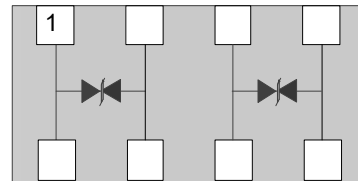


## Ultra Low Capacitance ESD/TVS Array in DFN2010

### 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 $\mu s$ )



### 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

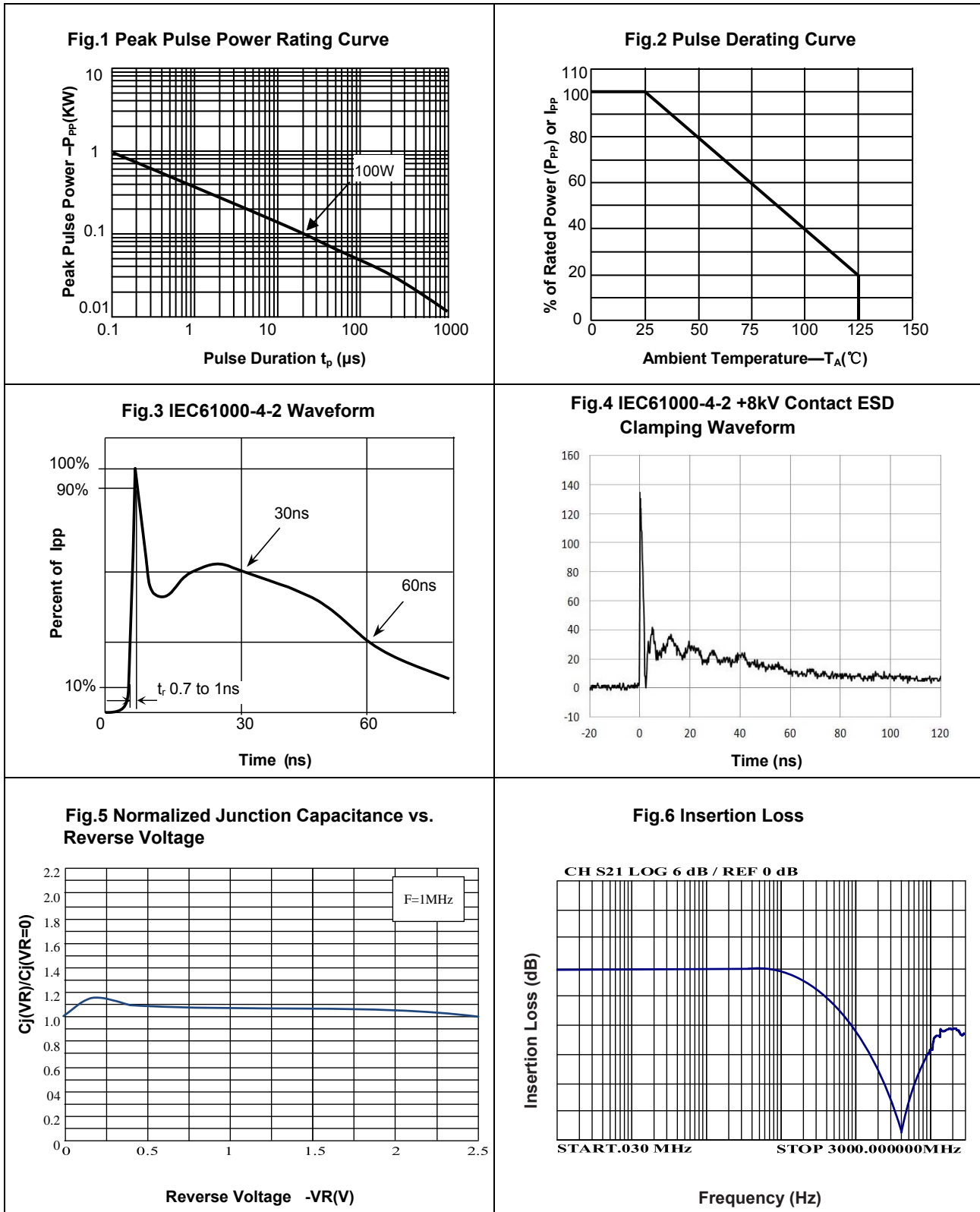
Parameter	Symbol	Value	Unit
Peak Pulse Power ( $T_p=8/20\mu s$ )	$P_{PP}$	100	W
ESD contact/air discharge (IEC-61000-4-2)	$V_{ESD}$	25/25	kV
Peak Pulse Current ( $T_p = 8/20\mu s$ )	$I_{PP}$	10	A
Junction Temperature	$T_J$	-55 to +125	°C
Storage temperature	$T_{STG}$	-55 to +150	°C

### Electrical Characteristics

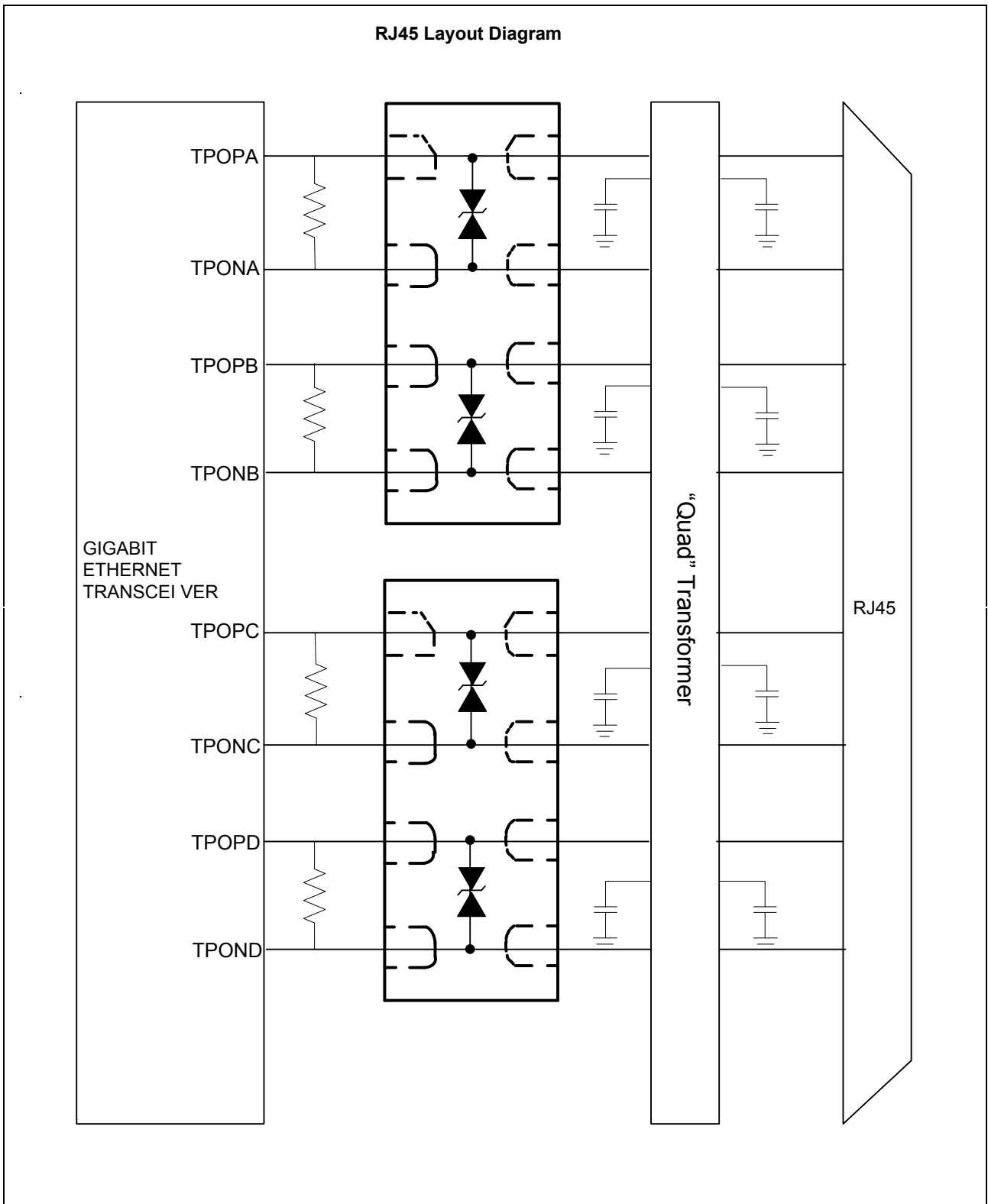
( $T_A = 25\text{ °C}$  unless otherwise specified)

Parameter	Symbol	Condition	Min	Typ	Max	Unit
Reverse stand-off Voltage	$V_{RWM}$				2.5	V
Reverse Breakdown Voltage	$V_{BR}$	$I_T=1mA$	3			V
Reverse Leakage Current	$I_R$	$V_R=2.5V$			1	$\mu A$
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

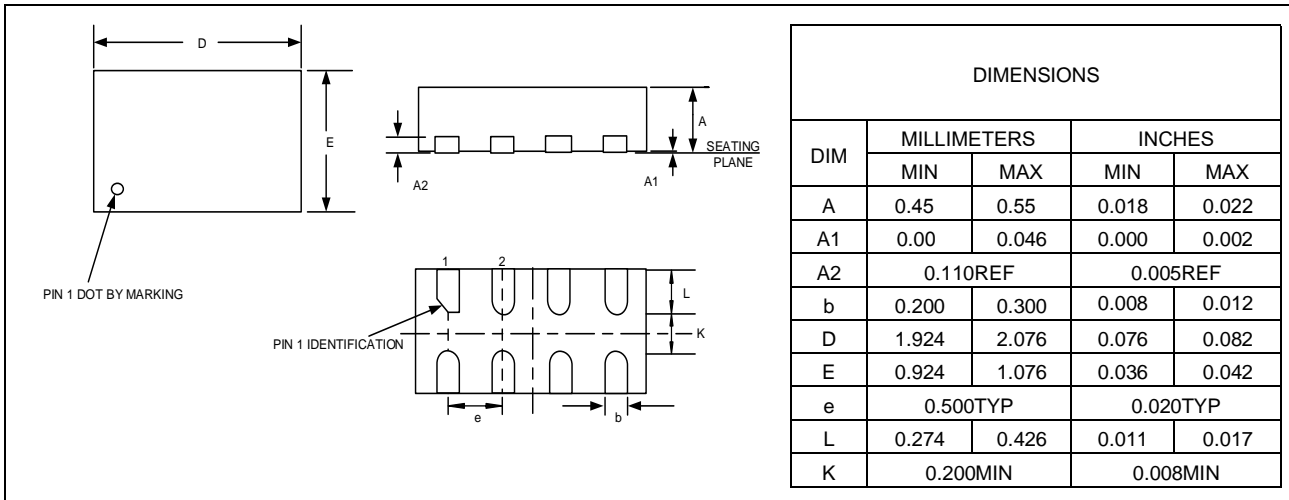
## Typical Characteristics (T<sub>amb</sub> = 25 °C unless otherwise specified)



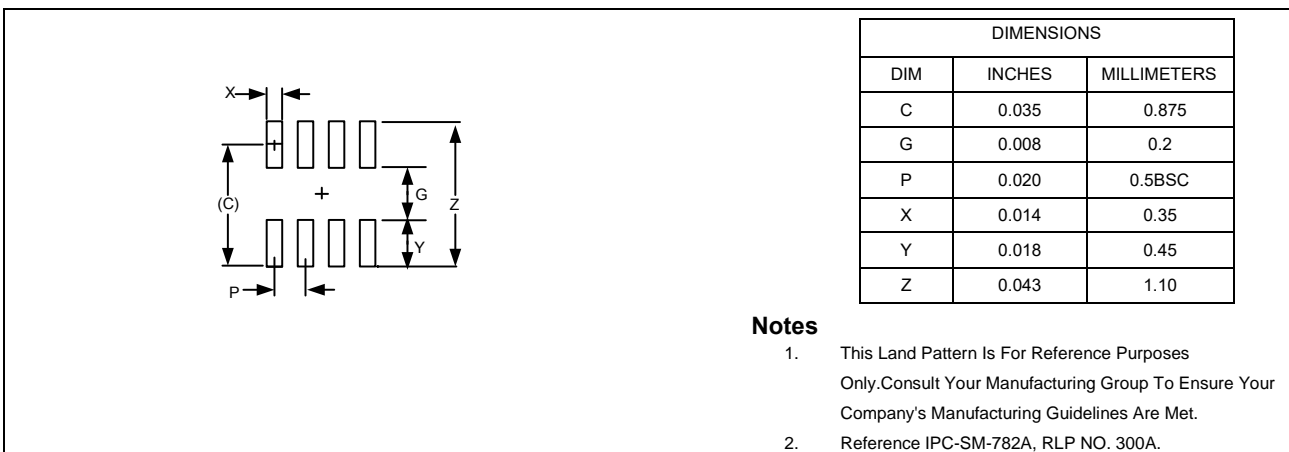
## Layout Diagrams



## Package Dimensions



## PAD Dimensions



## Ordering information

Order code	Marking	Package	Packaging option	Base quantity	Packaging specification
TESD2010LC2V5B	U33	DFN2010	Tape and reel	3000pcs / reel	EIA STD RS-481