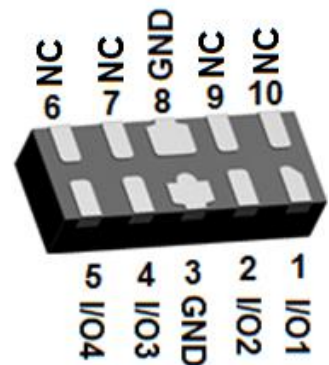
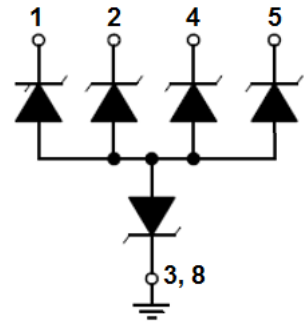


Features

- ESD protection for 4 lines with bi-directional
- For operating voltage of 60V and below
- Fast turn-on and low clamping voltage
- Solid-state silicon-avalanche and active circuit triggering technology
- Array of ESD rated diodes with internal equivalent TVS (Transient Voltage Suppression) diode
- ESD / transient protection of high speed data lines
 - IEC 61000-4-2 (ESD): ± 15 kV (air), ± 12 kV (contact)
- RoHS compliant with Halogen-free

HF



DFN2510-10L

Typical Applications

- Chip-On-Glass (COG) Panels
- OLED Panels
- Power line Protection
- Control Signal Lines Protection

Mechanical Data

- Case: DFN2510-10L
- Molding Compound: UL Flammability Classification Rating 94V-0
- Terminals: Matte tin-plated leads; solderability-per MIL-STD-202, Method 208

Ordering Information

Part Number	Package	Shipping Quantity	Marking Code
GESD60VAG4	DFN2510-10L	3000 pcs / Tape & Reel	60VA

Maximum Ratings (@ $T_A = 25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Value	Unit
IEC 61000-4-2; ESD (Air)	V_{ESD-A}	± 15	kV
IEC 61000-4-2; ESD (Contact)	V_{ESD-C}	± 12	kV
Reverse Stand-off Voltage	V_{RWM}	60	V

Thermal Characteristics

Parameter	Symbol	Value	Unit
Power Dissipation	P_D	0.25	W
Thermal Resistance Junction-to-Air	$R_{\theta JA}$	500	$^{\circ}\text{C/W}$
Thermal Resistance Junction-to-Case	$R_{\theta JC}$	342	$^{\circ}\text{C/W}$
Thermal Resistance Junction-to-Lead	$R_{\theta JL}$	280	$^{\circ}\text{C/W}$
Operating Temperature	T_{OP}	-55 ~ +85	$^{\circ}\text{C}$
Storage Temperature	T_{STG}	-55 ~ +150	$^{\circ}\text{C}$

Electrical Characteristics (@ $T_A = 25^{\circ}\text{C}$ unless otherwise specified)

Parameter	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Reverse Breakdown Voltage	V_{BR}	$I_T = 1\text{mA}$ Pin-1, -2, -4, -5 to pin-3, -8	65	-	-	V
Reverse Leakage Current	I_R	$V_{\text{Pin-1, -2, -4, -5}} = 60\text{V}$ $V_{\text{pin-3, -8}} = 0\text{V}$	-	-	1000	nA
ESD Clamping Voltage	V_C	IEC 61000-4-2 +8Kv (ITLP = 16A), $T = 25^{\circ}\text{C}$ Contact mode, any I/O pin to Ground.	-	110	-	V
Diode Capacitance	C_J	$V_R = 0\text{V}$, $f = 1\text{MHz}$ (I/O pin to I/O)	-	5	-	pF

Ratings and Characteristic Curves (@ $T_A = 25^\circ\text{C}$ unless otherwise specified)

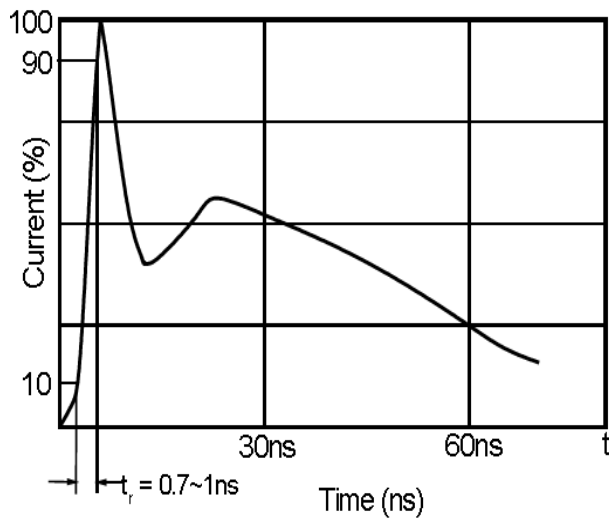


Fig 1 ESD pulse waveform according to IEC61000-4-2

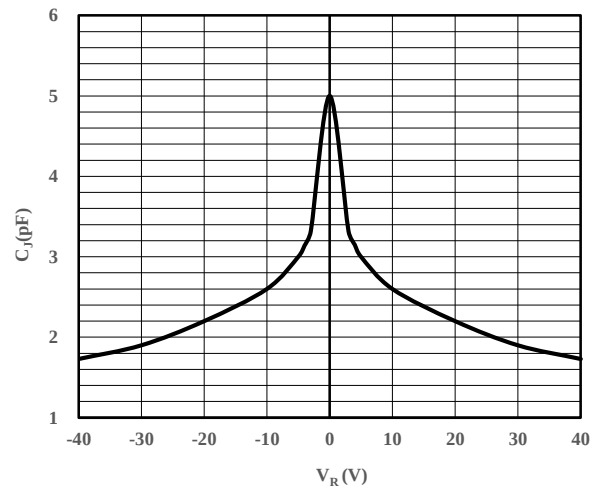
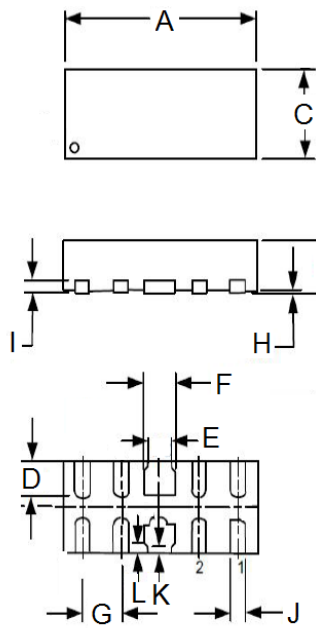


Fig 2 Capacitance Characteristics

Package Outline Dimensions (Unit: mm)



DFN2510-10L		
Dimension	Min.	Max.
A	2.450	2.550
B	0.450	0.550
C	0.950	1.050
D	0.350	0.450
E	0.200	0.450
F	0.350	0.450
G	0.400	0.600
H	0.000	0.002
I	0.100	0.200
J	0.100	0.250
K	0.000	0.050
L	0.000	0.095

Mounting Pad Layout (Unit: mm)

DFN2510-10L

