

## Features

- 400Watts peak pulse power ( $t_p = 8/20\mu s$ )
- Solid-state silicon-avalanche technology
- Low clamping voltage
- Low leakage current
- Low capacitance ( $C_j=3pF$  typ. I/O to I/O)



## IEC COMPATIBILITY (EN61000-4)

- IEC 61000-4-2  $\pm 15kV$  contact  $\pm 25kV$  air
- IEC 61000-4-4 (EFT) 40A (5/50ns)
- IEC 61000-4-5 (Lightning) 26A (8/20 $\mu s$ )

**DFN2626**

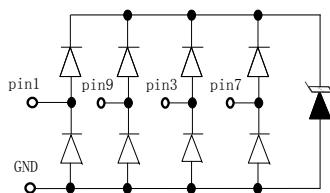
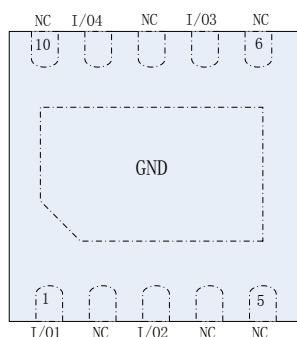
## Applications

- USB 2.0
- 10/100/1000 Ethernet
- DVI
- T1/E1 Secondary Protection
- T3/E3 Secondary Protection
- Analog Video

## Mechanical Characteristics

- DFN2626 package
- Molding compound flammability rating:  
UL 94V-0
- Packaging: Tape and Reel
- RoHS/WEEE Compliant

## Schematic & PIN Configuration



### Absolute Maximum Rating

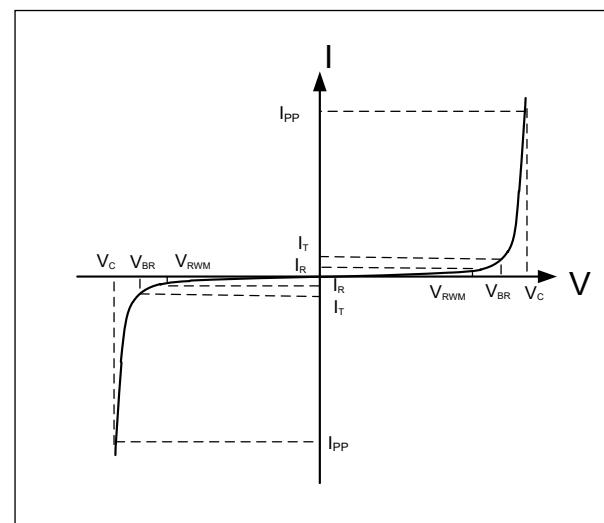
Rating	Symbol	Value	Units
Peak Pulse Power ( $t_p = 8/20\mu s$ )	$P_{PP}$	400	Watts
Peak Pulse Current ( $t_p = 8/20\mu s$ ) (note1)	$I_{pp}$	26	A
ESD per IEC 61000-4-2 (Air) ESD per IEC 61000-4-2 (Contact)	$V_{ESD}$	25 15	kV
Lead Soldering Temperature	$T_L$	260(10seconds)	°C
Junction Temperature	$T_J$	-55 to + 125	°C
Storage Temperature	$T_{stg}$	-55 to + 125	°C

### Electrical Characteristics

Parameter	Symbol	Conditions	Min	Typical	Max	Units
Reverse Stand-Off Voltage	$V_{RWM}$				3.3	V
Reverse Breakdown Voltage	$V_{BR}$	$I_T = 1mA$	4			V
Reverse Leakage Current	$I_R$	$V_{RWM} = 3.3V, T = 25°C$		0.2	0.5	uA
Peak Pulse Current	$I_{PP}$	$t_p = 8/20\mu s$			26.0	A
Clamping Voltage	$V_C$	$I_{PP} = 26.0A, t_p = 8/20\mu s$		17		V
Junction Capacitance	$C_J$	$V_R = 0V, f = 1MHz$ I/O to I/O		2.8		pF
		$V_R = 0V, f = 1MHz$ I/O to GND		5.5		pF

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

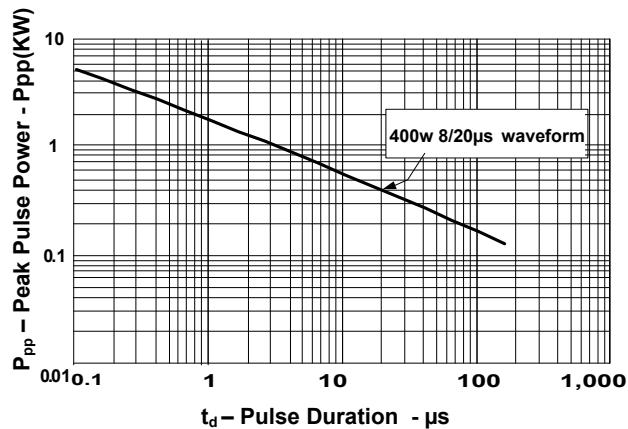
Symbol	Parameter
$I_{PP}$	Maximum Reverse Peak Pulse Current
$V_C$	Clamping Voltage @ $I_{PP}$
$V_{RWM}$	Working Peak Reverse Voltage
$I_R$	Maximum Reverse Leakage Current @ $V_{RWM}$
$V_{BR}$	Breakdown Voltage @ $I_T$
$I_T$	Test Current



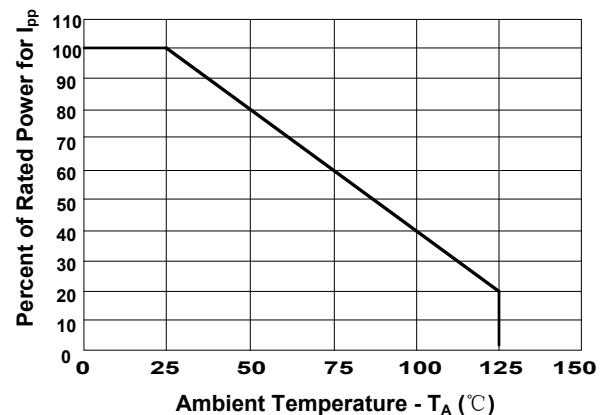
Note:.. 8/20μs pulse waveform.

## Typical Characteristics

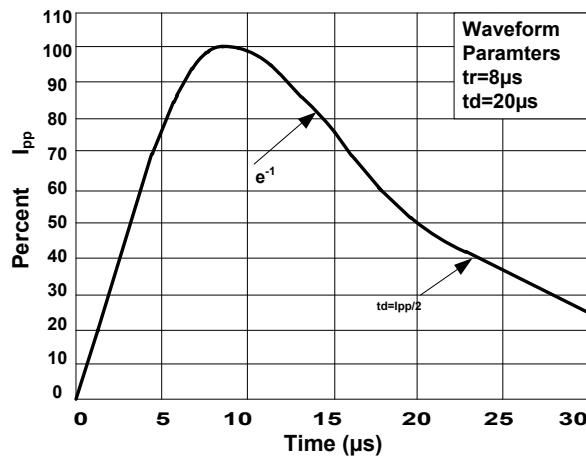
**Figure 1: Peak Pulse Power vs. Pulse Time**



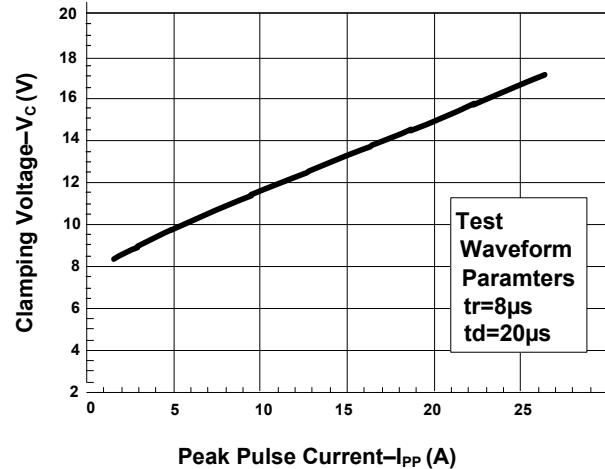
**Figure 2: Power Derating Curve**



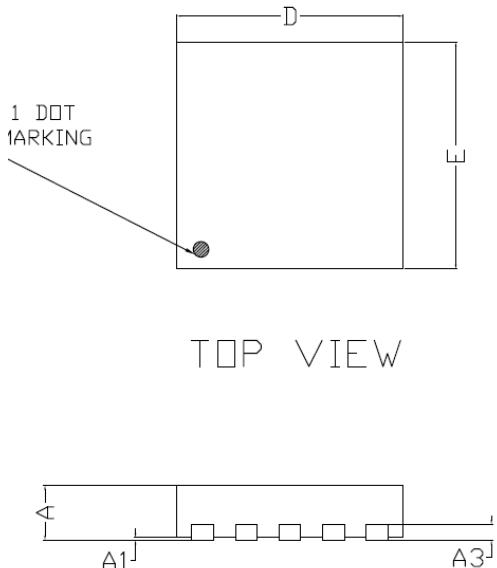
**Figure3: Pulse Waveform**



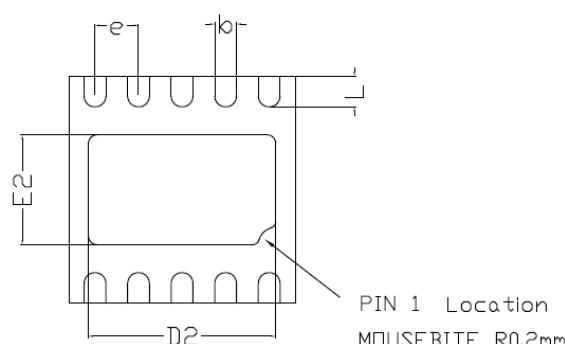
**Figure 4: Clamping Voltage vs.Ipp**



## Outline Drawing



SYMBOL	MILLIMETERS		
	MIN.	MOM.	MAX.
A	0.500	0.550	0.600
A1	0.000		0.050
A3			0.150 REF.
D	2.550	2.600	2.650
E	2.550	2.600	2.650
D2	2.000	2.150	2.250
E2	1.110	1.260	1.360
b	0.200	0.250	0.300
L	0.250	0.350	0.450
e	0.5 BSC		



BOTTOM VIEW

## Marking



## Ordering information

Order code	Package	Base qty	Delivery mode
PTN2610L3M3C40	DFN2626	3K	Tape and reel