GSD3004N1F

Switching Diode

Product Description

Switching Diode 350V and 225mA

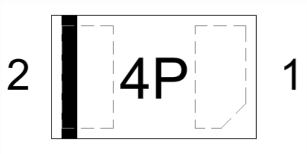
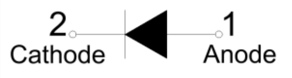
Features

- Fast Switching Speed.
- Low Reverse Leakage Current

Mechanical Data

- DFN1006-2L Package
- Epoxy Meets UL 94 V-0 Flammability Rating
- RoHS Compliant and Halogen Free

Packages & Pin Assignments

DFN1006-2L	Equivalent Circuit
 *Band indicates Cathode	

Ordering and Marking Information

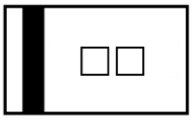
Ordering Information

Part Number	Package	Marking Code	Quantity/Reel
GSD3004N1F	DFN1006-2L	4P	10,000 PCS

GSD3004N1F

- **Product Code:**
  GSD3004
- **Package Code:**
  N1 for DFN1006-2L Package
- **Green Level:**
  F for RoHS Compliant and Halogen Free

Marking Information

	- **Product Code:** **□□ is 4P** *Band for Cathode Side	

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

Symbol	Parameter	Value	Units
V_{RRM}	Peak Repetitive Reverse Voltage	350	V
V_{RM}	Peak Non-Repetitive Reverse Voltage	300	V
$V_{R(RMS)}$	RMS Reverse Voltage	212	V
I_{FM}	Forward Continuous Current	225	mA
I_{FSM}	Repetitive Peak Forward Current	625	mA
I_{FSM}	Non-Repetitive Peak Forward Surge Current (@t=1.0 us)	4	A
P_D	Power Dissipation	250	mW
$R_{\Theta JA}$	Thermal Resistance from Junction to Ambient	500	°C/W
T_J	Junction Temperature	150	°C
T_{STG}	Storage Temperature	-55 to +150	°C

These ratings are limiting values above which the serviceability of the diode may be impaired.

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

Symbol	Parameter	Test Condition	Min	Max	Units
V_R	Reverse Breakdown Voltage	I_R=150μA	350		V
V_F	Forward Voltage	I_F=20mA		0.87	V
		I_F=100mA		1.00	V
		I_F=200mA		1.25	V
I_R	Reverse Current	V_R = 240V (25℃)		100	nA
		V_R = 240V (150℃)		100	uA
C_T	Capacitance	V_R = 0V, f = 1MHz		5	pF
t_{rr}	Reverse Recovery Time	I_F = I_R=30mA, I_{RR} = 0.1x I_R R_L = 100Ω		50	ns

Typical Characteristics

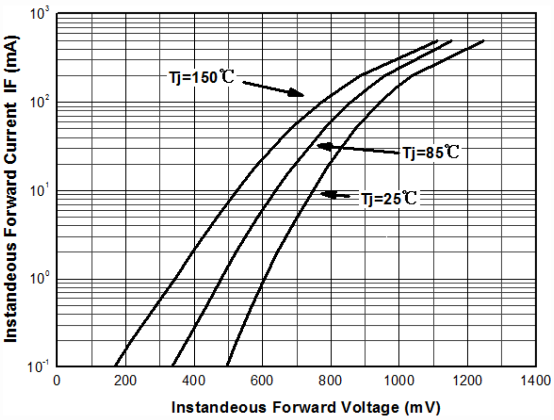


Fig. 1 Forward Characteristics

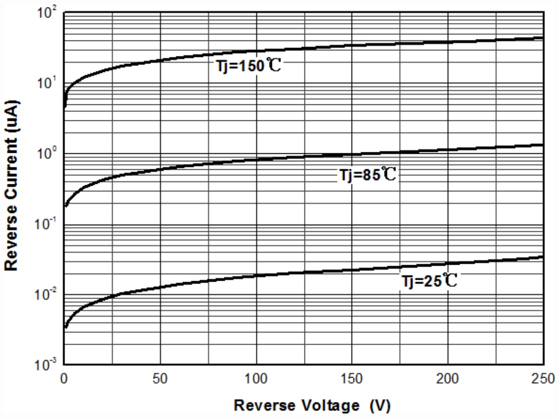


Fig. 2 Reverse Characteristics

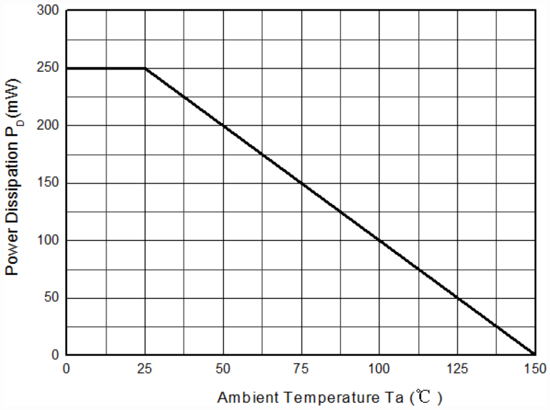
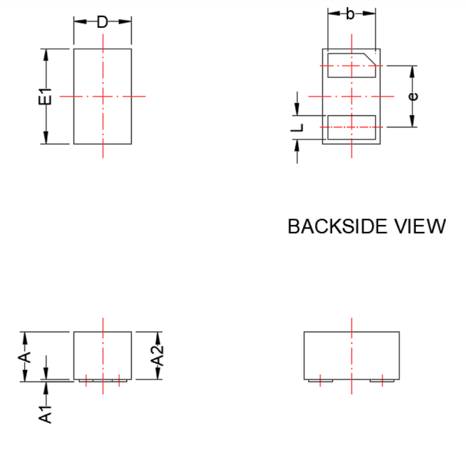


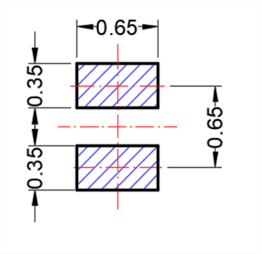
Fig. 3 Power Derating Curve

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:

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

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