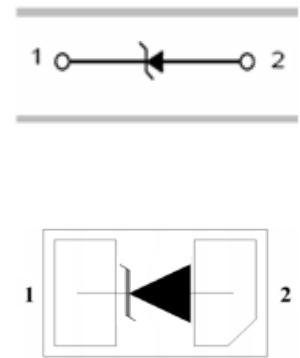


Features

- ESD / transient protection of high speed data lines
 - IEC 61000-4-2 (ESD): $\pm 30\text{kV}$ (air), $\pm 30\text{kV}$ (contact)
- Low reverse stand-off voltage: $V_{RWM} = 36\text{V}$
- Protects one I/O or power line
- Low clamping voltage
- Low leakage current
- RoHS compliant with Halogen-free

HF



Mechanical Data

- Case: DFN1610-2L
- Molding Compound: UL Flammability Classification Rating 94V-0
- Terminals: Matte Tin-Plated Leads, Solderability-per MIL-STD-202, Method 208

DFN1610-2L

Ordering Information

Part Number	Package	Shipping Quantity	Marking Code
ESD36VDH	DFN1610-2L	10000 pcs / Tape & Reel	36VD

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

Parameter	Symbol	Value	Unit
IEC 61000-4-2; ESD (Air)	V_{ESD-A}	± 30	kV
IEC 61000-4-2; ESD (Contact)	V_{ESD-C}	± 30	kV
Peak Pulse Power ($t_p = 8/20\mu\text{s}$)	P_{PP}	1400	W
Peak Pulse Current ($t_p = 8/20\mu\text{s}$)	I_{PP}	20	A

Thermal Characteristics

Parameter	Symbol	Value	Unit
Junction Temperature	T_J	$-55 \sim +125$	$^\circ\text{C}$
Storage Temperature Range	T_{STG}	$-55 \sim +150$	$^\circ\text{C}$

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

Parameter	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Reverse Stand-off Voltage	V_{RWM}		-	-	36	V
Reverse Breakdown Voltage	$V_{(BR)}$	$I_T = 1\text{mA}$	37	-		V
Reverse Leakage Current	I_R	$V_{RWM} = 36\text{V}$	-	-	1	μA
Clamping Voltage	V_C	$I_{PP} = 8\text{A}, t_p = 8/20\mu\text{s}$	-	-	60	V
		$I_{PP} = 20\text{A}, t_p = 8/20\mu\text{s}$	-	-	70	V
Junction Capacitance	C_J	$V_R = 0\text{V}, f = 1\text{MHz}$	-	-	150	pF

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

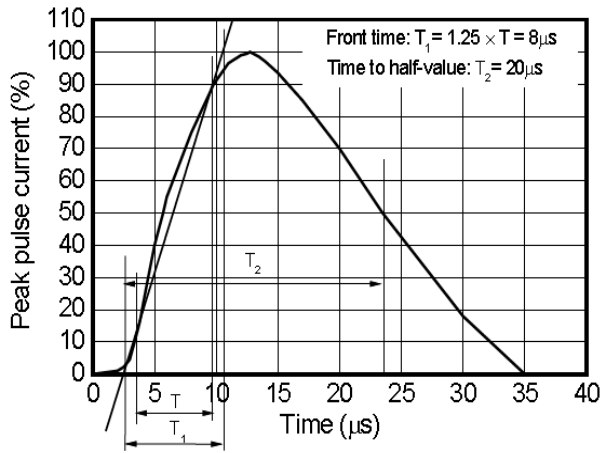


Fig 1 8/20µs waveform per IEC61000-4-5

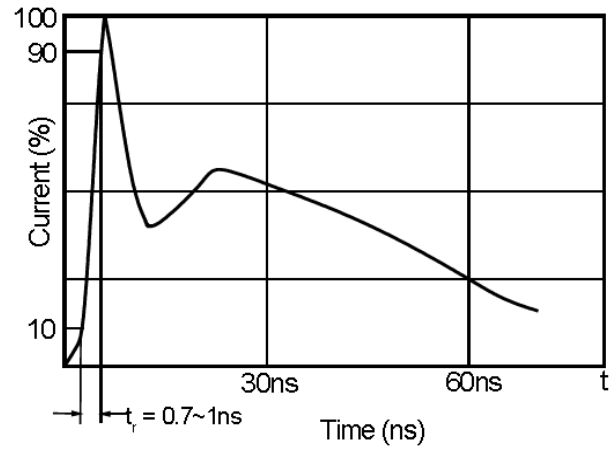


Fig 2 ESD pulse waveform according to IEC61000-4-2

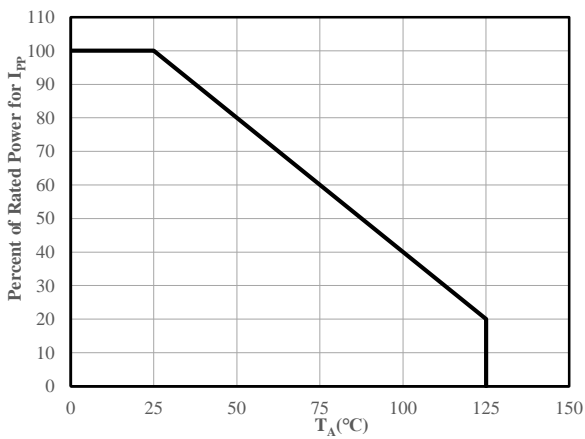


Fig 3 Power Derating Curve

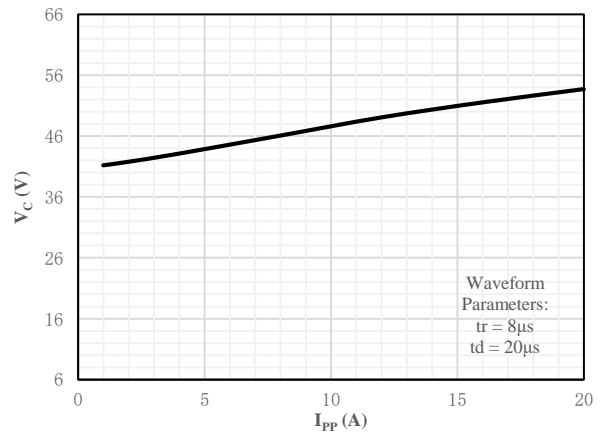


Fig 4 Clamping Voltage vs. Peak Pulse Current

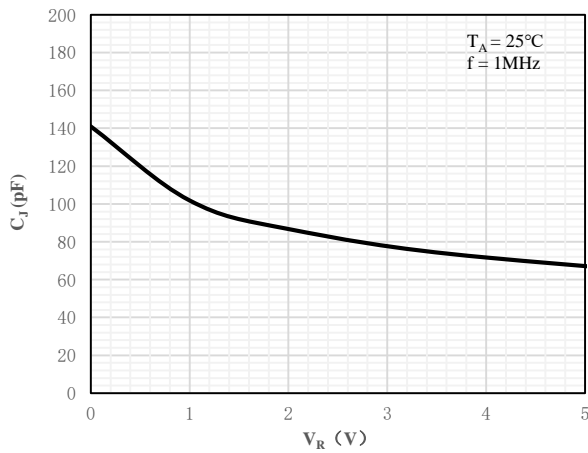
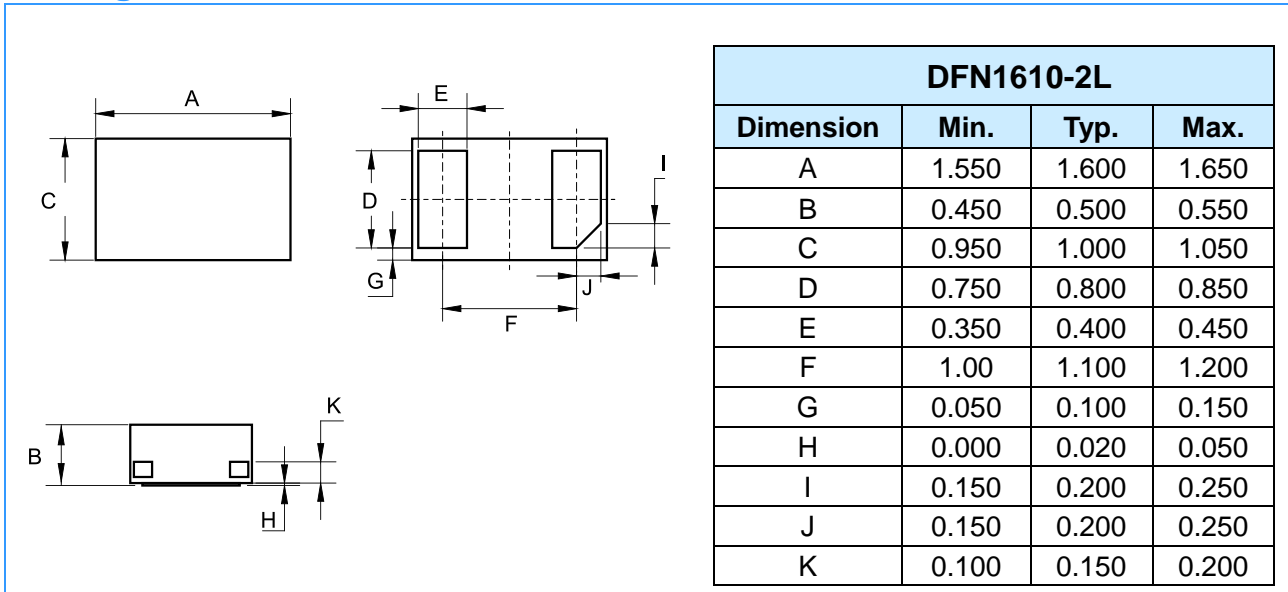


Fig 5 Junction Capacitance vs. Reverse Voltage

Package Outline Dimensions (Unit: mm)



Package Outline Dimensions (Unit: mm)

