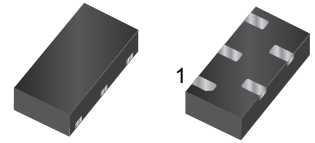**GOOD-ARK**

SEMICONDUCTOR
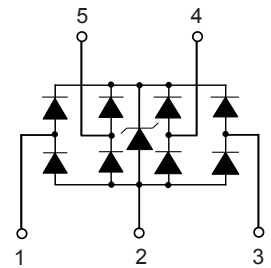
GSEHP5U006
Ultra Low Capacitance ESD TVS Array

Features

- Low leakage
- Ultra low capacitance
- Moisture sensitivity level 1
- Epoxy meets UL 94 V-0 flammability rating
- ESD Protection for high-speed data lines to: IEC 61000-4-2 ±15KV Contact, ±20KV Air

DFN1308-5L

Pin	Identification
1	I/O 1
2	Ground
3	I/O 2
4	I/O 3
5	I/O 4

Schematic Diagram

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

Parameter	Symbol	Value	Unit
Peak Pulse Power (T$_P$=8/20μS)	P$_{PP}$	65	W
Peak Pulse Current (T$_P$=8/20μS)	I$_{PP}$	5	A
Junction Temperature	T$_J$	-55 To +125	°C
Storage Temperature	T$_{STG}$	-55 To +150	°C

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

| Parameter	Symbol	Condition	Min	Typ	Max	Unit
Reverse Working Voltage	V$_{RWM}$	-	-	-	5	V
Reverse Breakdown Voltage	V$_{BR}$	I$_T$=1mA	6.5	7.5	9	V
Reverse Leakage Current	I$_R$	V$_R$=5V	-	10	100	nA
Clamping Voltage I/O-GND	V$_C$	I$_{PP}$=1A, T$_P$=8/20us, Pin 1,3,4,5 to 2	-	-	10	V
		I$_{PP}$=5A, T$_P$=8/20us, Pin 1,3,4,5 to 2	-	-	13	V
Junction Capacitance	C$_{I/O-GND}$	V$_R$=0V, F=1MHz, Pin Capacitance to GND	-	0.6	0.7	pF
Junction Capacitance	C$_{I/O-I/O}$	V$_R$=0V, F=1MHz, Pin Capacitance to I/O	-	0.3	0.35	pF

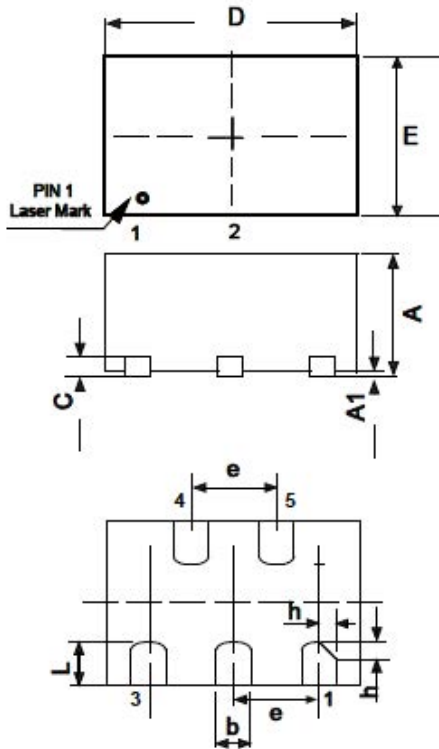## Typical Characteristic Curves
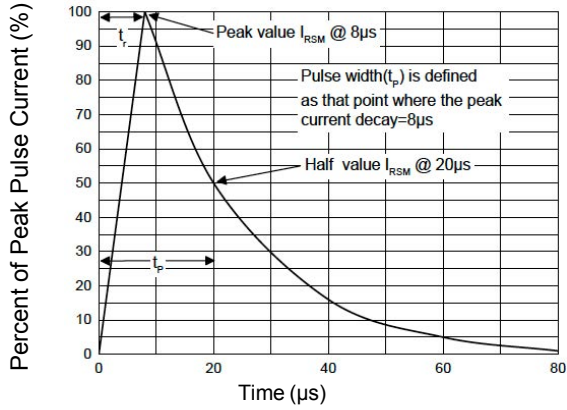
Figure 1. 8x20µs Pulse Waveform
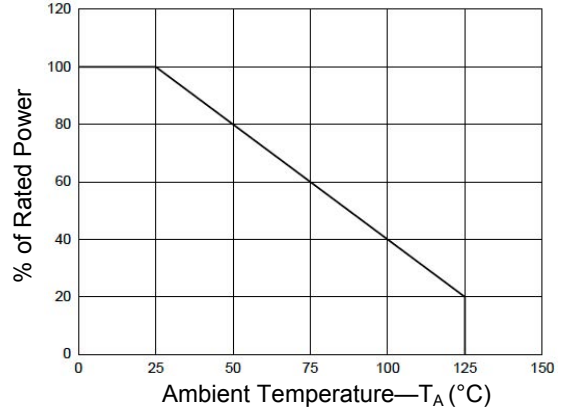
Figure 2. Pulse Derating Curve
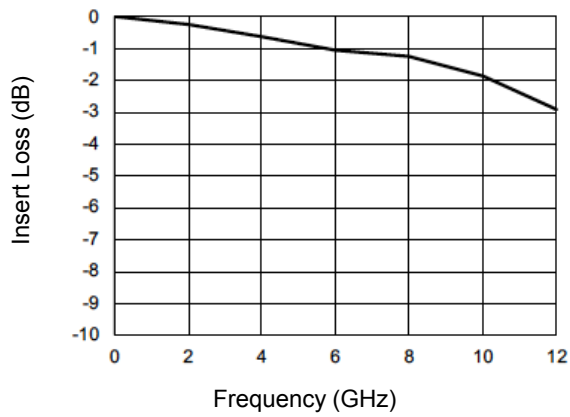
Figure 3. Insert Loss vs. Frequency (IO to GND)

Package Outline Dimensions   (DFN1308-5L)

Symbol	Dimensions in Inches		Dimensions in Millimeters	
	Min	Max	Min	Max
A	0.012	0.016	0.300	0.400
A1	0.000	0.002	0.000	0.050
b	0.006	0.010	0.150	0.250
C	0.005 TYP		0.127 TYP	
D	0.047	0.056	1.200	1.400
E	0.028	0.036	0.700	0.900
e	0.02 TYP		0.500 TYP	
h	0.004	0.006	0.100	0.150
L	0.008	0.012	0.200	0.300

Order Information

Device	Package	Marking	Quantity	HSF Status
GSEHP5U006	DFN1308-5L	5P	5Kpcs/Reel	RoHS Compliant