GSE050LU2NTF

ESD Protection Diode

Product Description

It is designed to protect sensitive electronics from damage due to electrostatic discharge (ESD) and other transient events.

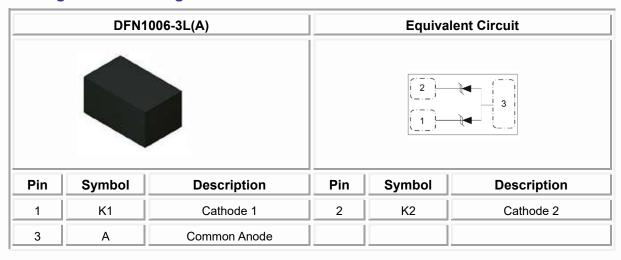
Features

- Operating Voltage: 5V.
- Unidirectional Configurations
- IEC61000-4-2(ESD) ±15kV (Air)
- IEC61000-4-2(ESD) ±15kV (Contact)
- IEC61000-4-4(EFT) 40A (5/50ns)
- IEC61000-4-5(Lighting) 3.5A (8/20µs)

Mechanical Data

- DFN1006-3L(A) Package
- RoHS Compliant and Halogen Free

Package and Pin Assignment





Ordering and Marking Information

GS P/N	Package	Marking	Quantity / Reel
GSE050LU2NTF	DFN1006-3L(A)	L	10,000PCS
GSE050LU2NTF			
- Product Code: GSE050LU2	- Package Code: NT for DFN1006-3L(A) - Green Level: F for RoHS Compliant and Halogen Free		
	Marking	Information	
. L	- Product Code L • Dot denote		

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

Symbol	Parameter	Value	Unit
P _{PP}	Peak Pulse Power (t _P =8/20μs)	40	W
Ірр	Peak Pulse Current (tթ=8/20µs)	3.5	Α
.,	ESD Per IEC61000-4-2 (Air)	±15	KV
VESD	ESD Per IEC61000-4-2 (Contact)	±15	KV
TJ	Operating Junction Temperature Range	-55 to +125	°C
T _{STG}	Storage Temperature Range	-55 to +1125	°C

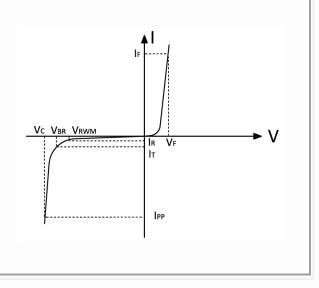


Electrical Characteristics (T_A=25°C unless otherwise specified)

Symbol	Parameter	Conditions	Min	Тур	Max	Unit
V _{RWM}	Reverse Working Voltage	-			5	V
V _{BR}	Reverse Breakdown Voltage	I _T = 1mA	5.6			V
I _R	Reverse Leakage Current	V _{RWM} =5V			0.1	μА
Vc	Clamping Voltage	І _{РР} =3А (8/20µs)			13.5	V
Сл	Junction Capacitance	V _R =0V, f=1MHz		0.3		pF

Electrical Parameters

Symbol	Parameter	
Ірр	Reverse Peak Pulse Current	
Vc	Clamping Voltage @ IPP	
V _{RWM}	Reverse Working Voltage	
I _R	Reverse Leakage Current @ V _{RWM}	
V _{BR}	Breakdown Voltage @ I⊤	
lτ	Test Current	





Typical Characteristics (T_A=25℃ unless otherwise specified)

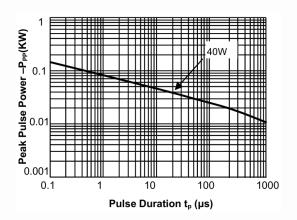


FIG 1. Peak Pulse Power vs. Pulse Time

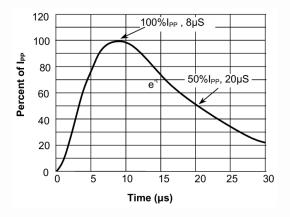


FIG 3. 8/20µs Pulse Waveform

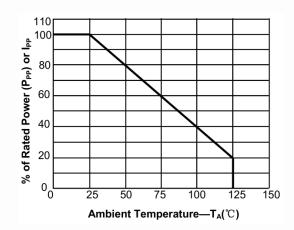


FIG 2. Power Derating Curve

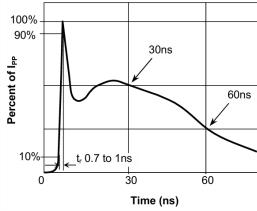
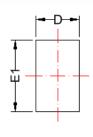


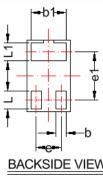
FIG 4. Pulse Waveform-ESD(IEC61000-4-2)



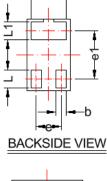
DFN1006-3L(A)

Package Dimension

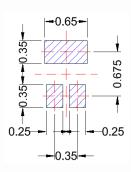








Recommended Land Pattern



	Dimensions				
O	Millimeters		Inches		
Symbol	MIN	MAX	MIN	MAX	
Α	0.40	0.50	0.016	0.020	
A 1	0.00	0.05	0.000	0.002	
b	0.10	0.20	0.004	0.008	
b1	0.40	0.60	0.016	0.024	
D	0.55	0.65	0.022	0.026	
E1	0.95	1.05	0.037	0.041	
е	0. 35	0. 350 BSC 0.014 BSC			
e1	0.675 BSC 0.027 BSC		BSC		
L	0.20	0.40	0.008	0.016	
L1	0.20	0.30	0.008	0.012	

NOTE:

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



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