

LOW CAPACITANCE AND HIGH SURGE TVS DIODE ARRAY

Features

- 495 Watts Peak Pulse Power per Line ($t_p=8/20\mu s$)
- Protects Four Lines
- Low Clamping Voltage
- Working Voltages : 3.3V
- Low Leakage Current

Applications

- 10/100/1000 Ethernet Interface
- Microprocessor based equipment
- Personal Digital Assistants (PDA's)
- Notebooks, Desktops, and Servers
- ISDN S/T Interface
- WAN/LAN Equipment
- USB Interface

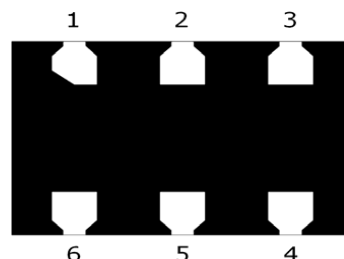
Mechanical Characteristics

- DFN3020P6 Package
- Molding Compound Flammability Rating : UL 94V-O
- Weight 12 Milligrams (Approximate)
- Quantity Per Reel : 3,000pcs
- Reel Size : 7 inch
- Lead Finish : Lead Free

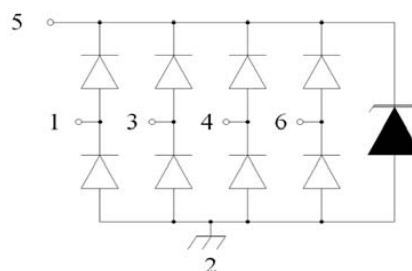
Absolute Maximum Ratings ($T_{amb}=25^{\circ}C$ unless otherwise specified)

Parameter	Symbol	Value	Unit
Peak Pulse Power (8/20 μs)	P _{pp}	495	W
ESD per IEC 61000-4-2 (Air)	V _{ESD}	± 25	Kv
ESD per IEC 61000-4-2 (Contact)		± 15	
Operating Temperature Range	T _J	-55 to +125	°C
Storage Temperature Range	T _{STJ}	-55 to +150	°C

Dimensions DFN3020P6



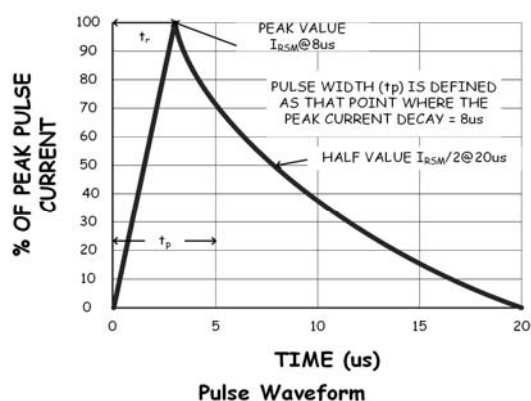
Pin Configuration



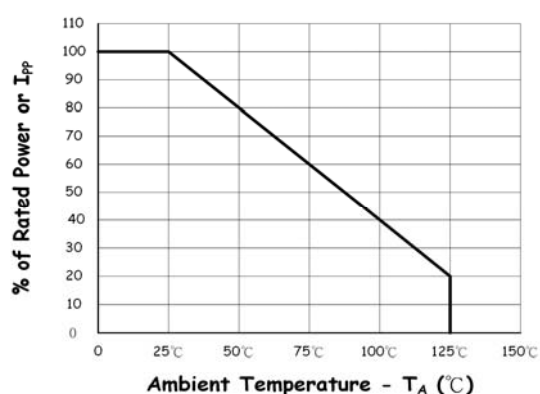
Electrical Characteristics (TA=25°C unless otherwise specified)

Part Number	Device Marking	V _{RWM} (V)	V _{BR} (V)	I _T (mA)	V _C @1A	V _C		I _R μA (Max)	C (Pf) (Typ.)
						(Max)	(@A)		
LC3314P6	LC3314P6	3.3	4	1	5.5	5.5	15	0.1	5

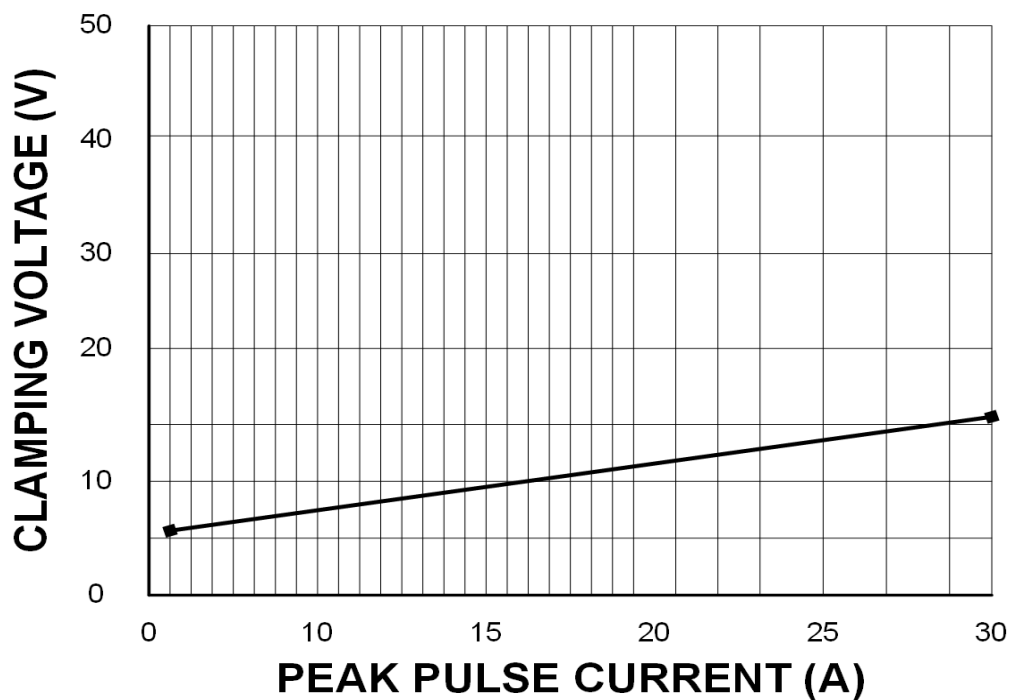
TYPIC CHARACTERIZATIONS



8x20μs Pulse Waveform

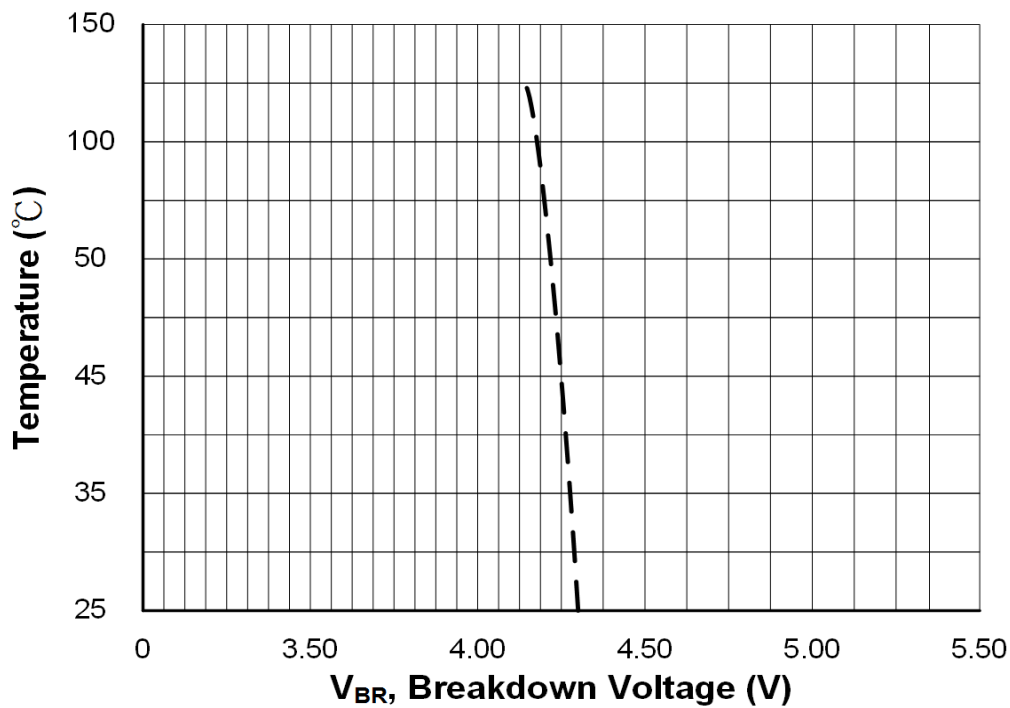


Power Derating Curve

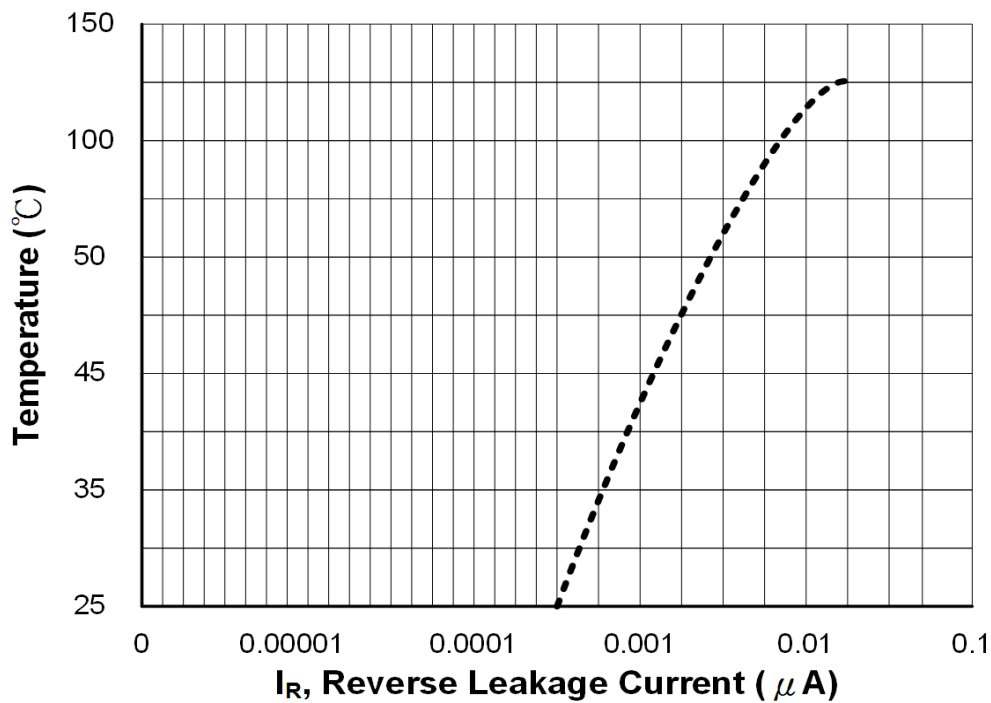


Clamping Voltage vs. Peak Pulse Current (tp=8/20us)

TYPIC CHARACTERIZATIONS

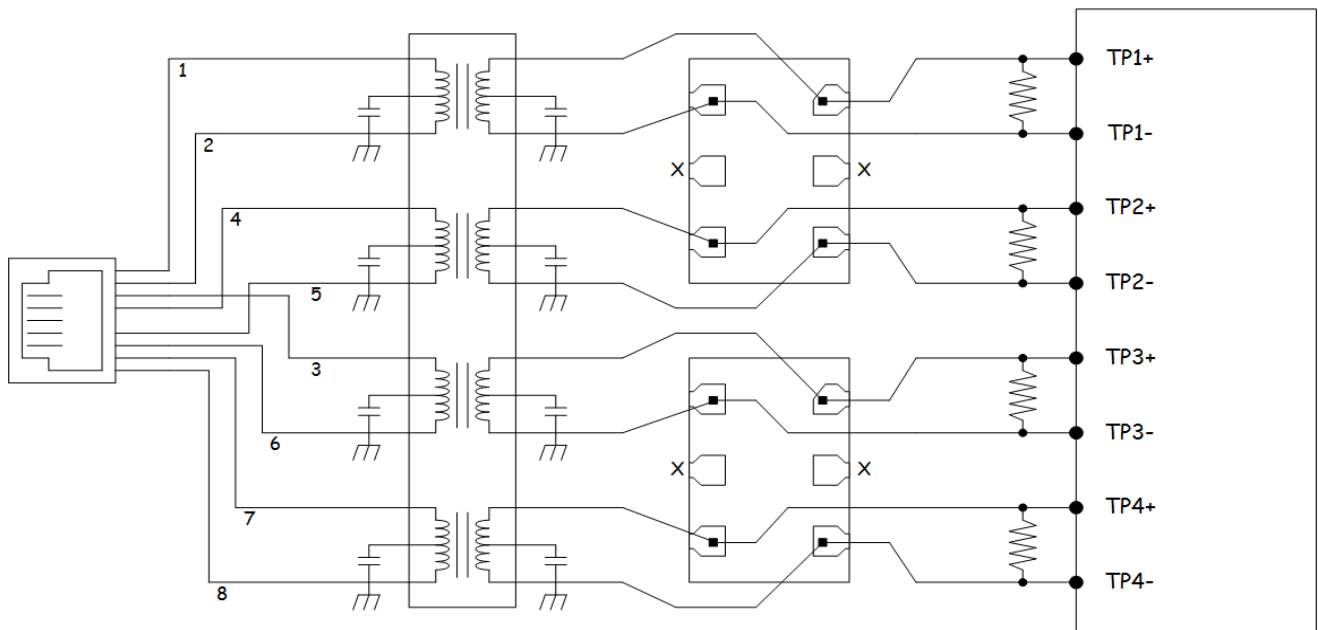


Typic Breakdown Voltage vs. Temperature



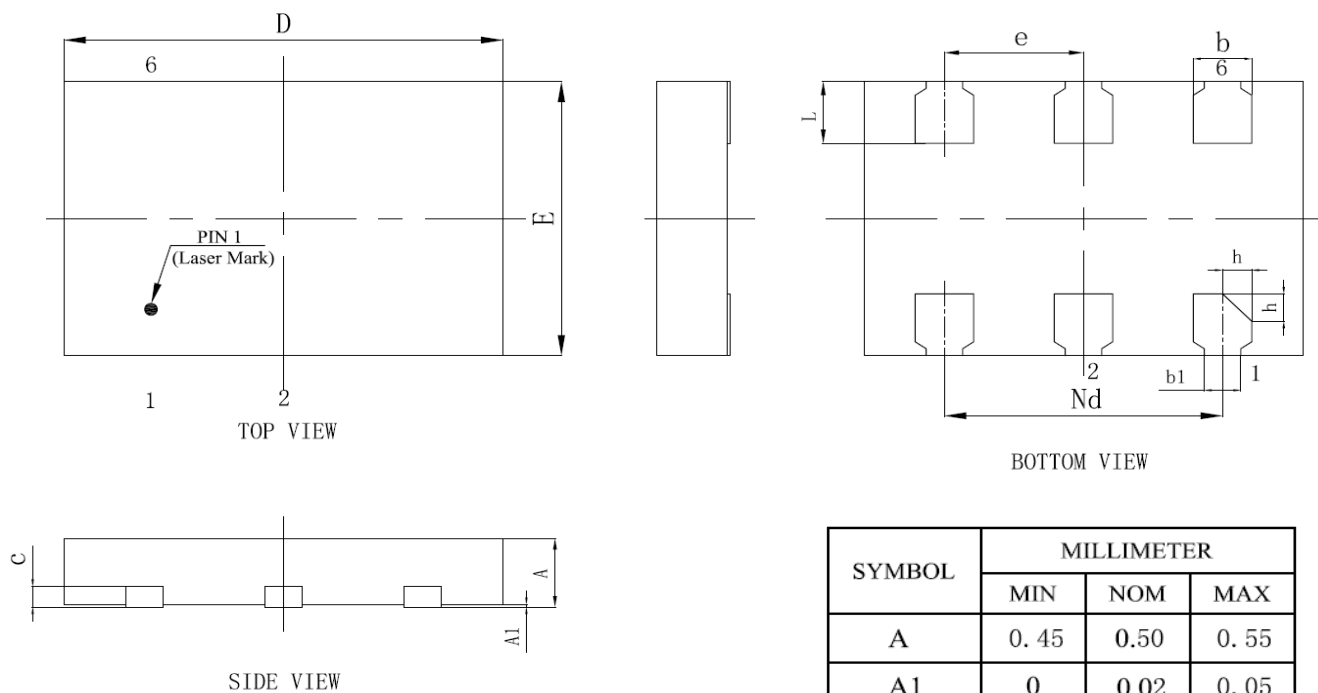
Typic Reverse Leakage vs. Temperature

APPLICATION INFORMATION



Line to Line Schematic Diagram for Gigabit Ethernet Telcordia GR-1089 Intra-Building Protection (PHY Operating Temp $\leq 90^{\circ}\text{C}$)

DFN3020P6 PACKAGE OUTLINE & DIMENSIONS



SYMBOL	MILLIMETER		
	MIN	NOM	MAX
A	0.45	0.50	0.55
A1	0	0.02	0.05
b	0.30	0.40	0.50
b1	0.20	0.25	0.30
c	0.10	0.15	0.20
D	2.90	3.00	3.10
e	0.95BSC		
Nd	1.80	1.90	2.00
E	1.90	2.00	2.10
L	0.40	0.45	0.50
h	0.15	0.20	0.25