

Ultra Low Capacitance ESD/TVS Array in DFN2010

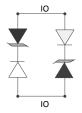
Features

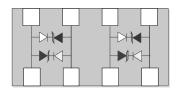
- 100Watts peak pulse power (tp = 8/20µs)
- DFN 2010 Package
- Protects Up To Two Bidirectional I/O Lines
- Solid-state silicon-avalanche technology
- Low clamping voltage
- Low leakage current
- Low capacitance (0.8pF typical I/O to I/O)
- ESD Protection for high-speed data lines to: IEC 61000-4-2 ±25KV contact ±25KV air IEC 61000-4-4 (EFT) 40A (5/50ns) IEC 61000-4-5 (Lightning) 10A (8/20µs)



- Case: DFN2010 (plastic package). Lead free; RoHS compliant
- Molding Compound Flammability Rating: UL 94 V-0
- **Terminals:** High temperature soldering guaranteed: 260 °C/10 sec. at terminals







Applications

- 10/100/1000 Ethernet
- Integrated magnetics/RJ-45 connectors
- LAN/WAN Equipment
- Security Cameras
- Industrial Controls
- Security Cameras
- Industrial Controls

Absolute Maximum Ratings

Ratings at 25 °C, ambient temperature unless otherwise specified

Parameter	Symbol	Value	Unit
Peak Pulse Power (T _P =8/20µS)	P _{PP}	100	W
ESD contact/air discharge (IEC-61000-4-2)	V _{ESD}	25/25	kV
Peak Pulse Current (t₂ = 8/20µS)	I _{PP}	10	Α
Junction Temperature	TJ	-55 to +125	$^{\circ}$
Storage temperature	T _{STG}	-55 to +150	$^{\circ}$

Electrical Characteristics

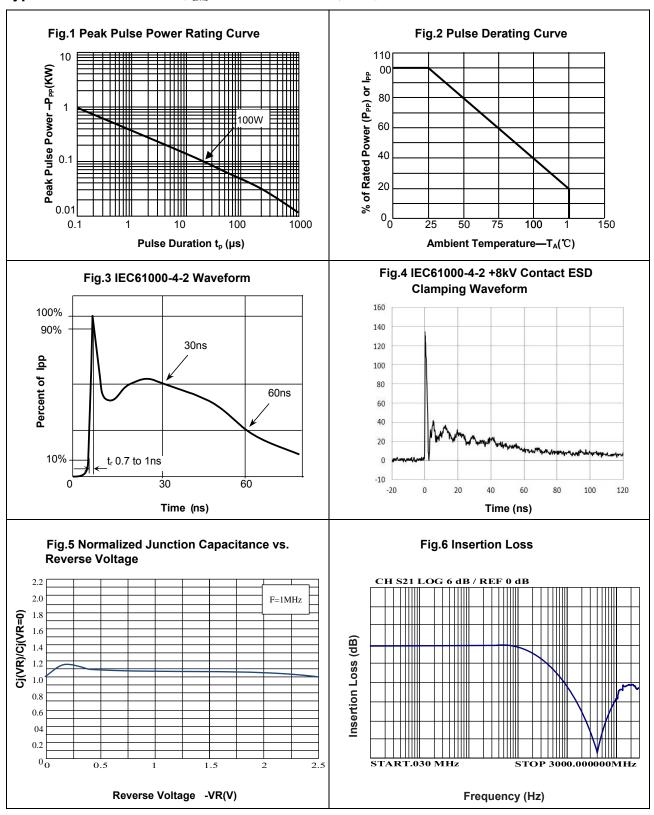
(T_A = 25 °C unless otherwise specified)

Parameter	Symbol	Condition	Min	Тур	Max	Unit
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 _R =3.3V			0.5	uA
Clamping Voltage(SURGE)	Vc	I _{PP} =10A,T _P =8/20μS		10		V
Junation Canaditanea	CJ	V _R =0V,f=1MHz, I/O to I/O		8.0		pF
Junction Capacitance	CJ	V _R =0V,f=1MHz, I/O to GND		1.2		pF

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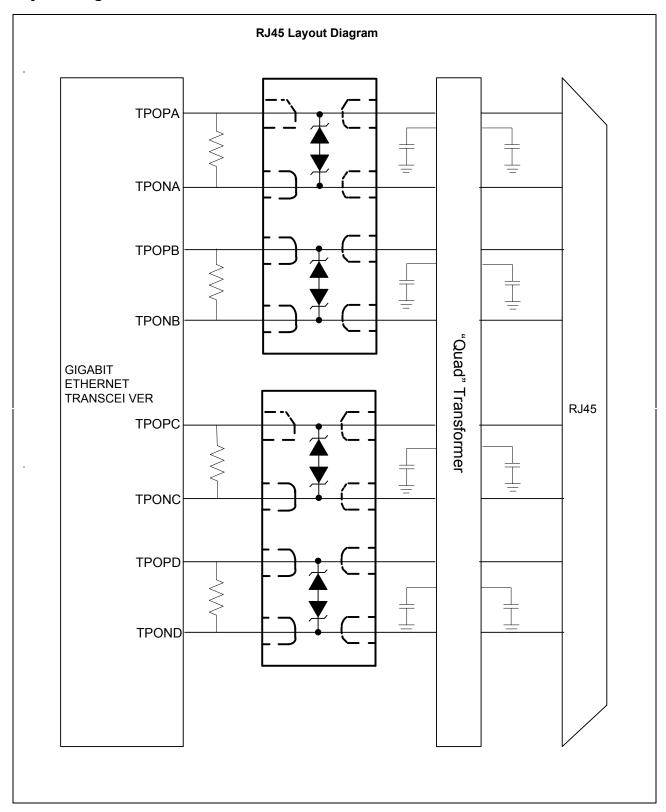


Typical Characteristics ($T_{amb} = 25 \, ^{\circ}\text{C}$ unless otherwise specified)



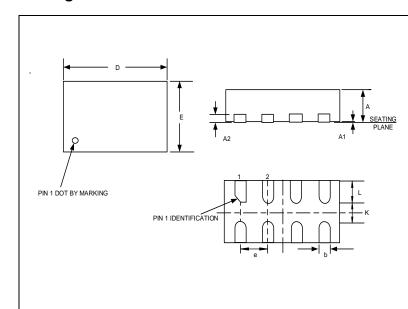


Layout Diagrams



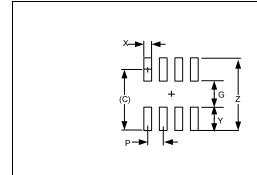


Package Dimensions



DIMENSIONS					
MILLIMETERS		INCHES			
DIM	MIN	MAX	MIN	MAX	
Α	0.45	0.55	0.018	0.022	
A1	0.00	0.046	0.000	0.002	
A2	0.110REF		0.00	0.005REF	
b	0.200	0.300	0.008	0.012	
D	1.924	2.076	0.076	0.082	
E	0.924	1.076	0.036	0.042	
е	0.500TYP		0.020	OTYP	
L	0.274	0.426	0.011	0.017	
K	0.200MIN		0.00	8MIN	

PAD Dimensions



DIMENSIONS			
DIM	INCHES MILLIMETERS		
С	0.035 0.875		
G	0.008 0.2		
Р	0.020	0.5BSC	
Х	0.014	0.35	
Y	0.018	0.45	
Z	0.043 1.10		

Notes

- This Land Pattern Is For Reference Purposes
 Only.Consult Your Manufacturing Group To Ensure Your
 Company's Manufacturing Guidelines Are Met.
- 2. Reference IPC-SM-782A, RLP NO. 300A.

Ordering information

Order code	Marking	Package	Packaging option	Base quantity	Packaging specification
CESD2010LC3V3B	U33	DFN2010	Tape and reel	3000pcs / reel	EIA STD RS-481

Revision history

Date	Revision	Changes
23-May-2017	1.0	Initial release

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