.  
Forward Current 1.0A



### Features

- Low Forward Voltage Drop
- Low Power Loss, High Efficiency
- RoHS Compliant and Halogen Free

### Mechanical Data

- Case : Molded Plastic, SOD-123FL Package
- Terminals : Solderable per MIL-STD-750, Method 2026
- Polarity: Color Band denotes Cathode End

### Package and Pin Assignment

SOD-123FL		Equivalent Circuit
		
Pin	Description	
1	Anode	
2	Cathode	

### Ordering and Marking Information

Ordering Information			
Part Number	Package	Marking Code	Quantity/Reel
GSDSS14D2F	SOD-123FL	SS14	3000 PCS
GSDSS16D2F	SOD-123FL	SS16	3000 PCS
GSDSS110D2F	SOD-123FL	SS110	3000 PCS

<b>GSDSS1 □ □ D2 F</b>		
<b>- Product Code:</b> GSDSS1	<b>- Voltage Code:</b> □ □ is 4, 6, and 10. For examples 4 stands for 40V and 10 stands for 100V	<b>- Package Code:</b> D2 for SOD-123FL Package
<b>- Green Level:</b> F for RoHS Compliant and Halogen Free		

## Marking Information

SS1 11

- **Product Code:**

SS1

- **Voltage Code:**

11 is 4, 6, and 10.

For examples 4 stands for 40V

and 10 stands for 100V

## Electrical Characteristics

(Ratings at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60HZ, resistive or inductive load. For capacitive load, derate current by 20%.)

Symbol	Description	14D2F	16D2F	110D2F	Unit
V <sub>RRM</sub>	Maximum Repetitive Peak Reverse Voltage	40	60	100	V
V <sub>RMS</sub>	Maximum RMS Voltage	28	42	70	V
V <sub>DC</sub>	Maximum DC Blocking Voltage	40	60	100	V
I <sub>(AV)</sub>	Maximum Average Forward Rectified Current	1.0			A
I <sub>FSM</sub>	Peak Forward Surge Current, 8.3ms Single Half-Sine-Wave Superimposed on rated Load (JEDEC Method)	25			A
V <sub>F</sub>	Maximum Forward Voltage at 1.0A	0.55	0.70	0.85	V
I <sub>R</sub>	Maximum Reverse Current at Rated DC Blocking Voltage T <sub>A</sub> =25°C	0.5			mA
		10.0		5.0	mA
C <sub>J</sub>	Typical Junction Capacitance <sup>(1)</sup>	110	80		pF
R <sub>θJA</sub>	Typical Thermal Resistance <sup>1</sup>	250			°C/W
T <sub>J</sub>	Junction Temperature Range	-65 to 150			°C
T <sub>STG</sub>	Storage Temperature Range	-65 to 150			°C

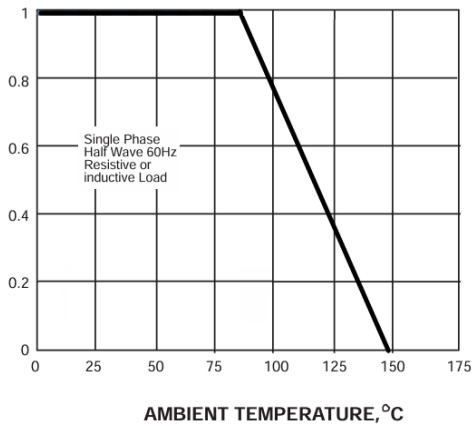
### NOTES:

1. Measured at 1MHz and applied reverse voltage of 4.0 V<sub>DC</sub>.
2. Mounted with 0.2 x 0.2" (5.0 x 5.0mm) Copper Pad Areas

## Typical Characteristics (Ratings at 25°C Ambient Temperature Unless Otherwise Specified.)

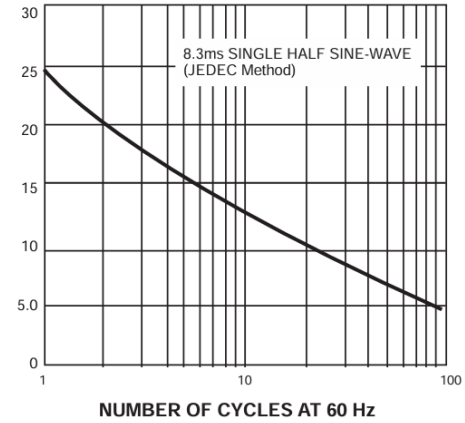
AVERAGE FORWARD RECTIFIED CURRENT, AMPERES

FIG. 1- FORWARD CURRENT DERATING CURVE



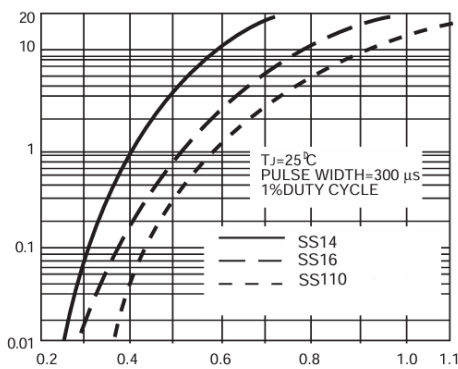
PEAK FORWARD SURGE CURRENT, AMPERES

FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT



INSTANTANEOUS FORWARD CURRENT, AMPERES

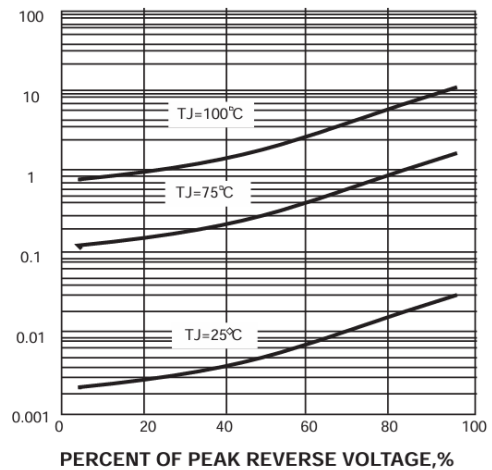
FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



INSTANTANEOUS FORWARD VOLTAGE, VOLTS

INSTANTANEOUS REVERSE CURRENT, MILLIAMPERES

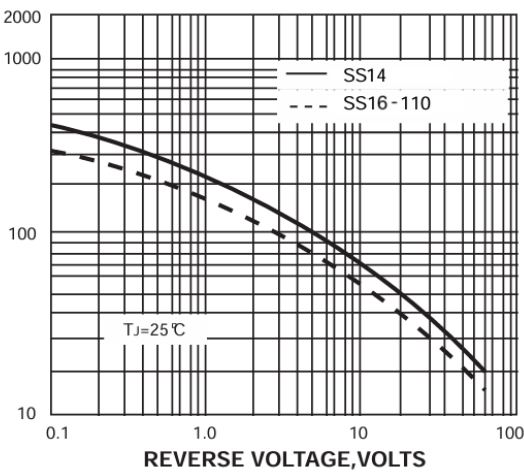
FIG. 4-TYPICAL REVERSE CHARACTERISTICS



PERCENT OF PEAK REVERSE VOLTAGE, %

JUNCTION CAPACITANCE, pF

FIG. 5-TYPICAL JUNCTION CAPACITANCE

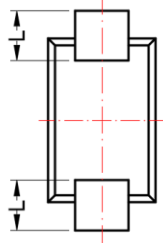
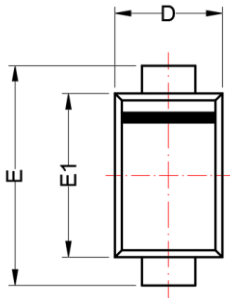


REVERSE VOLTAGE, VOLTS

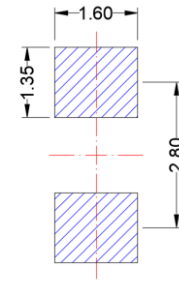
# SOD-123FL

## Package Dimension

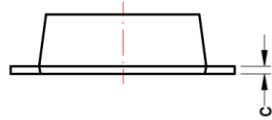
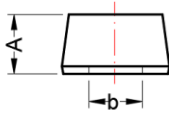
## Recommended Land Pattern



BACKSIDE VIEW



(Unit: mm)



## Dimensions

SYMBOL	Millimeters		Inches	
	MIN	MAX	MIN	MAX
A	0.80	1.10	0.031	0.043
b	0.50	1.20	0.020	0.047
D	1.50	1.90	0.059	0.075
E	3.30	3.80	0.130	0.150
E1	2.45	2.75	0.096	0.108
c	0.05	0.20	0.002	0.008
L	0.70	0.90	0.028	0.035





**NOTE:**



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

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