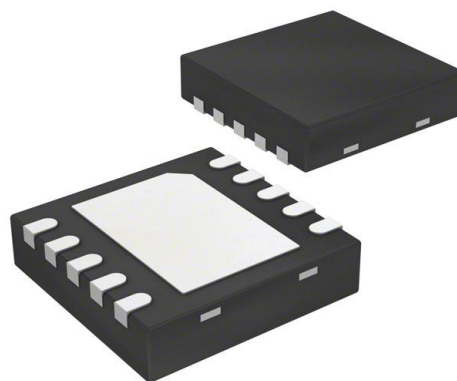




Features

- 400Watts peak pulse power ($t_p = 8/20\mu s$)
- Tiny DFN2626 package
- Solid-state silicon-avalanche technology
- Low clamping voltage
- Low leakage current
- Low capacitance ($C_j = 2.8pF$ typ. I/O to I/O)
- IEC 61000-4-2 $\pm 25kV$ contact $\pm 25kV$ air
- IEC 61000-4-4 (EFT) 40A (5/50ns)
- IEC 61000-4-5 (Lightning) 26A (8/20 μs)



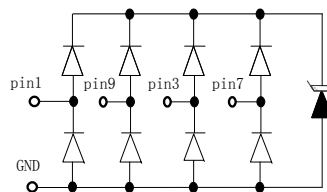
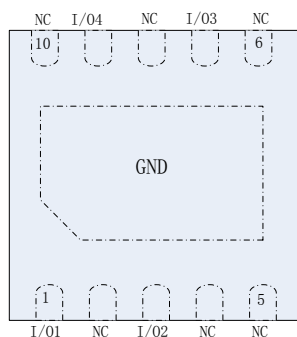
Applications

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

Mechanical Data

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

Schematic & PIN Configuration





Absolute Maximum Rating

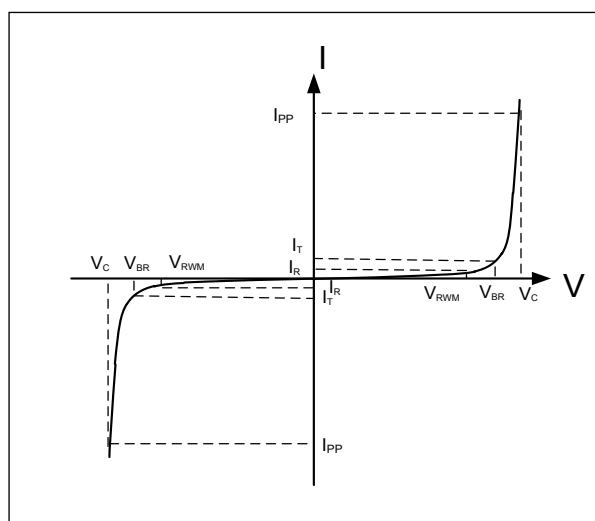
Rating	Symbol	Value	Units
Peak Pulse Power ($t_p=8/20\mu s$)	P_{pp}	400	Watts
Peak Pulse Current ($t_p=8/20\mu s$) (note1)	I_{pp}	26	A
ESD per IEC 61000-4-2 (Air) ESD per IEC 61000-4-2 (Contact)	V_{ESD}	25 25	kV
Lead Soldering Temperature	T_L	260(10seconds)	°C
Junction Temperature	T_J	-55 to + 125	°C
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	$V_{RWM}=3.3V, T=25^\circ C$		0.2	0.5	μA
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.: 8/20 μs pulse waveform.

Typical Characteristics

Figure 1: Peak Pulse Power vs. Pulse Time

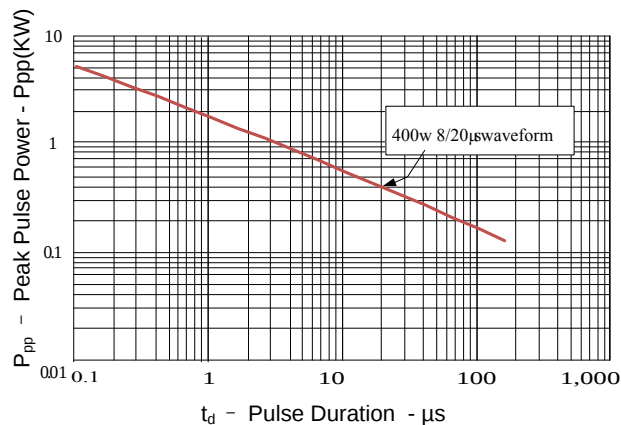


Figure 2: Power Derating Curve

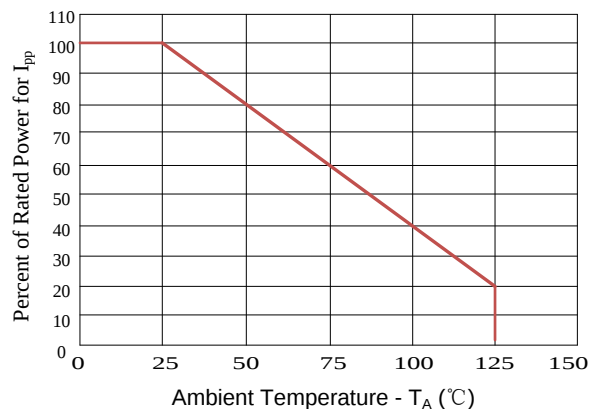


Figure3: Pulse Waveform

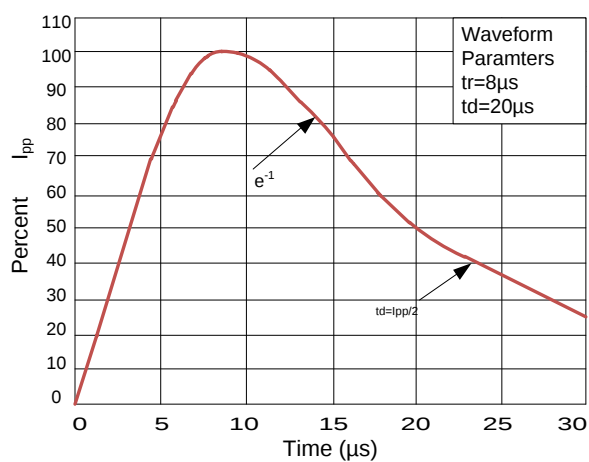
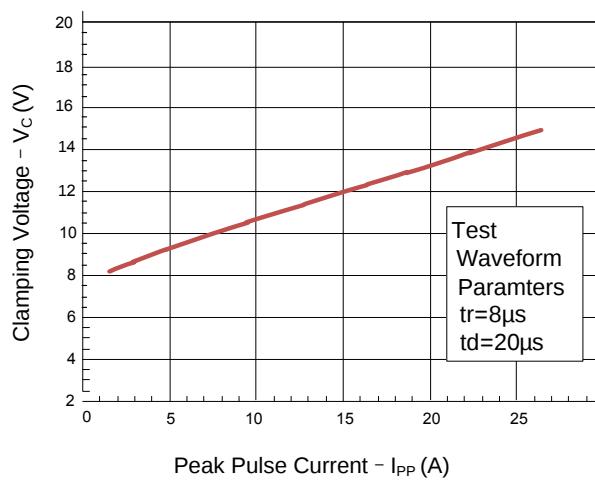
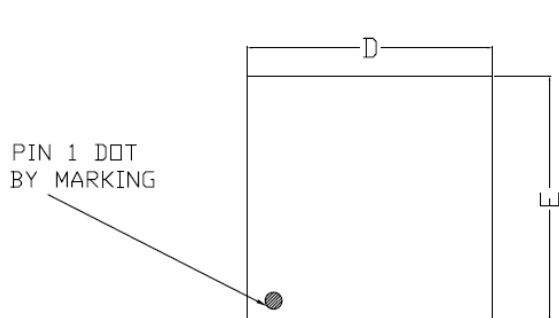


Figure 4: Clamping Voltage vs. I_pp

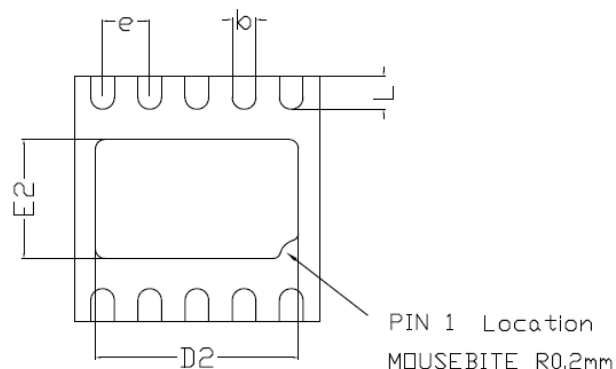




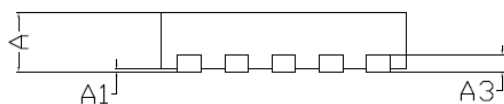
Outline Drawing – DFN2626



TOP VIEW



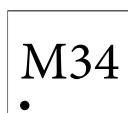
BOTTOM VIEW



SIDE VIEW

COMMON DIMENSIONS(MM)			
PKG.			
UT: ULTRA Thin			
REF.	MIN.	NOM.	MAX.
A	0.50	0.55	0.60
A1	0.00	—	0.05
A3	0.15 REF.		
D	2.55	2.60	2.65
E	2.55	2.60	2.65
D2	2.00	2.15	2.25
E2	1.11	1.26	1.36
b	0.20	0.25	0.30
L	0.25	0.35	0.45
e	0.5 BSC		

Marking



Ordering Information

Order code	Package	Base qty	Delivery mode
SP3304N	DFN2626	3000	Tape and reel