GSDST14N1F

Schottky Diode

Product Description

Schottky Barrier Diode 40V and 1A

Features

- Low Forward Voltage
- Trench Schottky Barrier Technology

Mechanical Data

- DFN1006-2L Package
- Color Band denotes Cathode End
- RoHS Compliant and Halogen Free

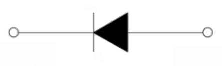
Packages & Pin Assignments

DFN1006-2L

TOP VIEW

Pin	Description
1	Anode
2	Cathode

Equivalent Circuit



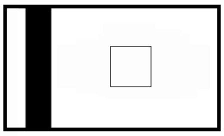
Ordering and Marking Information

Ordering Information

Part Number	Package	Part Marking	Quantity / Reel
GSDST14N1F	DFN1006-2L	X	10,000 PCS

- **Product Code:** GSDST14
- **Package Code:** N1 is DFN1006-2L
- **Green Level:** F is RoHS Compliant and Halogen Free

Marking Information



- **Product Code:** ☐ Is X
- **Color Band** Cathode End

Absolute Maximum Ratings (T_A=25°C unless otherwise specified)

Symbol	Parameter	Rating	Unit
V_{RRM}	Maximum repetitive peak reverse voltage	40	V
V_{RMS}	Maximum RMS voltage	28	V
V_{DC}	Maximum DC blocking voltage	40	V
$I_{F(AV)}$	Maximum average forward rectified current	1	A
I_{FSM}	Peak forward surge current*	5	A
P_D	Power Dissipation T_A=25°C	0.6	W
T_J	Junction Temperature Range	-55 to +150	°C
T_{STG}	Storage Temperature Range	-55 to +150	°C

⁎ 8.3 ms single half sine-wave superimposed on rated load.

Electrical Characteristics (T_A=25°C unless otherwise specified)

Symbol	Description	Conditions	Min	Max	Unit
V_{BR}	Breakdown Voltage	I_R=0.5mA	40	-	V
V_F	Instantaneous Forward Voltage	I_F=100mA	-	375	mV
		I_F=500mA	-	485	
		I_F=1000mA	-	600	
I_R	Reverse Leakage Current	V_R = 10V	-	30	µA
		V_R = 40V	-	100	

Performance Characteristics (T_A=25°C unless otherwise specified)

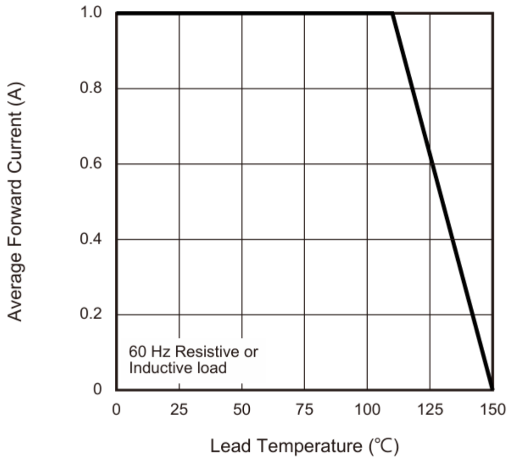


Fig.1 - Forward Current Derating Curve

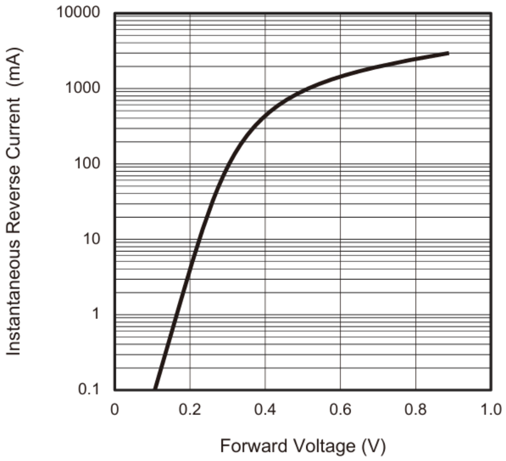


Fig.2 - Typical Instantaneous Forward Characteristics

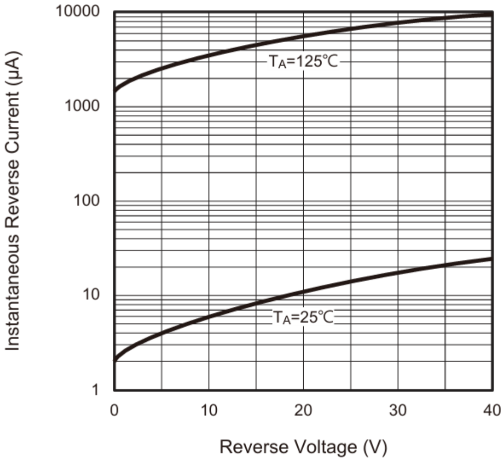


Fig.3 - Typical Reverse Characteristics

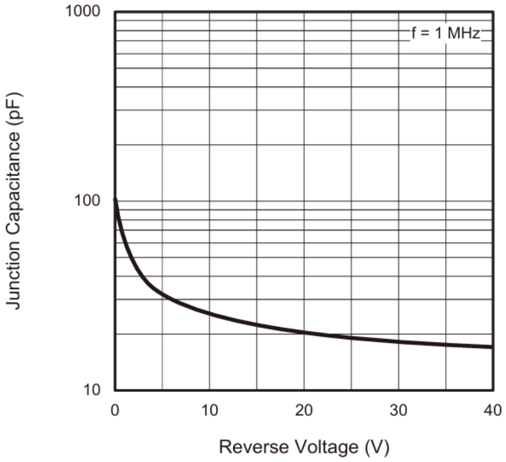
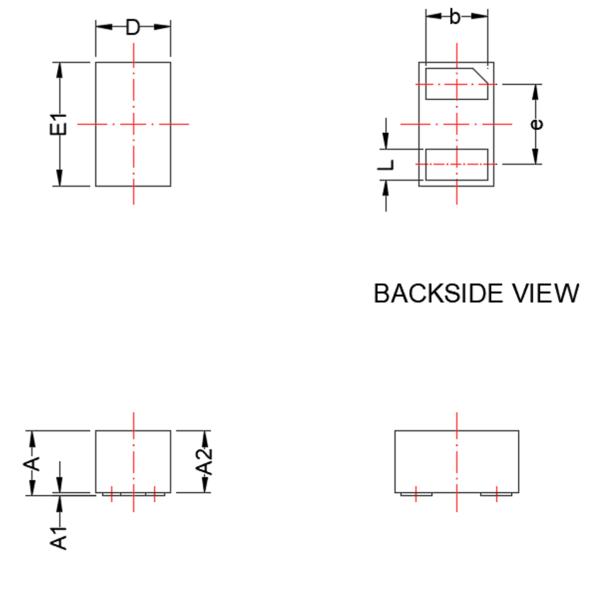


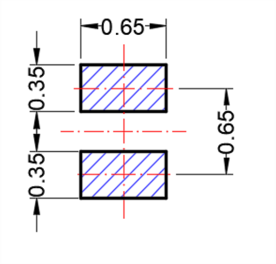
Fig.4 - Capacitance Characteristics

DFN1006-2L

Package Dimension



Recommended Land Pattern



(Unit: mm)

Dimensions				
Symbol	**Millimeters**		**Inches**	
	Min	**Max**	**Min**	**Max**
A	0.45	0.60	0.018	0.024
A1	0.00	0.05	0.000	0.002
A2	0.40	0.60	0.016	0.024
b	0.45	0.55	0.018	0.022
D	0.55	0.65	0.022	0.026
E1	0.95	1.05	0.037	0.041
e1	0.65 BSC		0.026 BSC	
L	0.20	0.30	0.008	0.012

NOTE:
DIMENSION D DOES NOT INCLUDE MOLD FLASH,PROTRUSIONS OR GATE BURRS.

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Version_1.0