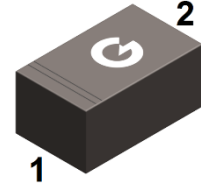


### Features

- ESD / transient protection of high speed data lines
  - IEC 61000-4-2 (ESD):  $\pm 30$  kV (air),  $\pm 30$  kV (contact)
- Working voltage:  $V_{RWM} = 24V$
- Low leakage current
- Low clamping voltage
- RoHS compliant with Halogen-free

HF



DFN1006-2

### Mechanical Data

- Case: DFN1006-2
- 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
GESD24VDL	DFN1006-2	10000 pcs / Tape & Reel	N5

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

Parameter	Symbol	Value	Unit
IEC 61000-4-2; ESD (Air)	$V_{ESD-A}$	$\pm 30$	kV
IEC 61000-4-2; ESD (Contact)	$V_{ESD-C}$	$\pm 30$	kV
Peak Pulse Power ( $t_p = 8/20\mu s$ )	$P_{PP}$	160	W
Peak Pulse Current ( $t_p = 8/20\mu s$ )	$I_{PP}$	3	A

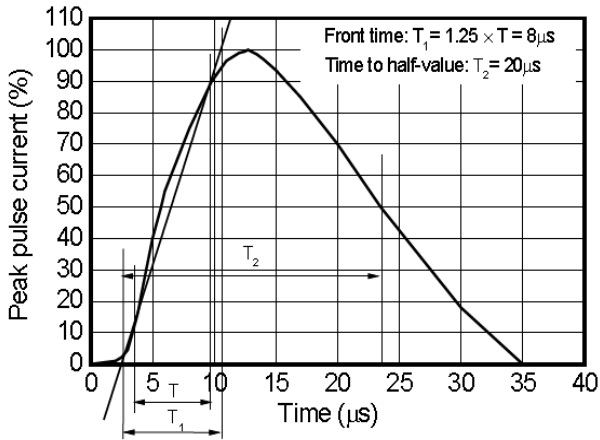
### Thermal Characteristics

Parameter	Symbol	Value	Unit
Operating Temperature	$T_J$	-55 ~ +150	$^\circ C$
Storage Temperature	$T_{STG}$	-55 ~ +150	$^\circ C$

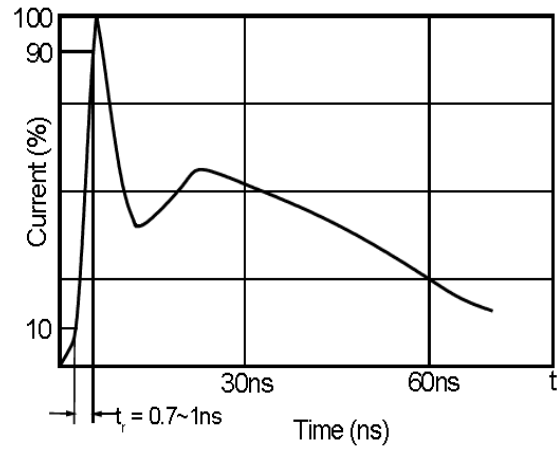
### Electrical Characteristics (@ $T_A = 25^\circ\text{C}$ unless otherwise specified)

Symbol	Parameter	Test Condition	Min.	Typ.	Max.	Unit
$V_{RWM}$	Reverse Stand-off Voltage		-	-	24	V
$V_{BR}$	Reverse Breakdown Voltage	$I_T = 5\text{mA}$	26.5	-	-	V
$I_R$	Reverse Leakage Current	$V_{RWM} = 24\text{V}$	-	-	0.05	$\mu\text{A}$
$V_C$	Clamping Voltage	$I_{PP} = 1\text{A}, t_p = 8/20\mu\text{s}$	-	-	36	V
		$I_{PP} = 3\text{A}, t_p = 8/20\mu\text{s}$	-	-	42	V
$C_J$	Junction Capacitance	$V_R = 0\text{V}, f = 1.0\text{MHz}$	-	-	50	pF

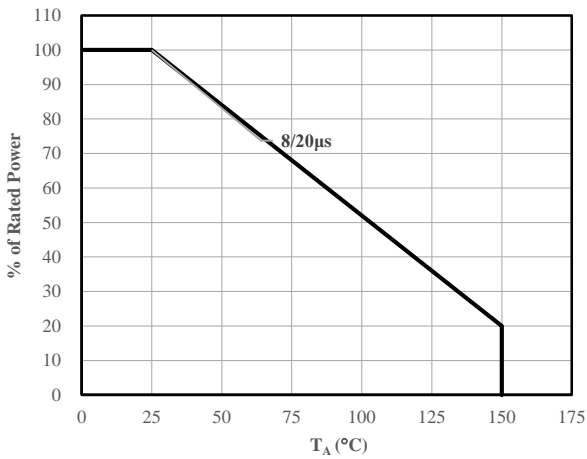
**Ratings and Characteristics Curves** (@  $T_A = 25^\circ\text{C}$  unless otherwise specified)



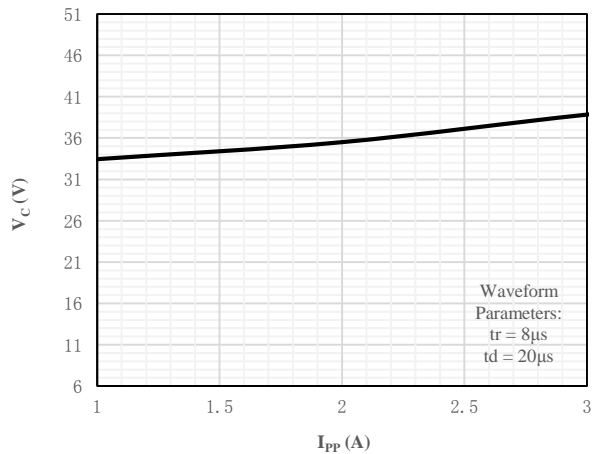
**Fig 1** 8/20  $\mu\text{s}$  waveform per IEC61000-4-5



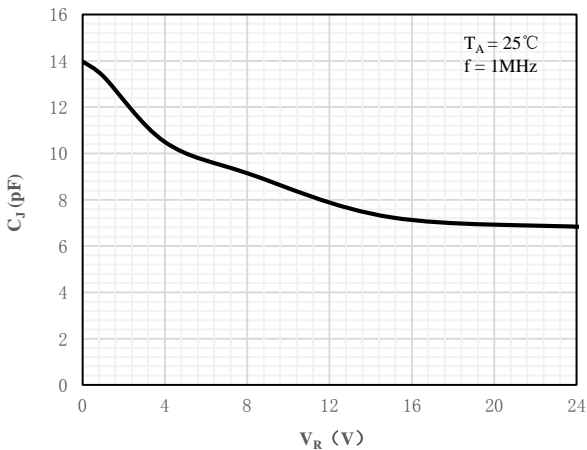
**Fig 2** ESD pulse waveform according to IEC61000-4-2



**Fig 3** Power Derating Curve

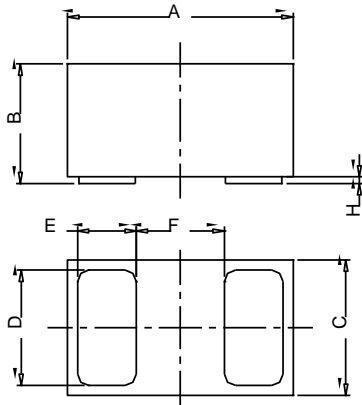


**Fig 4** Clamping Voltage vs. Peak Pulse Current



**Fig 5** Junction Capacitance vs. Reverse Voltage

Package Outline Dimensions (Unit: mm)



DFN1006-2			
Dimension	Min.	Typ.	Max.
A	0.95	1.00	1.075
B	0.47	0.50	0.53
C	0.55	0.60	0.675
D	0.45	0.50	0.55
E	0.20	0.25	0.30
F	-	0.40	-
H	0	0.03	0.05

Package Outline Dimensions (Unit: mm)

DFN1006-2

