

Features

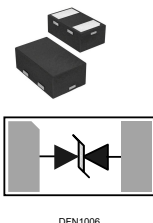
60Watts peak pulse power ($t_p = 8/20\mu s$)
 Bidirectional configurations
 Solid-state silicon-avalanche technology
 Low clamping voltage
 Low leakage current
 IEC 61000-4-2 $\pm 25kV$ contact $\pm 25kV$ air
 IEC 61000-4-4 (EFT) 40A (5/50ns)
 IEC 61000-4-5 (Lightning) 5A (8/20 μs)

Applications

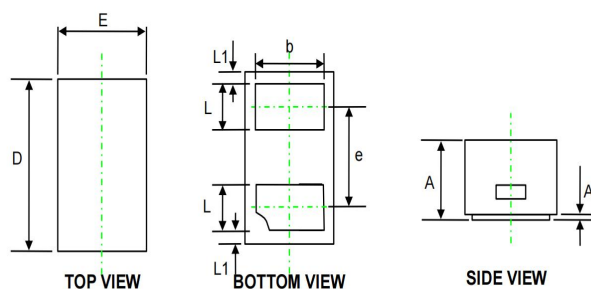
Microprocessor based equipment
 Personal Digital Assistants (PDA's)
 Notebooks, Desktops, and Servers
 Portable Instrumentation
 Pagers Peripherals

Mechanical Data

DFN1006 package
 Molding compound flammability rating: UL 94V-0
 Packaging: Tape and Reel
 RoHS/WEEE Compliant



DFN1006



Symbol	Dimensions In Millimeters (mm)		
	Min.	Typ.	Max.
A	0.44	0.47	0.50
A1	0.00	0.03	0.05
D	0.95	1.00	1.08
E	0.55	0.60	0.68
b	0.40	0.50	0.60
e	-	0.65	-
L	0.20	0.25	0.30
L1	0.05 REF.		

Dimensions in inches and (millimeters)

Absolute Maximum Rating

Rating	Symbol	Value	Units
Peak Pulse Power ($t_p = 8/20\mu s$)	P_{PP}	60	Watts
Peak Pulse Current ($t_p = 8/20\mu s$) (note1)	I_{pp}	5	A
ESD per IEC 61000-4-2 (Air) ESD per IEC 61000-4-2 (Contact)	V_{ESD}	25 25	kV
Lead Soldering Temperature	T_L	260(10seconds)	$^{\circ}C$
Junction Temperature	T_J	-55 to + 150	$^{\circ}C$
Storage Temperature	T_{stg}	-55 to + 150	$^{\circ}C$

H5VL10B

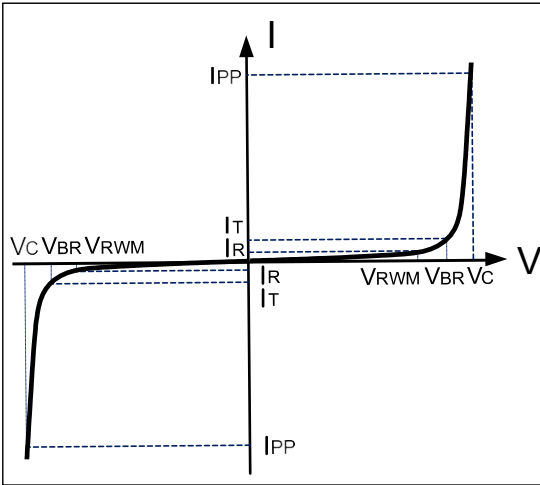
Electrical Characteristics

Parameter	Symbol	Conditions	Min	Typical	Max	Units
Reverse Stand-Off Voltage	V_{RWM}				5.0	V
Reverse Breakdown Voltage	V_{BR}	$I_T=1mA$	5.6			V
Reverse Leakage Current	I_R	$V_{RWM}=5V, T=25^{\circ}C$			0.5	μA
Clamping Voltage	V_C	$I_{PP}=5A, t_p=8/20\mu s$			15	V
Junction Capacitance	C_j	$V_R = 0V, f = 1MHz$		12	18	pF

Electrical Parameters (TA = 25°C unless otherwise noted)

Symbol	Parameter
I_{PP}	Maximum Reverse Peak Pulse Current
V_C	Clamping Voltage @ I_{PP}
V_{RWM}	Working Peak Reverse Voltage
I_R	Maximum Reverse Leakage Current @ V_{RWM}
V_{BR}	Breakdown Voltage @ I_T
I_T	Test Current

Note: 8/20μs pulse waveform.



RATING AND CHARACTERISTIC CURVES (H5VL10B)

Figure 1: Peak Pulse Power vs. Pulse Time

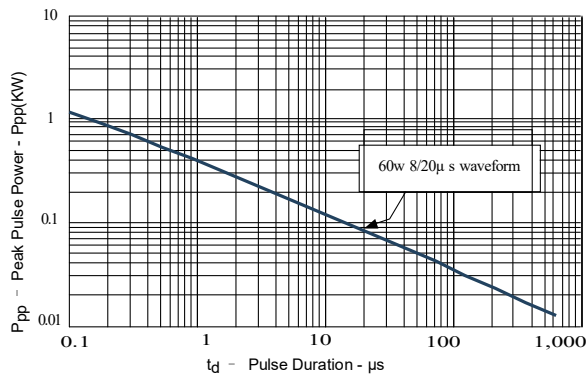


Fig.2 Clamping Voltage vs. Ipp

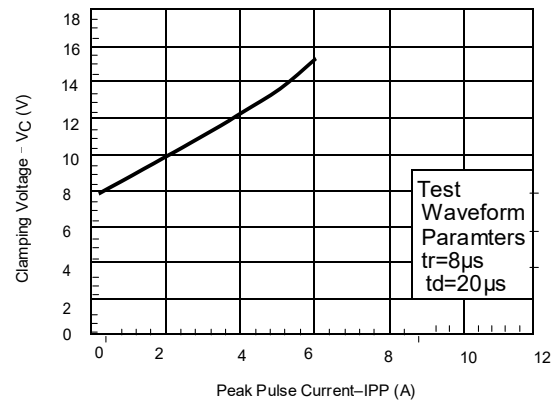


Fig.3 Pulse Waveform-8/20 μs

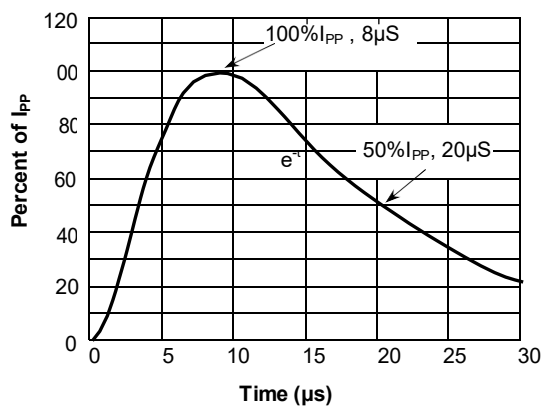


Fig.4 Pulse Waveform-ESD(IEC61000-4-2)

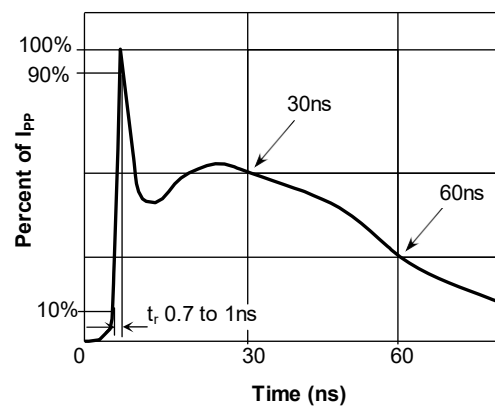


Fig.5 IEC61000-4-2 +8kV Contact Discharge

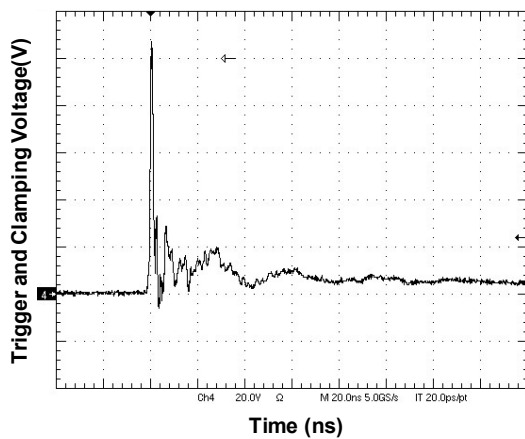


Fig.6 IEC61000-4-2 -8kV Contact Discharge

