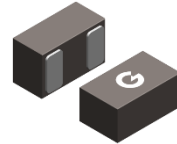


Features

- Transient protection for data&power lines to IEC 61000-4-2(ESD)30Kv(air),30kV(contanct) IEC 61000-4-5(Surge)25A(tp=8/20us)
- Working Voltage: 4.5V
- Low clamping voltage
- Low leakage current
- Solid-state silicon avalanche technology
- RoHS compliant with Halogen-free

HF



DFN1006-2

Typical Applications

- Power lines
- Cellular handsets
- Tablets
- Microprocessors
- Portable Electronics

Mechanical Data

- Case: DFN1006-2
- Molding compound, UL flammability classification rating 94V-0
- Terminals: Tin plated leads, solderable per MIL-STD-202, Method 208

Ordering Information

Part Number	Package	Shipping	Marking Code
GESD4V5BL	DFN1006-2	10000 pcs / Tape & Reel	ZY

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

Characteristic	Symbol	Value	Units
Peak pulse power (tp = 8/20μs)	P _{PK}	350	W
Peak pulse current (tp = 8/20μs)	I _{PP}	25	A
Reverse Stand-off Voltage	V _{RWM}	4.5	V
ESD according to IEC61000-4-2 air discharge	V _{ESD}	±30	KV
ESD according to IEC61000-4-2 contact discharge		±30	

Thermal Characteristics

Parameter	Symbol	Value	Units
Junction temperature	T _J	-55 ~ +125	°C
Storage temperature range	T _{STG}	-55 ~ +150	°C

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

Parameter	Symbol	Test conditions	Min.	Typ.	Max.	Units
Reverse breakdown voltage	V_{BR}	$I_R=1\text{mA}$	4.6	-	-	V
Reverse leakage current	I_R	$V_{RWM}=4.5\text{V}$	-	-	1	μA
Clamping voltage	V_C	$I_{PP}=1\text{A}$, $t_p=8/20\mu\text{s}$	-	-	6	V
		$I_{PP}=20\text{A}$, $t_p=8/20\mu\text{s}$	-	-	13	V
		$I_{PP}=25\text{A}$, $t_p=8/20\mu\text{s}$	-	-	15	V
Junction capacitance	C_J	$V_R=0\text{V}$, $f=1\text{MHz}$	-	30	80	pF
		$V_R=4\text{V}$, $f=1\text{MHz}$	-	27	60	

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

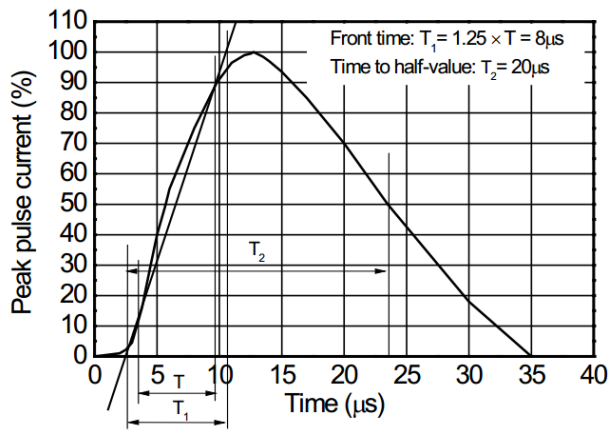


Fig1. 8/20us pulse waveform according to
IEC61000-4-5

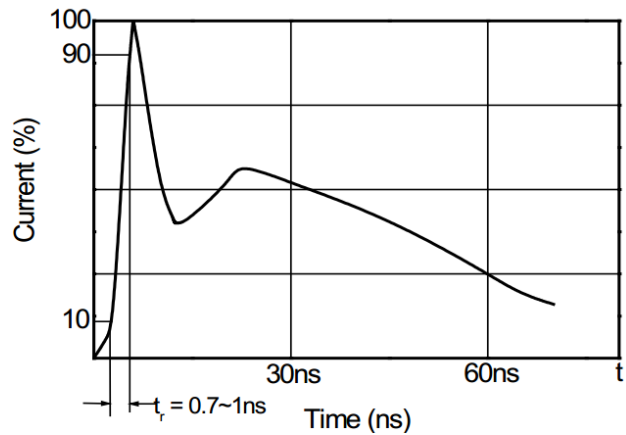
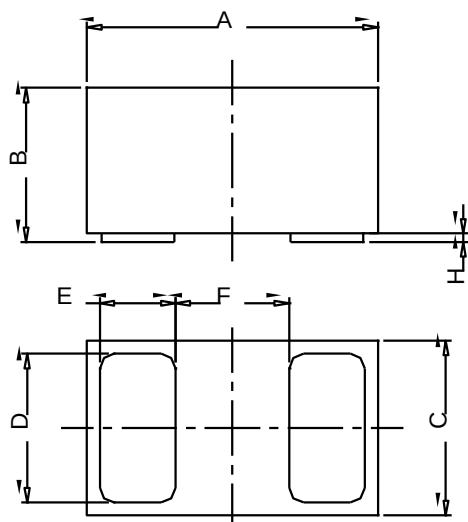


Fig2. ESD pulse waveform according to
IEC61000-4-2

Package Outline Dimensions (unit: mm)



DFN1006-2			
Dim	Min	Typ	Max
A	0.95	1.00	1.075
B	0.45	0.50	0.55
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
All Dimensions in mm			

Mounting Pad Layout (unit: mm)

