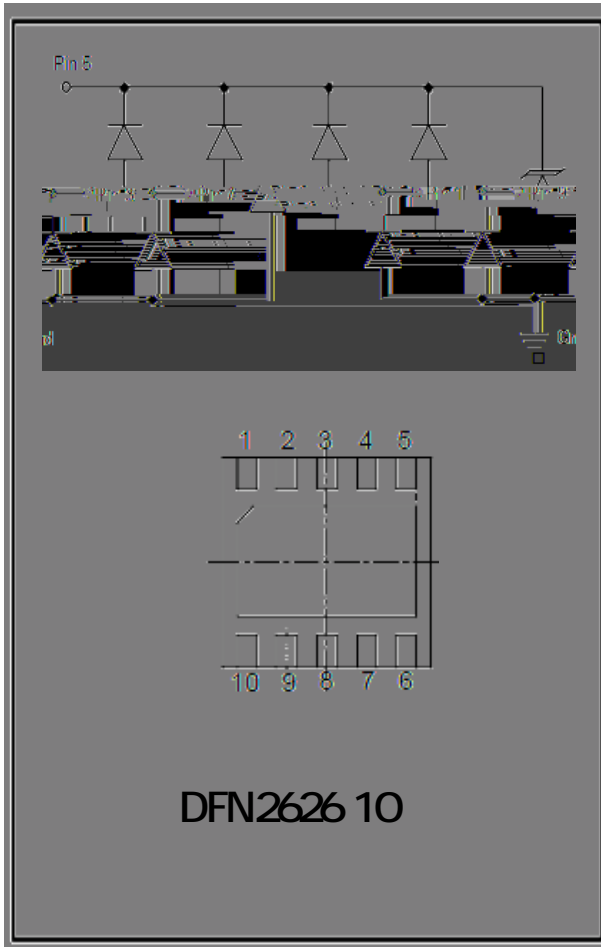




ESDSL3304P8

4-Line Uni-directional , Ultra-low Capacitance Transient Voltage Suppressor



Features

- Ultra small package
- Stand-off voltage: 3.3V
- Transient protection for each line according to
 - IEC61000-4-2(ESD): $\pm 15\text{kV}$ (contact)
 - IEC61000-4-5(surge): 24A (8/20 μs)
- Low clamping voltage
- RoHS Compliant

Applications

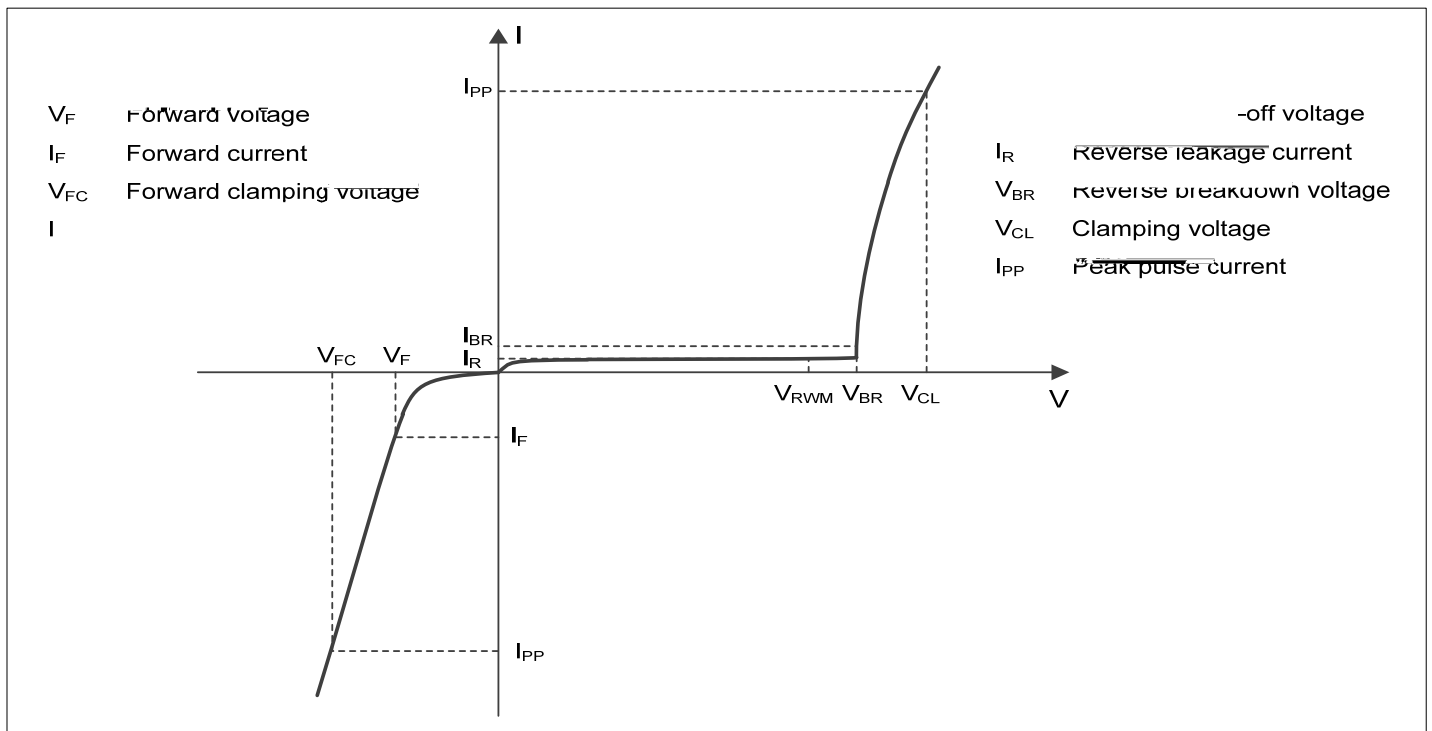
- Analog Video
- RJ-45 Connectors
 - T1/E1 Secondary Protection
 - T3/E3 Secondary Protection
- 10/100/1000 Ethernet

Mechanical Characteristics

- Package: DFN2626-10L
- Case Material: "Green" Molding Compound.
- Moisture Sensitivity: Level 3 per J-STD-020
- Marking Information: See Below



Definitions of electrical characteristics





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Absolute Maximum Ratings (Ta=25°C unless otherwise specified)

PARAMETER	SYMBOL	LIMITS	UNIT
Peak pulse power ($t_p = 8/20\mu s$)	P_{pk}	450	W
Peak pulse current ($t_p = 8/20\mu s$)	I_{PP}	24	A
ESD according to IEC61000-4-2 air discharge	V_{ESD}	± 25	kV
Operating Temperature Range	T_J	-55~125	
Storage Temperature Range	T_{STG}	-55~150	

Electrical Characteristics Ta=25 Unless otherwise specified

PARAMETER	Symbol	UNIT	Conditions	Min	Typ	Max
Reverse maximum working voltage	V_{RWM}	V				3.3
Reverse leakage current	I_R	μA	$V_{RWM} = 3.3V$			0.5
h u †	V_{PT}	V	$I_{PT} = 2\mu A$	3.5		
o " †	V_{SB}	V	$I_{SB} = 50mA$	2.8		
Clamping voltage ¹⁾	V_{CL}	V	$I_{PP} = 1A$, (8 x 20 μs pulse), any I/O to GND			5.5
Clamping voltage ¹⁾	V_{CL}	V	$I_{PP} = 24A$, (8 x 20 μs pulse), any I/O to GND			18.5
Junction capacitance	C_J	pF	$V_R = 0V$, $f = 1MHz$ between I/O pins		2	
Junction capacitance	C_J	pF	$V_R = 0V$, $f = 1MHz$ any I/O to GND		3.2	5

Notes:

(1). Non-repetitive current pulse, according to IEC61000-4-5. (8/20 μs current waveform).

Ordering Information (Example)

D P/N	PACKING	UNIT WEIGHT	PACü	Ep	Qm	TTP	Énys



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Typical Performance Characteristics ($T_A=25$ unless otherwise Specified)

Fig.1 8/20 μ s waveform per IEC61000-4-5

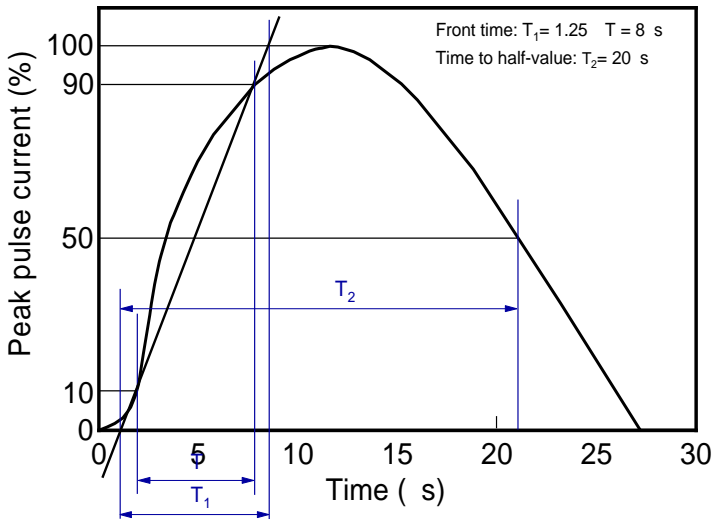


Fig.3 Clamping voltage vs. Peak pulse current

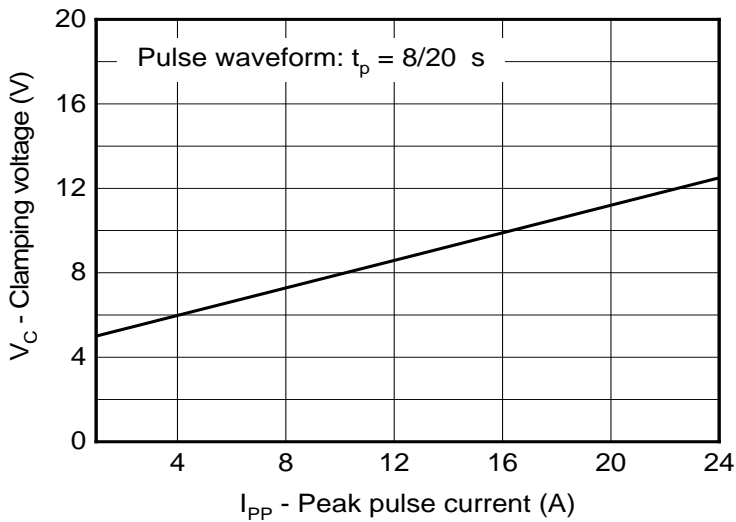


Fig.5 Non-repetitive peak pulse power vs. Pulse time

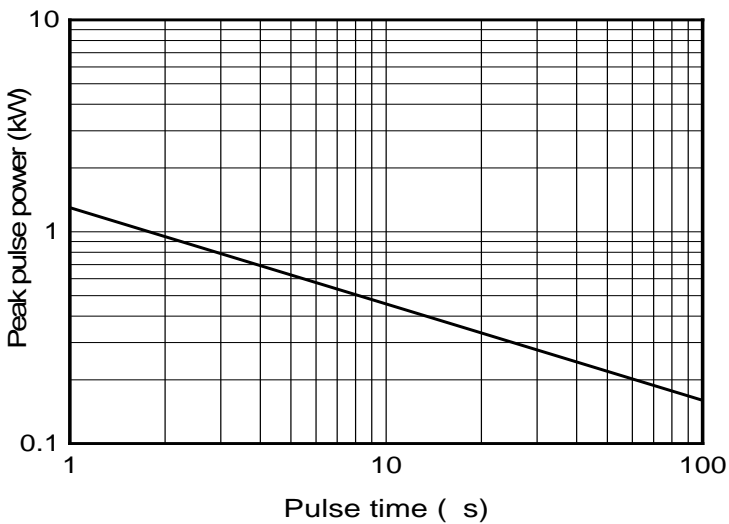


Fig.2 Contact discharge current waveform per IEC61000-4-2

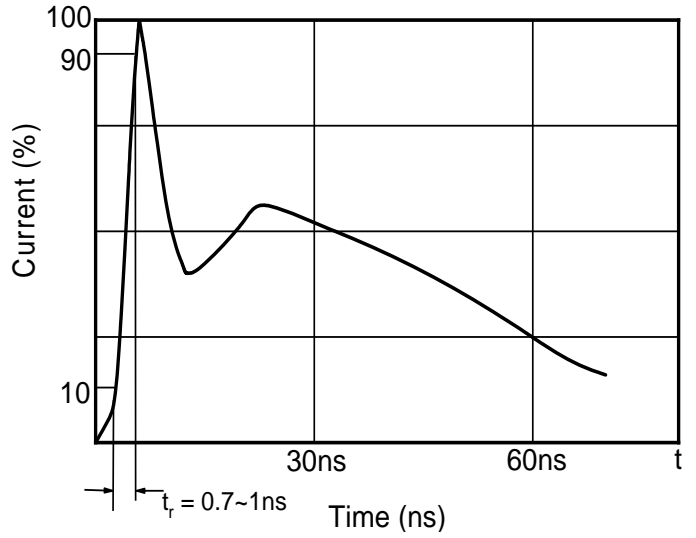


Fig.4. Capacitance vs. Reverse voltage

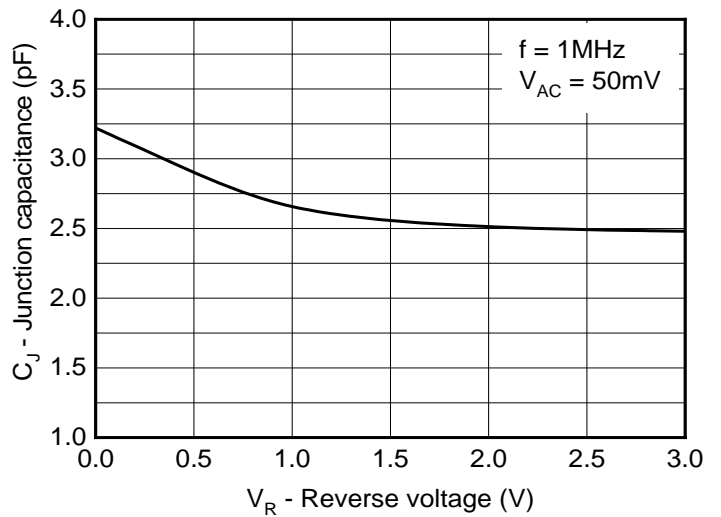
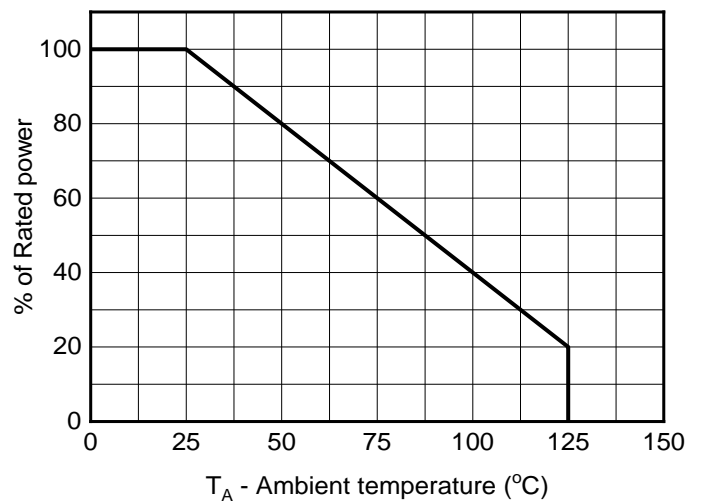


Fig.6 Power derating vs. Ambient temperature







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