

### Features

- 225 Watts Peak Pulse Power per Line (tp=8/20µs)
- Protects Four Unidirectional I/O line
- Low Clamping Voltage
- Working Voltages : 5V
- Low Leakage Current
- IEC61000-4-2 (ESD) ±25kV (air), ±15kV (contact)
- IEC61000-4-4 (EFT) 40A (5/50ns)
- IEC61000-4-5 (LIGHTING) 9A (8/20µs)

### Applications

- Ethernet - 10/100/1000 Base T
- Cellular Phones
- I<sup>2</sup>C Bus Protection
- Parallel & Serial Port Protection
- Personal Digital Assistant (PDA)
- Microcontroller Input Protection
- ISDN S/T Interface
- WAN/LAN Equipment

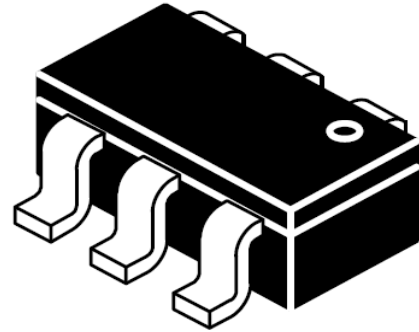
### Mechanical Characteristics

- SOT-26 Package
- Molding Compound Flammability Rating : UL 94V-O
- Weight 16 Milligrams (Approximate)
- Quantity Per Reel : 3,000pcs
- Reel Size : 7 inch
- Lead Finish : Lead Free

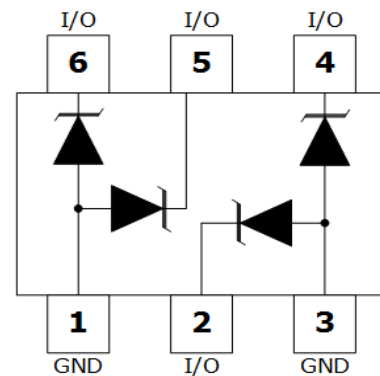
### Absolute Maximum Ratings (Tamb=25°C unless otherwise specified)

Parameter	Symbol	Value	Unit
Peak Pulse Power (8/20µs)	Ppp	225	W
ESD per IEC 61000-4-2 (Air)	V <sub>ESD</sub>	±25	Kv
ESD per IEC 61000-4-2 (Contact)		±15	
Operating Temperature Range	T <sub>J</sub>	-55 to +125	°C
Storage Temperature Range	T <sub>STJ</sub>	-55 to +150	°C

### Dimensions SOT-6



### Pin Configuration



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

PART NUMBER	DEVICE MARKING	$V_{RWM}$	$V_B$	$I_T$	$V_C$	$V_C$		$I_R$	$C_T$
		(V) (max.)	(V) (min.)		(IO to GND) @1A (max.)	(IO to GND) (max.)	(@A)		(I/O to GND) (pF) (typ.)
LC0564ST6	56D	5	6	1	8.5	20	9	1	1.2
					$V_C$	$V_C$			$C_T$
					(IO to I/O) @1A (max.)	(I/O to I/O) (max.)	(@A)		(I/O to I/O) (pF) (typ.)
					9.8	25	9		2.5

## TYPIC CHARACTERISTICS

Figure 1. 8 x 20  $\mu$ s Waveform

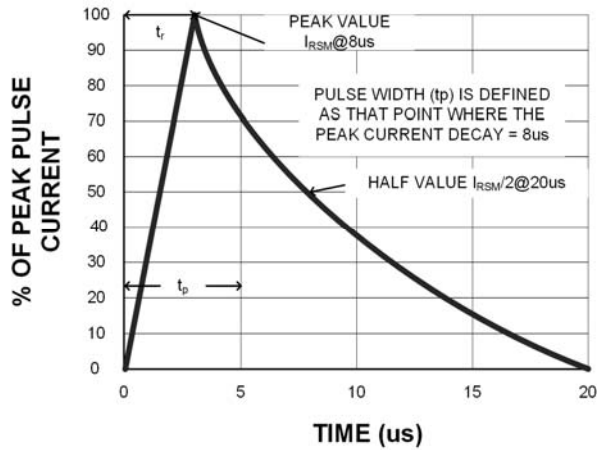


Figure 2. Power Derating Curve

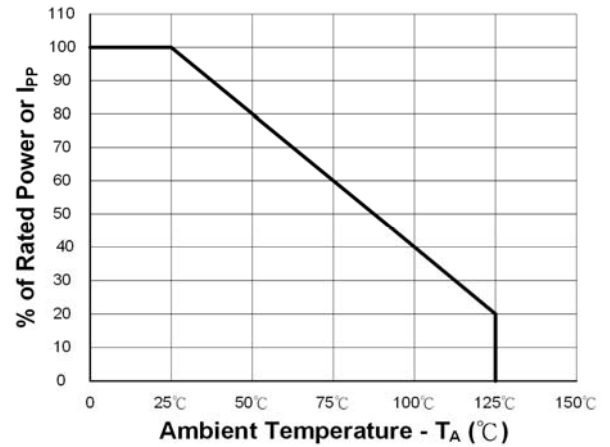
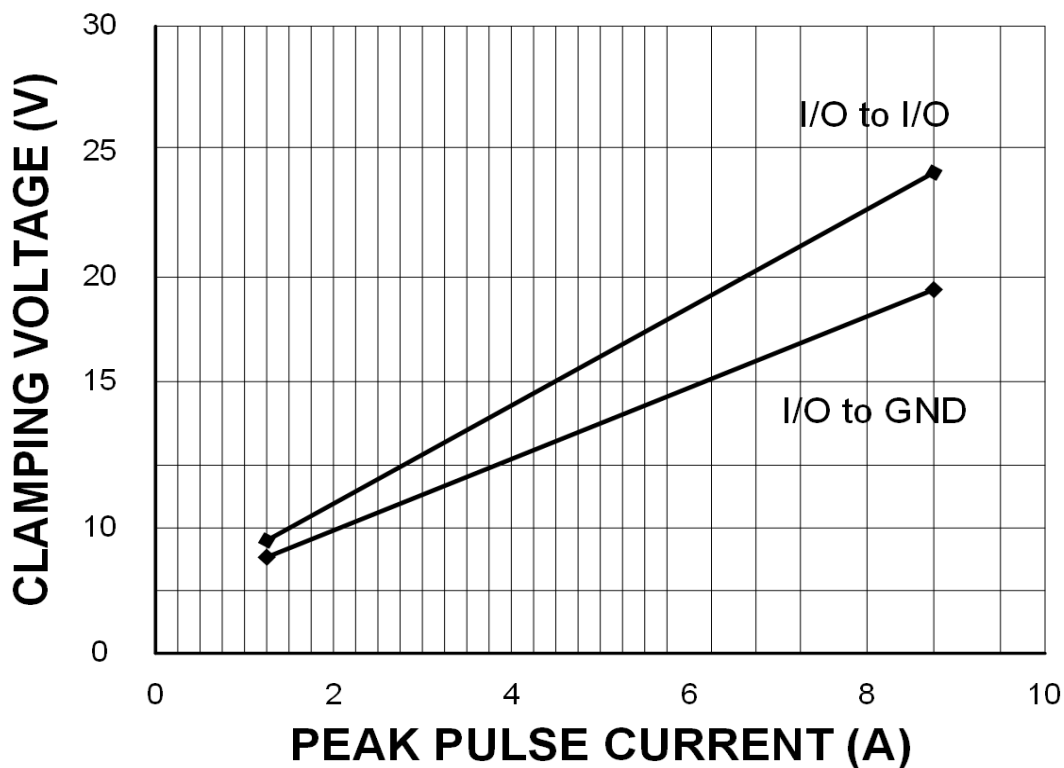
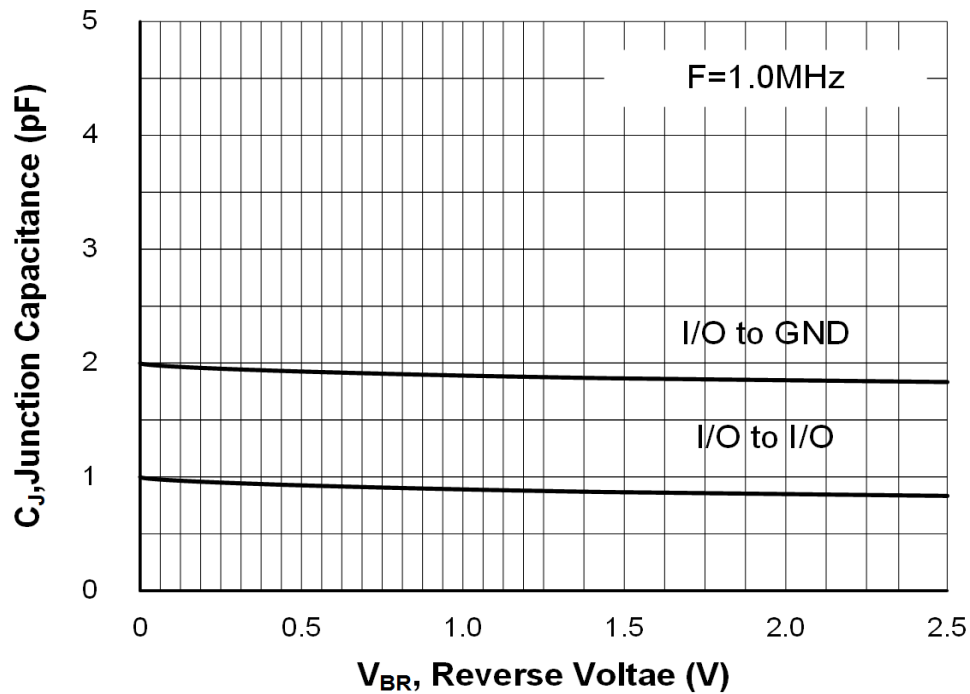


Figure 3. Clamping Voltage vs. Peak Pulse Current ( $t_p=8/20\mu s$ )

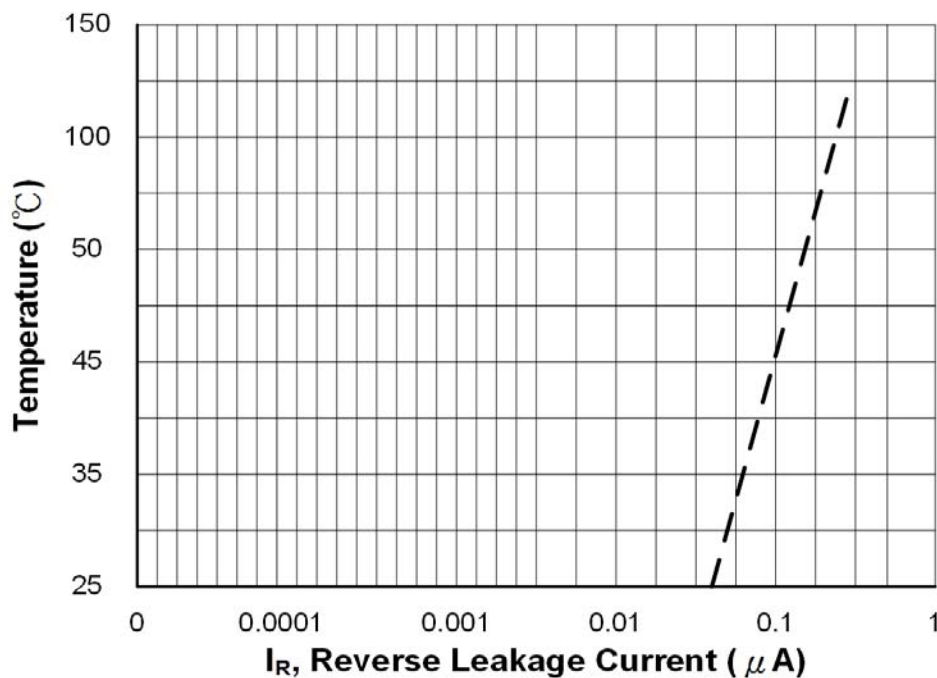


## TYPIC CHARACTERISTICS

**Figure 4. Typical Capacitance vs. Reverse Voltage**

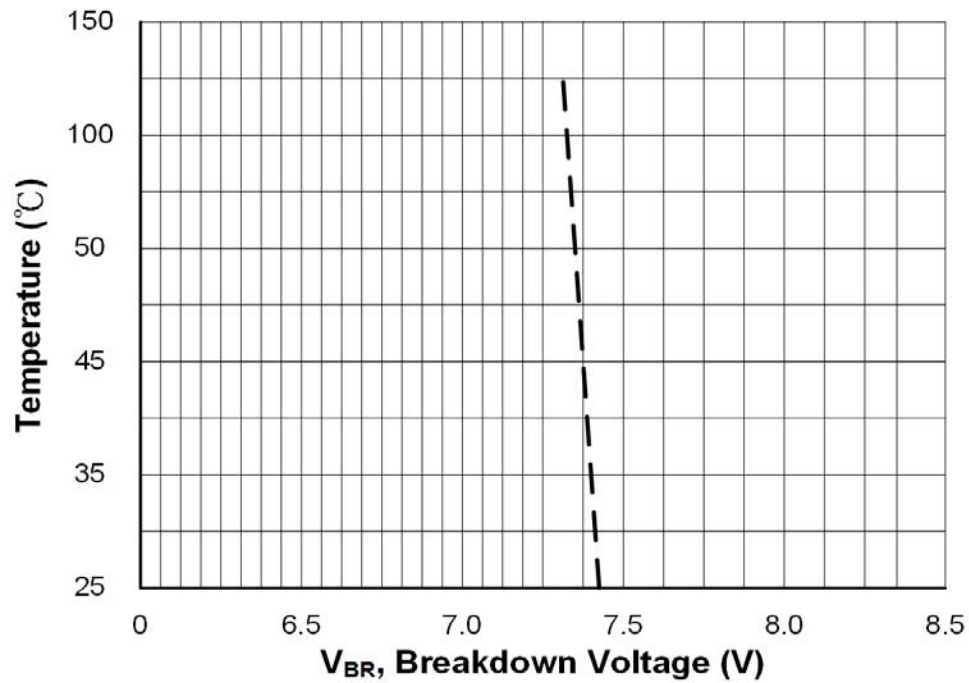


**Figure 5. Typical Reverse Leakage vs. Temperature**

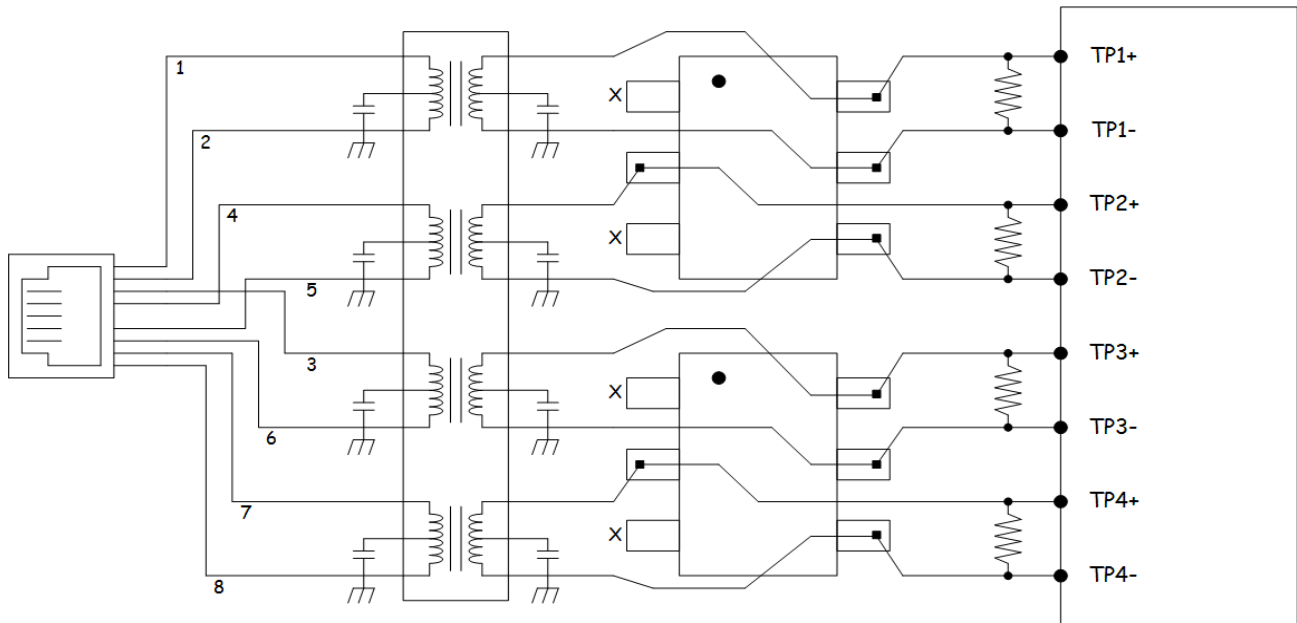


## TYPIC CHARACTERISTICS

Figure 6. Typical Breakdown Voltage vs. Temperature

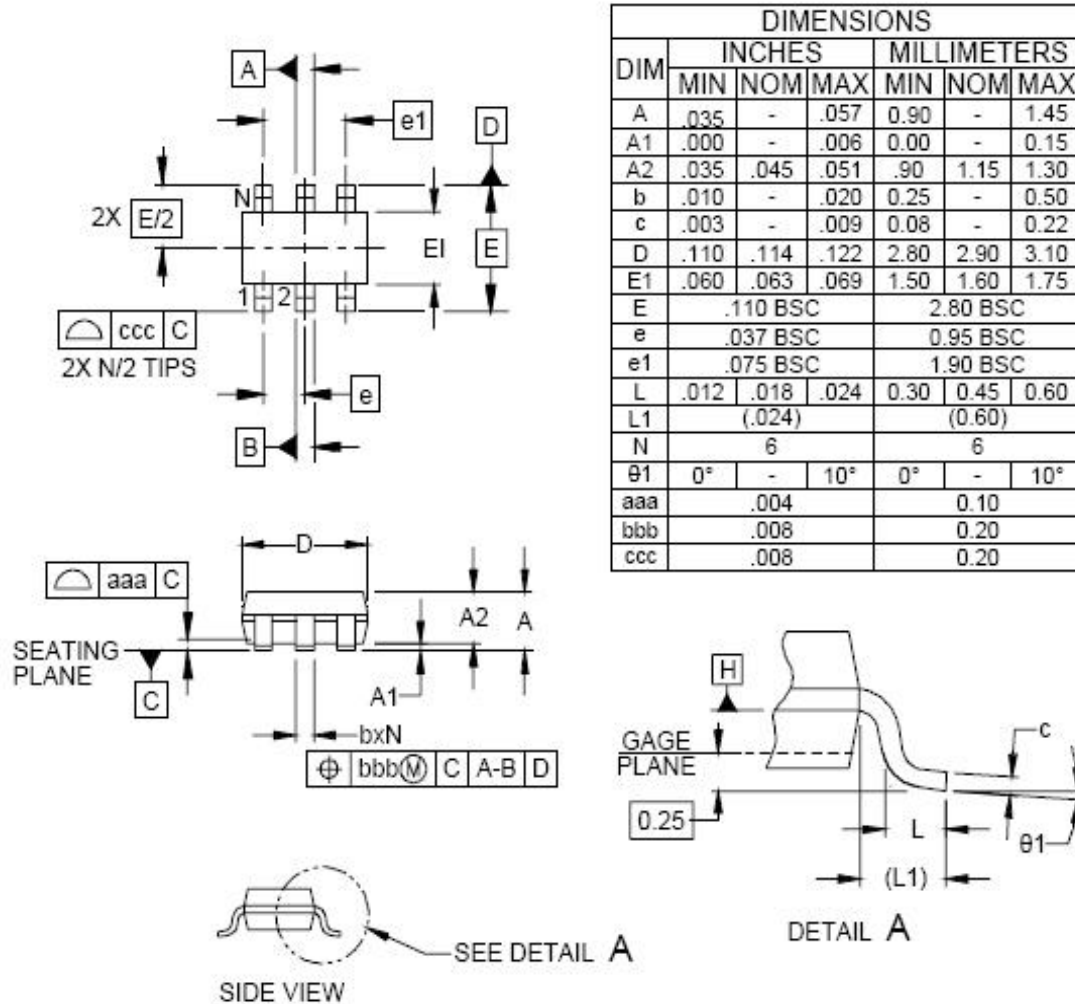


## APPLICATION INFORMATION

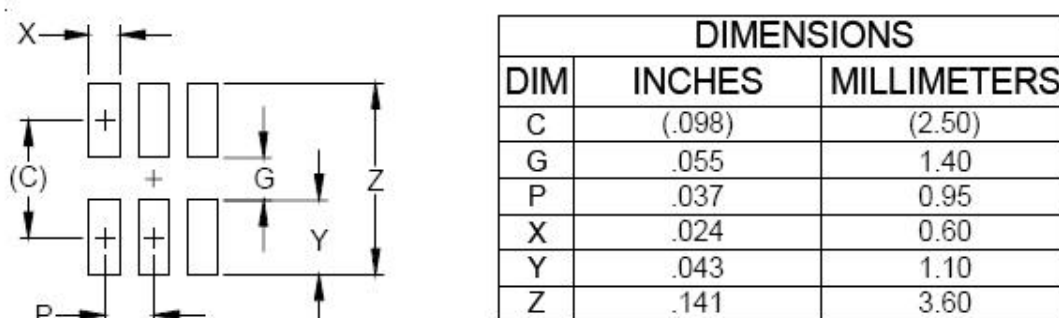


Gigabit Ethernet Protection Circuit

SOT-26 Package Outline & Dimensions



\* SOLDERING FOOTPRINT



Shanghai Leiditech Electronic Co.,Ltd  
 Email: sale1@leiditech.com  
 Tel : +86- 021 50828806  
 Fax : +86- 021 50477059