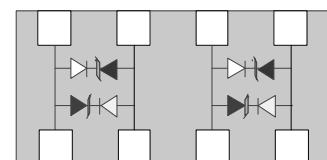
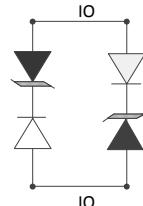


Features

- 100Watts peak pulse power ($T_p = 8/20\mu s$)
- DFN2010-8 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)



Mechanical Data

- **Case:** DFN2010-8 (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

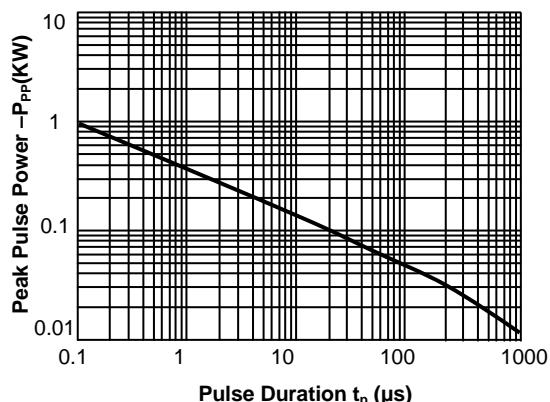
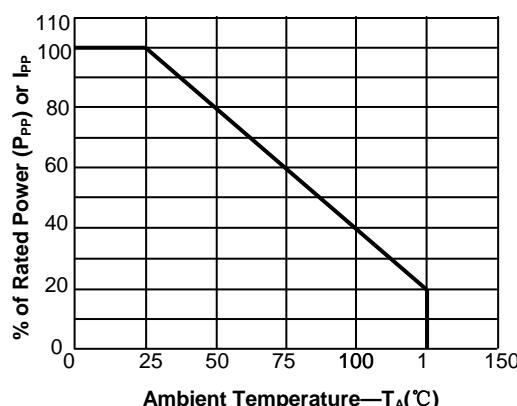
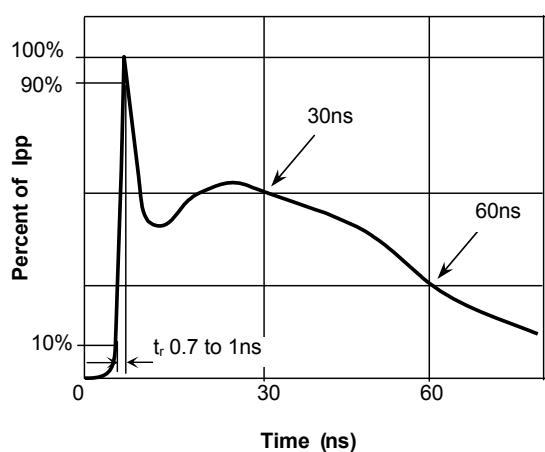
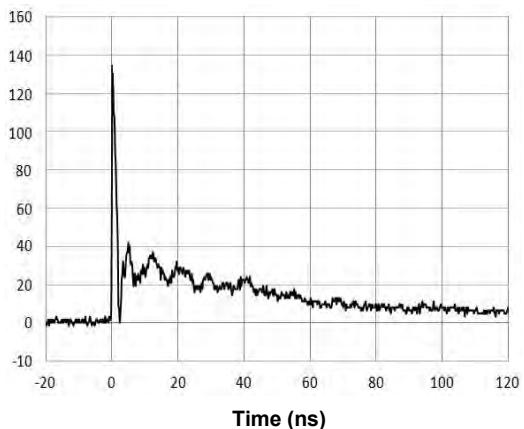
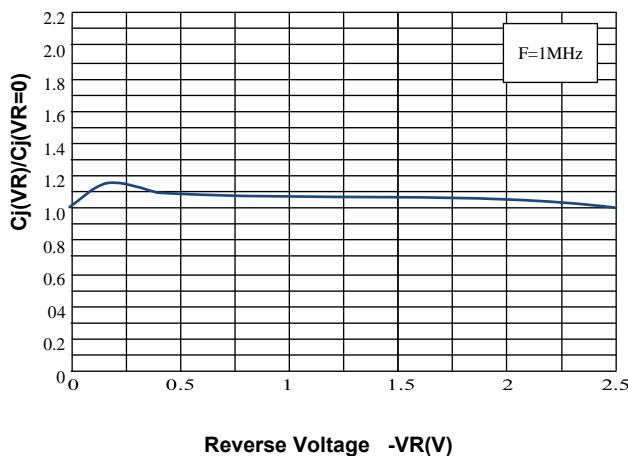
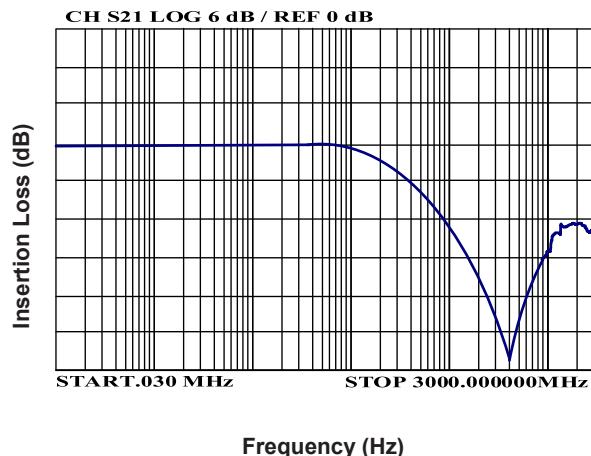
Ratings at 25 °C, ambient temperature unless otherwise specified

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

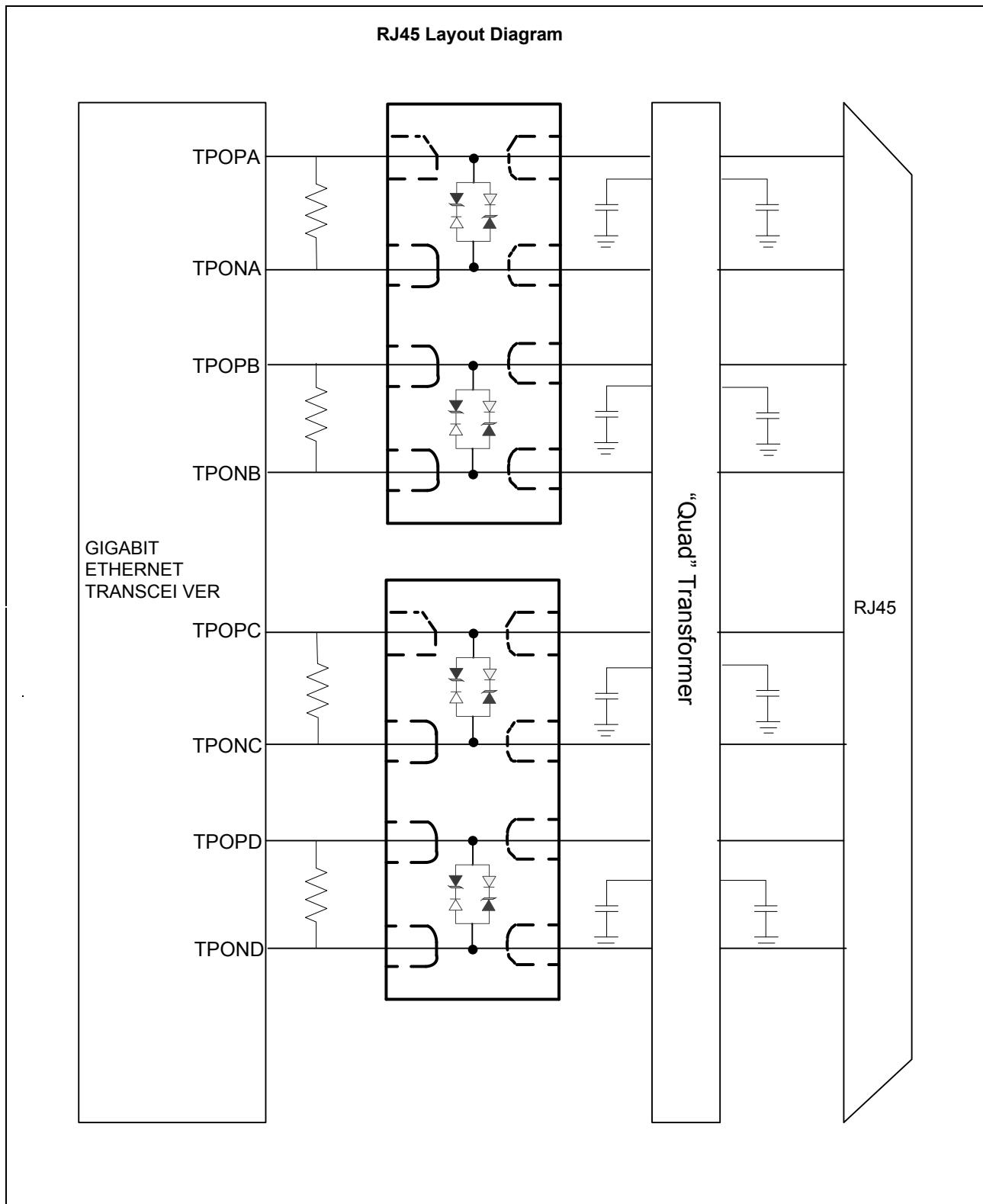
Electrical Characteristics

($T_A = 25$ °C unless otherwise specified)

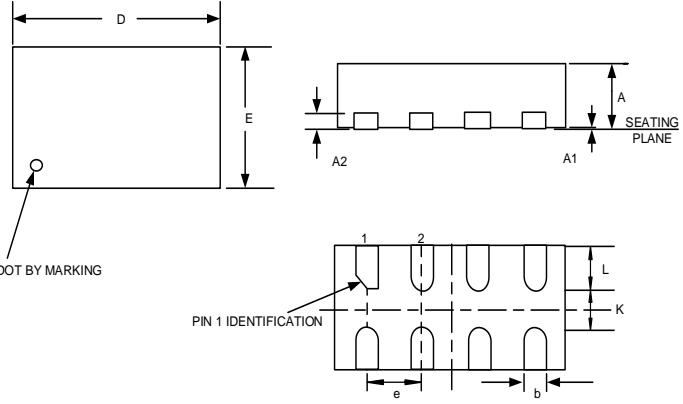
Parameter	Symbol	Condition	Min	Typ	Max	Unit
Reverse stand-off Voltage	V_{RWM}				2.8	V
Reverse Breakdown Voltage	V_{BR}	$I_T=1mA$	4			V
Reverse Leakage Current	I_R	$V_R=2.8V$			1	uA
Clamping Voltage(SURGE)	V_C	$I_{PP}=10A, T_p=8/20\mu s$		10		V
Junction Capacitance	C_J	$V_R=0V, f=1MHz, I/O to I/O$		0.8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

Typical Characteristics ($T_{amb} = 25^{\circ}\text{C}$ unless otherwise specified)
Fig.1 Peak Pulse Power Rating Curve**Fig.2 Pulse Derating Curve****Fig.3 IEC61000-4-2 Waveform****Fig.4 IEC61000-4-2 +8kV Contact ESD Clamping Waveform****Fig.5 Normalized Junction Capacitance vs. Reverse Voltage****Fig.6 Insertion Loss**

Layout Diagrams



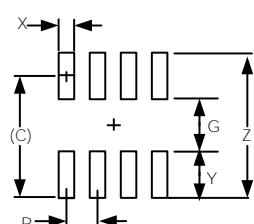
Package Dimensions



The diagram illustrates the physical dimensions of the package. Top view shows width D and height E. Side view shows thickness A, lead spacing A2, and lead height A1. Pin 1 dot marking is indicated on the left. Pin 1 identification is shown below, with pitch e and width b.

DIMENSIONS				
DIM	MILLIMETERS		INCHES	
	MIN	MAX	MIN	MAX
A	0.45	0.55	0.018	0.022
A1	0.00	0.046	0.000	0.002
A2	0.110REF		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
e	0.500TYP		0.020TYP	
L	0.274	0.426	0.011	0.017
K	0.200MIN		0.008MIN	

PAD Dimensions



The diagram shows a cross-sectional view of the package with coordinate axes X, Y, and Z. Dimensions include C, G, P, X, Y, and Z.

DIMENSIONS		
DIM	INCHES	MILLIMETERS
C	0.035	0.875
G	0.008	0.2
P	0.020	0.5BSC
X	0.014	0.35
Y	0.018	0.45
Z	0.043	1.10

Notes

1. 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
YEU20C82T10AG	U33	DFN2010-8	Tape and reel	3000pcs / reel	EIA STD RS-481