

## QUAD LOW CAPACITANCE TVS ARRAY FOR HIGH SPEED DATA LINES

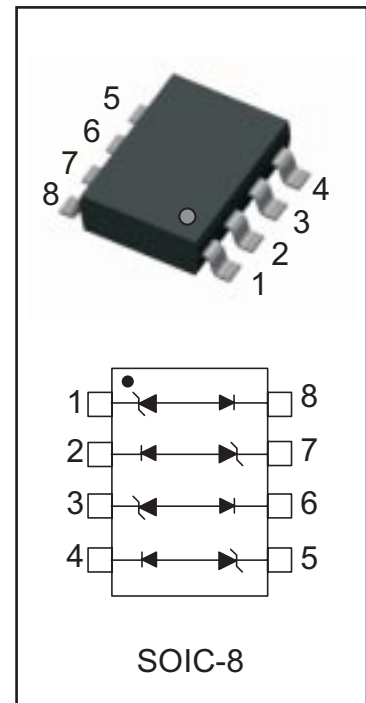
This Quad TVS Array offers an excellent ESD/Transient Protection for High Speed Transmission Data buses in very sensitive electronics. The array comes in an industry std SOIC-8 package, with 4 individual Low Capacitance TVS/Zeners which could offer 4 Uni-directional or 2 Bi-directional Data Line Protection.

### SPECIFICATION FEATURES

- 400W Power Dissipation (8x20μsec Waveform)
- Very Low Leakage Current, Maximum of 5μA @ 5Vdc
- Maximum Capacitance @ 1MHz Zero dc Bias, of 1.2pF
- Unidirectional, 2.4pF Bi-directional
- IEC61000-4-2 ESD 15kV air, 8kV Contact Compliance
- IEC61000-4-5 (Lightning) 17 Amps peak, 8x20μsec

### APPLICATIONS

- Personal Digital Assistant (PDA)
- Universal Serial Bus (1.1 and 2.0) and Fire Wire Port
- Portable Instrumentation
- Portable Consumer Electronics
- Ethernet 10, 100, and 1000 Base Port Protection



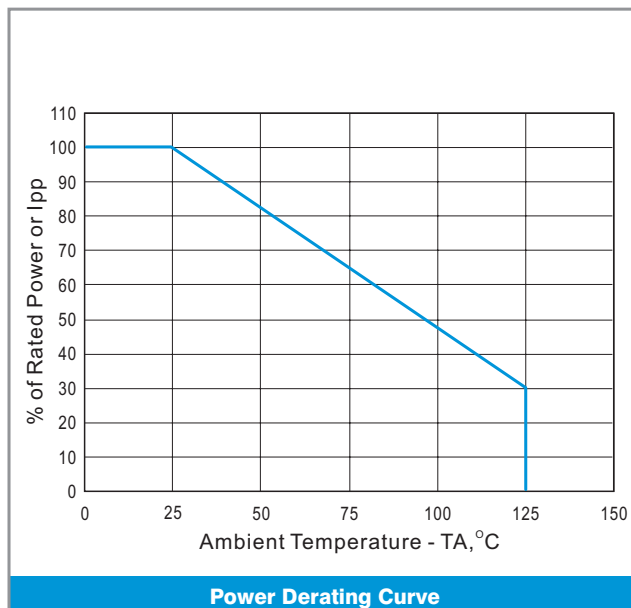
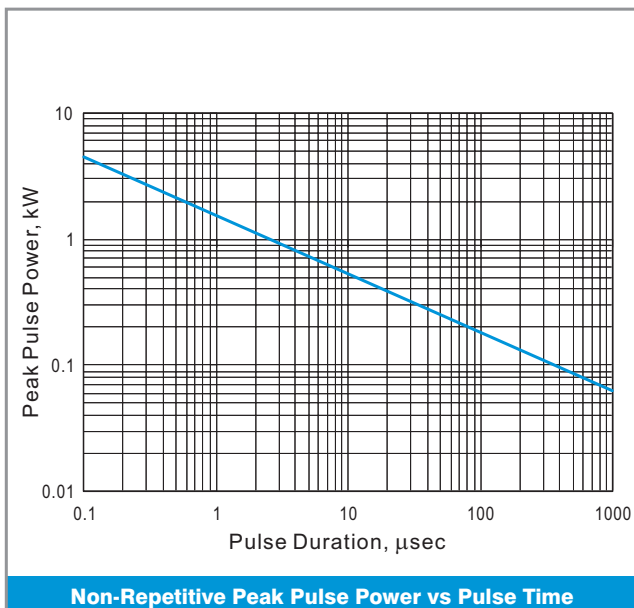
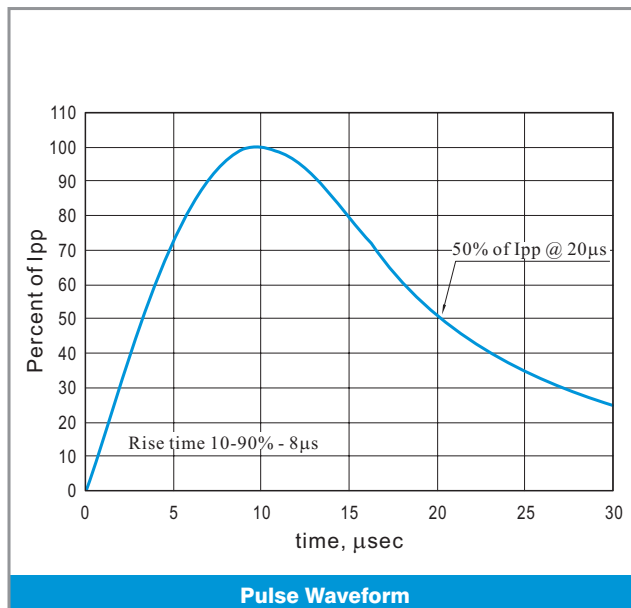
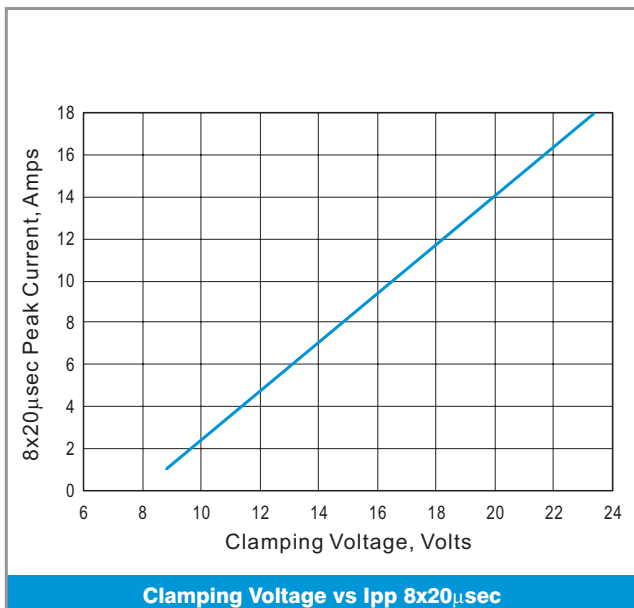
### MAXIMUM RATINGS

Rating	Symbol	Value	Units
Peak Pulse Power (8x20μsec Waveform)	$P_{PK}$	400	W
Peak Pulse Current (8x20μsec Waveform)	$I_{PP}$	17	A
ESD Voltage (HBM)	$V_{ESD}$	>25	kV
Operating Temperature Range	$T_J$	-55 to +125	°C
Storage Temperature Range	$T_{slg}$	-55 to +150	°C

### ELECTRICAL CHARACTERISTICS (PER DEVICE)

Parameter	Symbol	Conditions	Min.	Typical	Max.	Units
Reverse Stand-Off Voltage	$V_{RWM}$				5	V
Reverse Breakdown Voltage	$V_{BR}$	$I_{BR} = 1mA$	6			V
Reverse Leakage Current	$I_R$	$V_R = 5V$			5	μA
Clamping Voltage (8x20μsec)	$V_C$	$I_{PP} = 1A$			10	V
Clamping Voltage (8x20μsec)	$V_C$	$I_{PP} = 5A$			13	V
Off-State Junction Capacitance	$C_j$	0 Vdc Bias f = 1MHz Per Device			1.2	pF
Maximum Peak Pulse Current	$I_{PP}$	8x20μsec Waveform			17	A

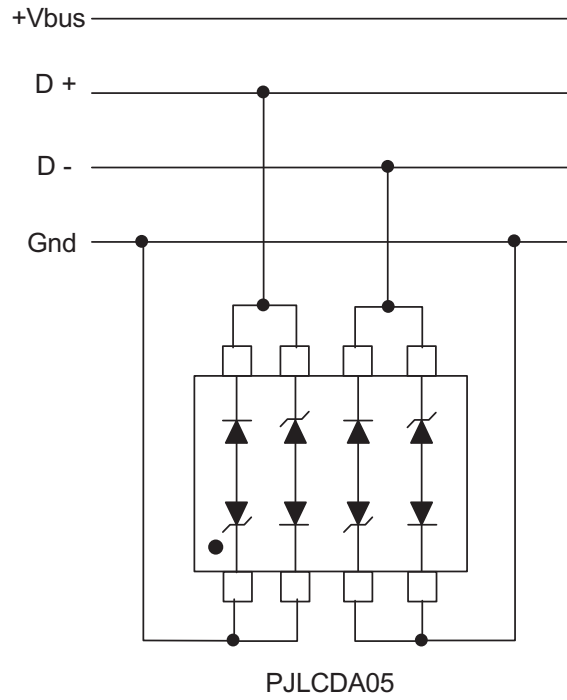
**RATING AND CHARACTERISTIC CURVES**



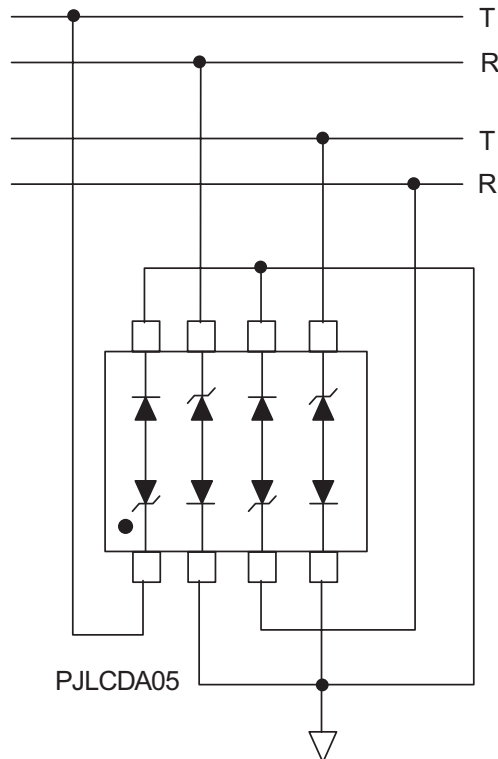
TVS/ZENER  
PJLCDA05

**TYPICAL APPLICATION CONFIGURATION**

USB Application

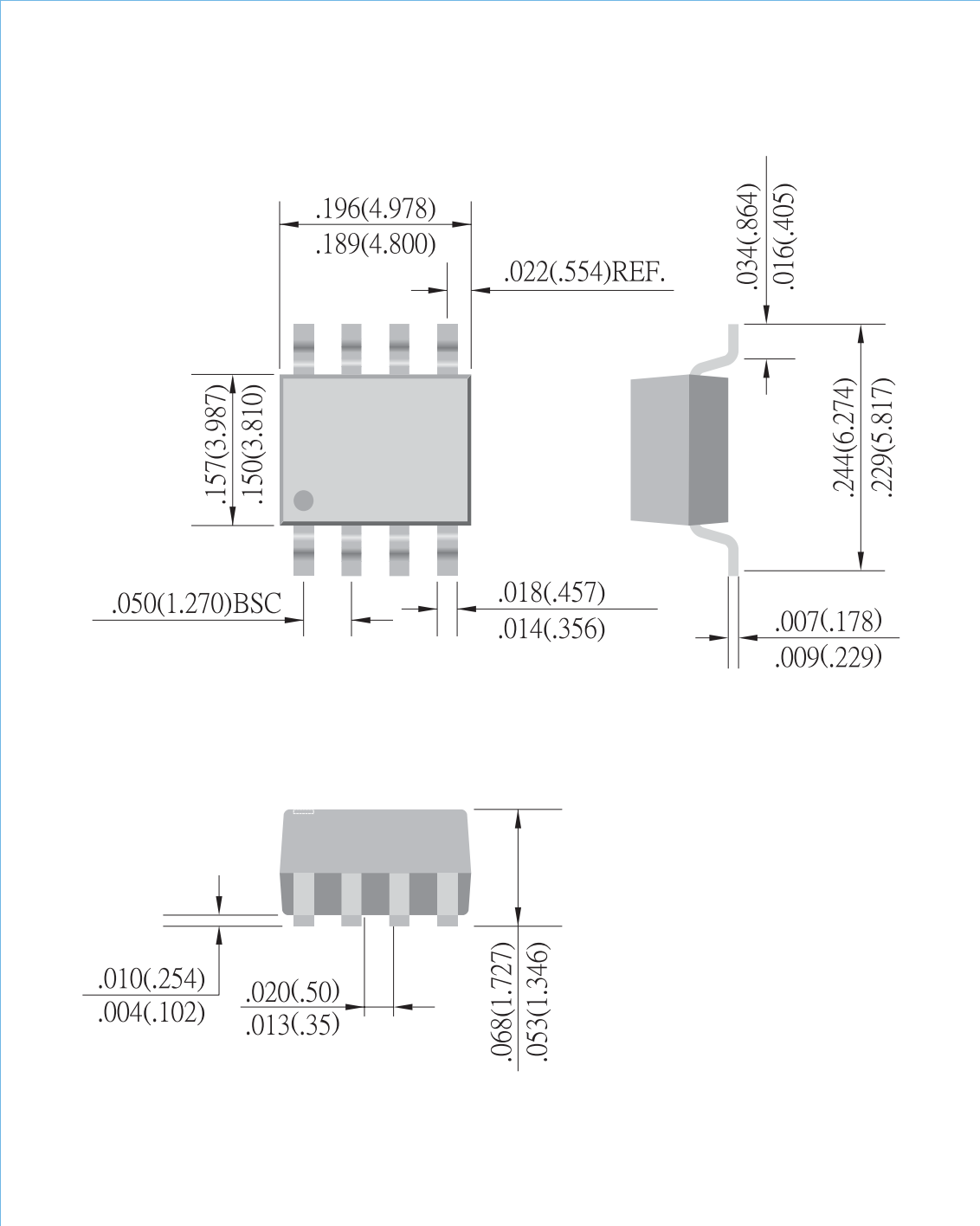


Ethernet Application



TVSIZENER  
| PJLCDA05 |

**SOIC-8** Unit: inch ( mm )



TYSIZENER

PJLCDA05