

RoHS Compliant Product
 A suffix of "-C" specifies halogen and lead-free

DESCRIPTION

DFN1610

The SIESD05-C is a transient voltage suppressor designed to protect power interfaces. It is suitable to replace multiple discrete components in portable electronics.

The SIESD05-C is specifically designed to protect power lines.



FEATURES

- Transient protection for high-speed data lines
- Low Clamping Voltage
- Solid-State Silicon Technology
- Reverse Stand-off Voltage: 5V

MARKING

H5N

PACKAGE INFORMATION

Package	MPQ	Leader Size
DFN1610	3K	7 inch

ORDER INFORMATION

Part Number	Type
SIESD05-C	Lead (Pb)-free and Halogen-free



ABSOLUTE MAXIMUM RATINGS ($T_A=25^{\circ}\text{C}$ unless otherwise noted.)

Parameter	Symbol	Ratings	Unit
ESD Rating per IEC61000-4-2	Air	± 30	kV
	Contact	± 30	
Peak Pulse Power @ $t_p=8/20\mu\text{s}$	P_{PP}	2730	W
Peak Pulse Current @ $t_p=8/20\mu\text{s}$	I_{PP}	130	A
Operating Junction & Storage Temperature Range	T_J, T_{STG}	125, -55~150	$^{\circ}\text{C}$

ELECTRICAL CHARACTERISTICS ($T_A=25^{\circ}\text{C}$ unless otherwise noted.)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Conditions
Reverse Stand-off Voltage	V_{RWM}	-	-	5	V	
Breakdown Voltage	$V_{(BR)}$	6	-	-		$I_T=1\text{mA}$
Reverse Leakage Current	I_R	-	-	1	μA	$V_{RWM}=5\text{V}$
Surge Clamping Voltage @ $t_p=8/20\mu\text{s}$	V_C	-	-	16	V	$I_{PP}=50\text{A}$
		-	-	21		$I_{PP}=130\text{A}$
Junction Capacitance	C_J	-	960	1000	pF	$V_R=0\text{V}, f=1\text{MHz}$

TYPICAL CHARACTERISTICS

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

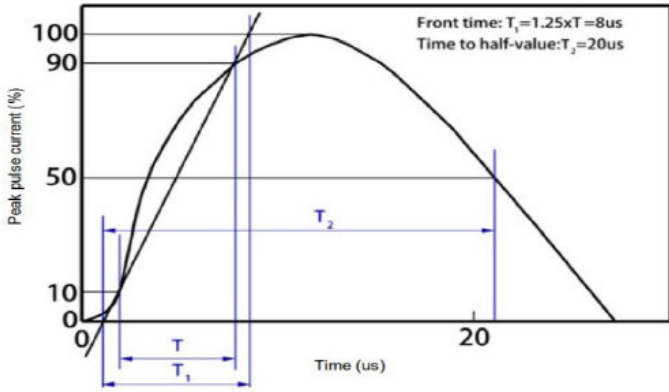


Fig 2 Contact Discharge Current Waveform per IEC 61000-4-2)

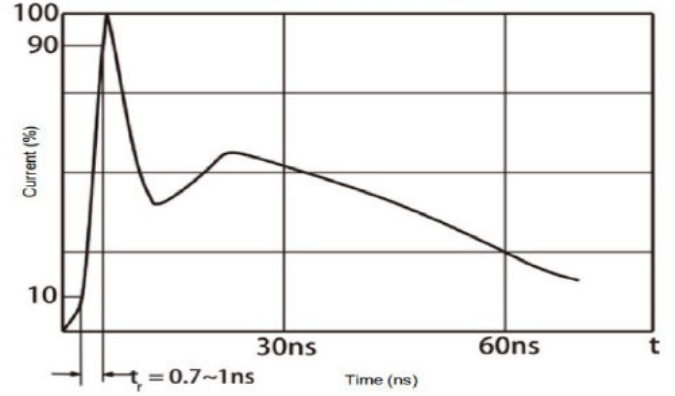


Fig 3 Voltage vs Capacitance

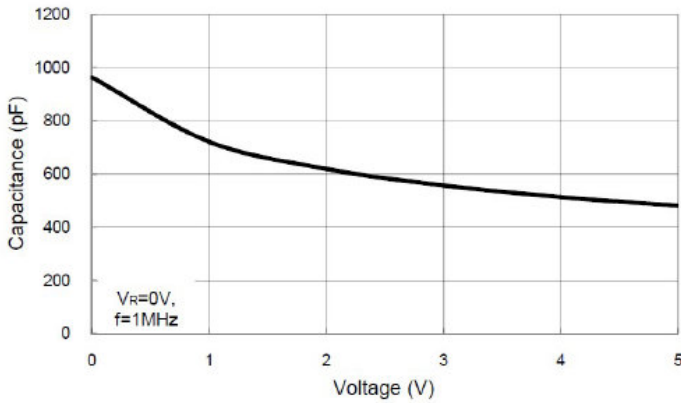
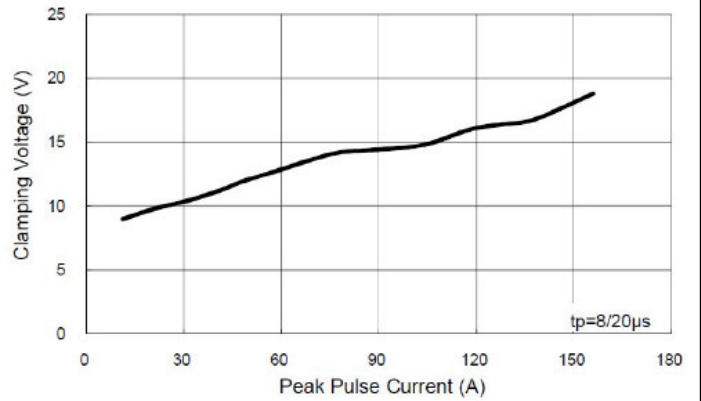
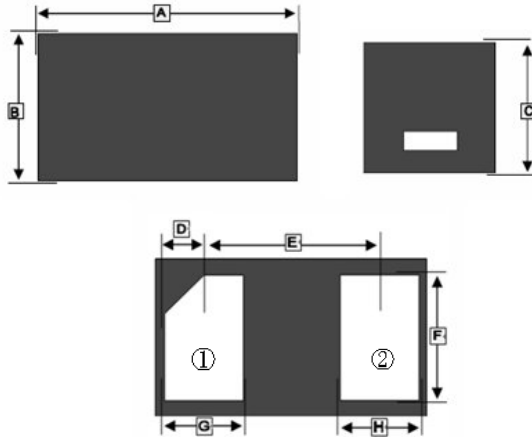


Fig 4 Peak Pulse Current vs Clamping Voltage



PACKAGE OUTLINE DIMENSIONS

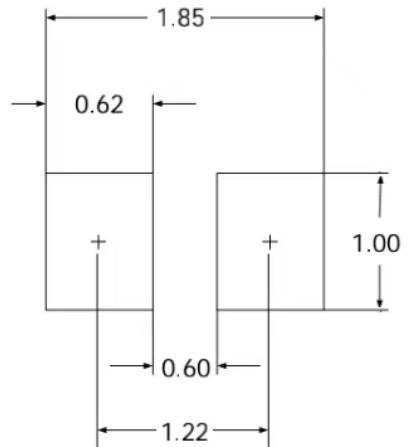
DFN1610



REF.	Millimeter	
	Min.	Max.
A	1.55	1.65
B	0.95	1.05
C	0.45	0.55
D	0.10 TYP	
E	1.10 BSC	
F	0.75	0.95
G	0.35	0.45
H	0.35	0.45

MOUNTING PAD LAYOUT

DFN1610



*Dimensions in millimeters