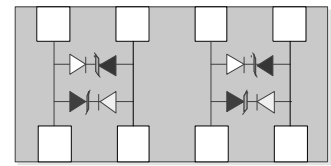
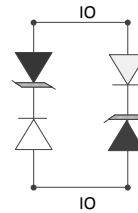


Ultra Low Capacitance ESD/TVS Array in DFN2010

Features

- 100Watts peak pulse power ($T_p = 8/20\mu s$)
- 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 $\pm 25kV$ contact $\pm 25kV$ air
IEC 61000-4-4 (EFT) 40A (5/50ns)
IEC 61000-4-5 (Lightning) 10A (8/20 μs)



Mechanical Data

- **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

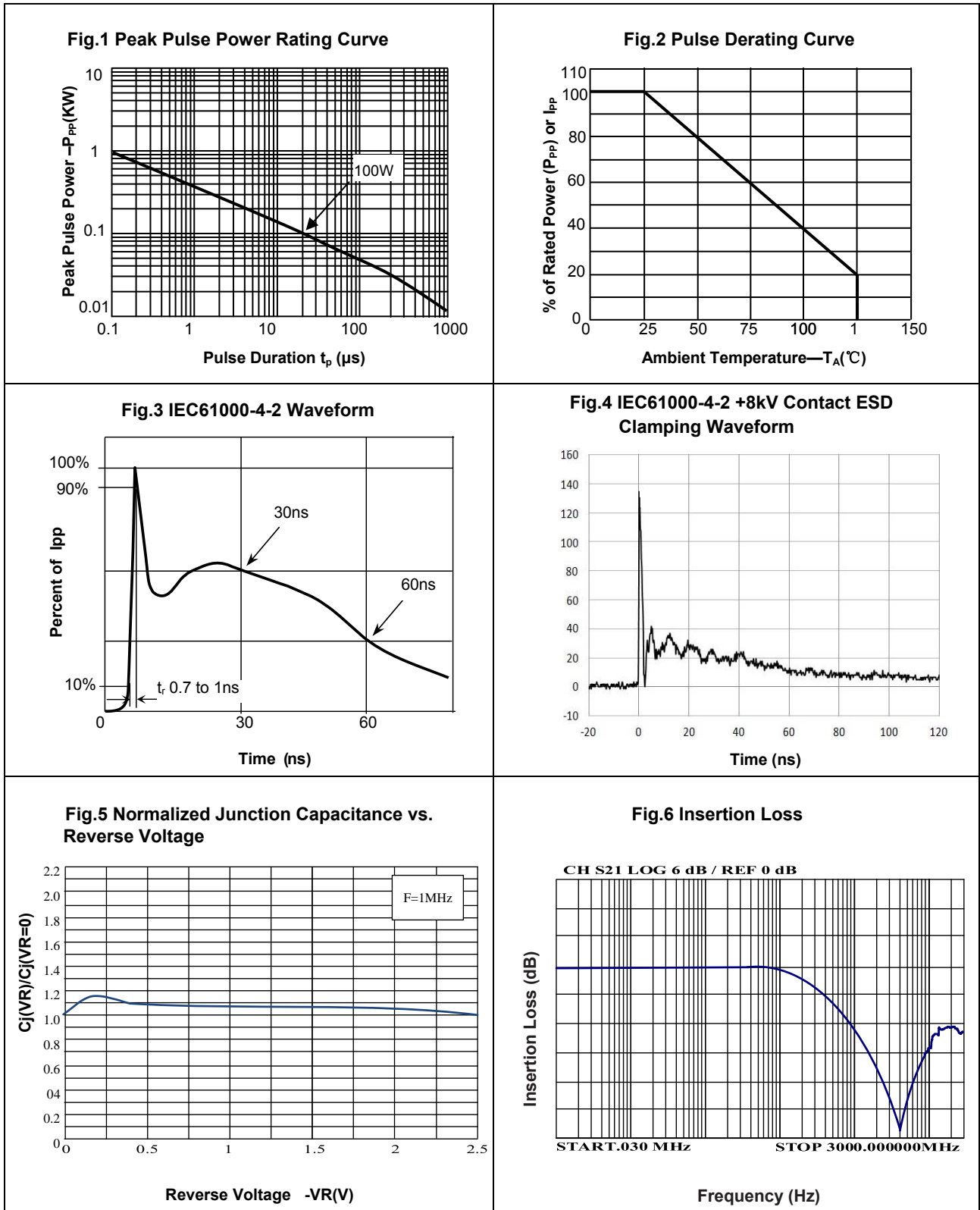
Parameter	Symbol	Value	Unit
Peak Pulse Power ($T_p=8/20\mu s$)	P_{PP}	100	W
ESD contact/air discharge (IEC-61000-4-2)	V_{ESD}	25/25	kV
Peak Pulse Current ($T_p = 8/20\mu s$)	I_{PP}	10	A
Junction Temperature	T_J	-55 to +125	°C
Storage temperature	T_{STG}	-55 to +150	°C

Electrical Characteristics

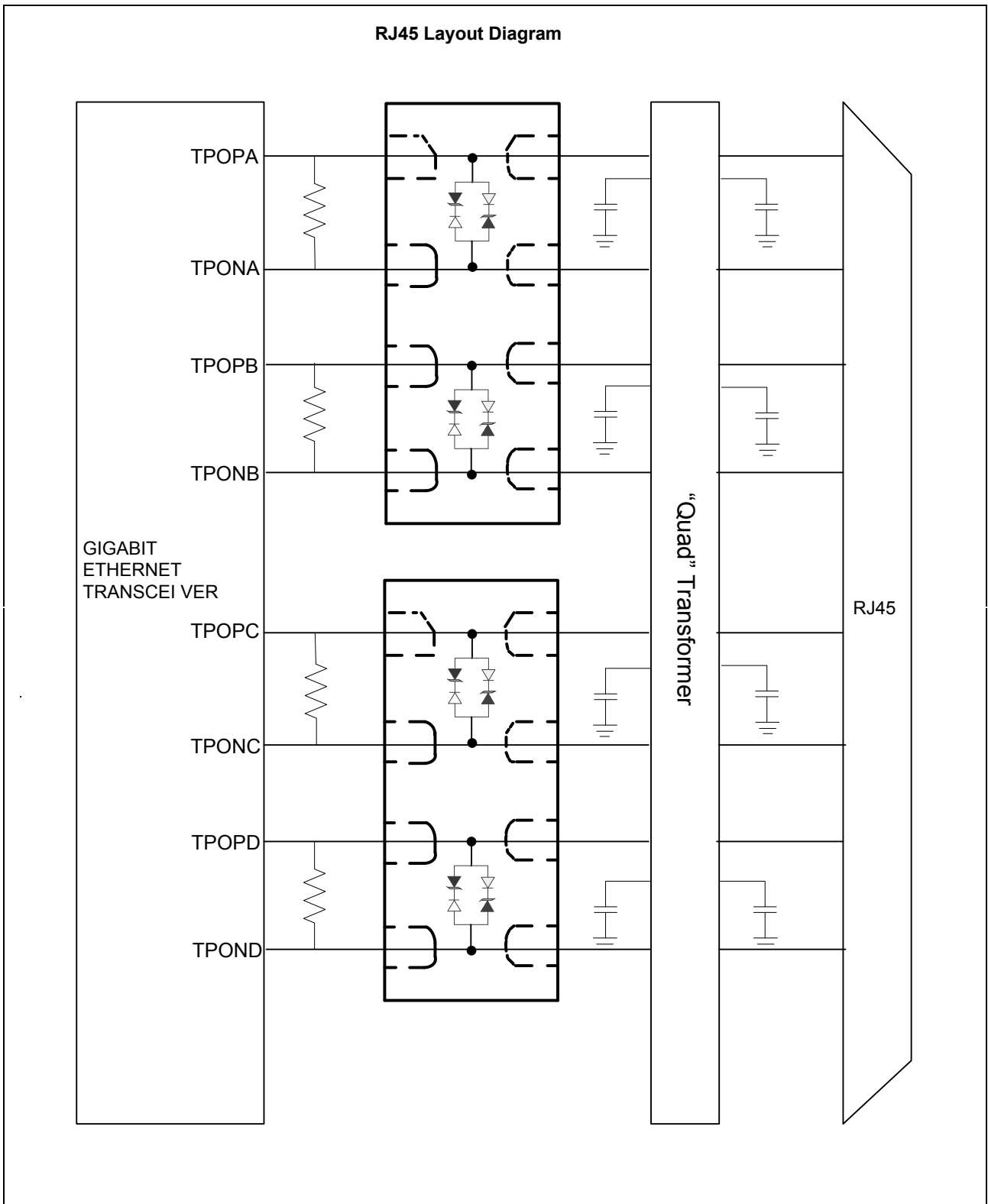
($T_A = 25\text{ °C}$ unless otherwise specified)

Parameter	Symbol	Condition	Min	Typ	Max	Unit
Reverse stand-off Voltage	V_{RWM}				2.8	V
Reverse Breakdown Voltage	V_{BR}	$I_T=1mA$	4			V
Reverse Leakage Current	I_R	$V_R=2.8V$			1	μA
Clamping Voltage(SURGE)	V_C	$I_{PP}=10A, T_p=8/20\mu s$		10		V
Junction Capacitance	C_J	$V_R=0V, f=1MHz, I/O$ to I/O		0.8		pF
	C_J	$V_R=0V, f=1MHz, I/O$ to GND		1.2		pF

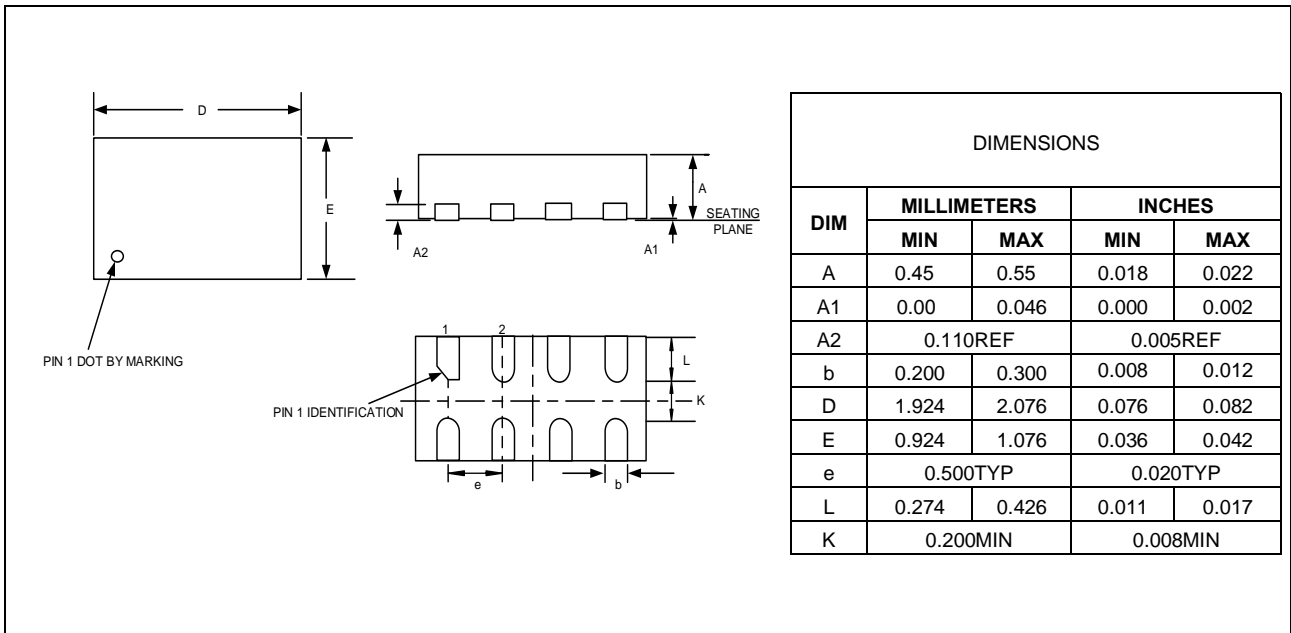
Typical Characteristics ($T_{amb} = 25\text{ }^{\circ}\text{C}$ unless otherwise specified)



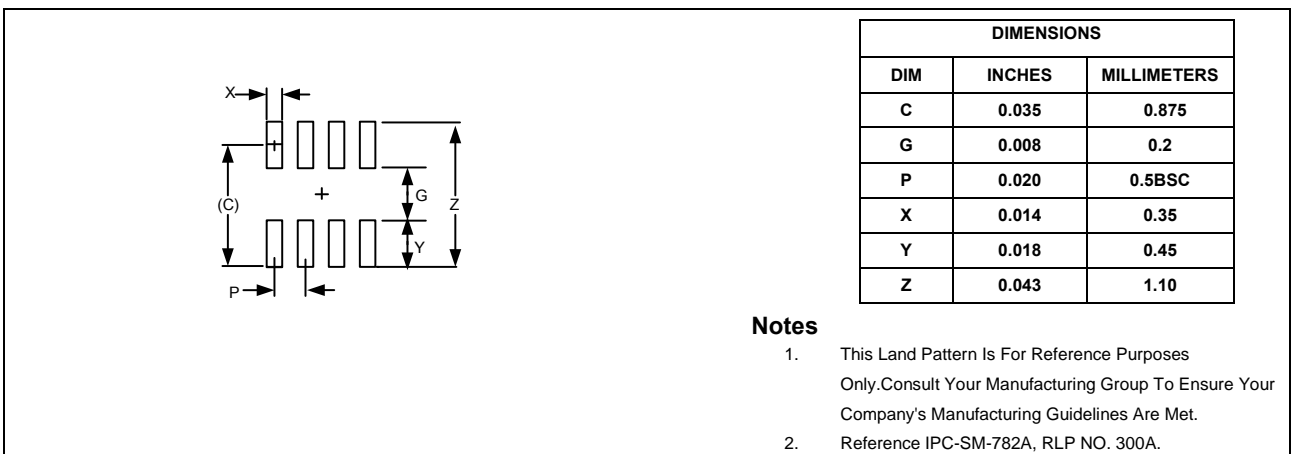
Layout Diagrams



Package Dimensions



PAD Dimensions



Ordering information

Order code	Marking	Package	Packaging option	Base quantity	Packaging specification
TESD2010LC2V8B	U33	DFN2010	Tape and reel	3000pcs / reel	EIA STD RS-481