

**LC6.5
thru
LC170A
LOW CAPACITANCE**

FEATURES

This series employs a standard TAZ in series with a rectifier with the same transient capabilities as the TAZ. The rectifier is used to reduce the effective capacitance up thru 100 MHz with a minimum amount of signal loss or deformation. The low capacitance TAZ may be applied directly across the signal line to prevent induced transients from lightning, power interruptions, or static discharge. If bipolar transient capability is required, two low-capacitance TAZ must be used in parallel, opposite in polarity for complete AC protection.

- 1500 WATTS OF PEAK PULSE POWER DISSIPATION AT 25°C AND 10 x 1000 μ s
- AVAILABLE IN RANGES FROM 6.5-200V
- LOW CAPACITANCE AC SIGNAL PROTECTION

MAXIMUM RATINGS

1500 Watts of Peak Pulse Power dissipation at 25°C
 $t_{clamping}$ (0 volts to $V_{(BR)}$ min): Less than 5×10^{-9} seconds
 Operating and Storage temperatures: -65° to +175°C
 Steady State power dissipation: 1.0 W
 Repetition Rate (duty cycle): .01%

ELECTRICAL CHARACTERISTICS

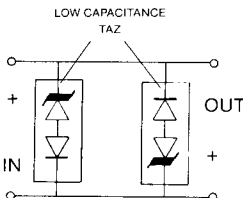
Clamping Factor: 1.4 @ Full Rated power
 1.30 @ 50% Rated power

Clamping Factor: The ratio of the actual V_C (Clamping Voltage) to the actual $V_{(BR)}$ (Breakdown Voltage) as measured on a specific device.

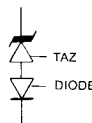
NOTE: When pulse testing, test in Avalanche direction. DO NOT pulse in forward direction.

APPLICATION

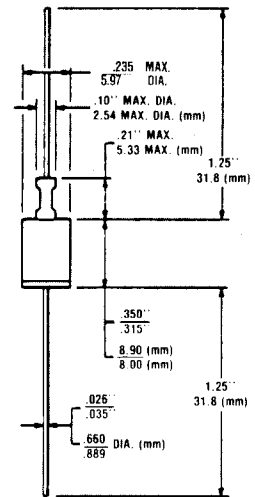
Devices must be used with two units in parallel, opposite in polarity, as shown in circuit for AC Signal Line protection:



SCHEMATIC



**TRANSIENT
ABSORPTION
ZENER**



**MECHANICAL
CHARACTERISTICS**

CASE: DO-13, welded, hermetically sealed metal and glass.

FINISH: All external surfaces are corrosion resistant and leads solderable.

POLARITY: Cathode connected to case and marked.

WEIGHT: 1.4 grams (Appx.)

MOUNTING POSITION: Any

LC6.5 thru LC170A

ELECTRICAL CHARACTERISTICS @ 25°C

MODEL/PART NUMBER	REVERSE STAND OFF VOLTAGE		BREAKDOWN VOLTAGE		@ If	MAXIMUM REVERSE LEAKAGE		MAXIMUM CLAMPING VOLTAGE		MAXIMUM PEAK PULSE CURRENT		CAPACITANCE @ 0 V	V _{IR} INVERSE BLOCKING VOLTAGE	I _{IR} INVERSE BLOCKING LEAKAGE CURRENT	V _{PR} PEAK INVERSE BLOCKING VOLTAGE
	V _{WM} VOLTS	V _{BR} VOLTS	Min.	Max.		I ₀ A	I _{PP} A	I _{PM} A	I _{PM} A	PF					
LC6.5	65	722	8.82	10	1000	12.3	100	100	75	1	100				
LC6.5A	65	722	7.98	10	1000	11.2	100	100	75	1	100				
LC7.0	70	778	9.51	10	500	13.3	100	100	75	1	100				
LC7.0A	70	778	8.80	10	500	12.0	100	100	75	1	100				
LC7.5	75	833	10.2	10	250	14.3	100	100	75	1	100				
LC7.5A	75	833	9.21	10	250	12.9	100	100	75	1	100				
LC8.0	80	889	10.9	1	100	15.0	100	100	75	1	100				
LC8.0A	80	889	9.83	1	100	13.6	100	100	75	1	100				
LC8.5	85	944	11.5	1	50	15.9	94	100	75	1	100				
LC8.5A	85	944	10.4	1	50	14.4	100	100	75	1	100				
LC9.0	90	1000	12.2	1	10	16.9	89	100	75	1	100				
LC9.0A	90	1000	11.1	1	10	15.4	97	100	75	1	100				
LC10	100	1110	13.6	1	5	18.8	80	100	75	1	100				
LC10A	100	1110	12.3	1	5	17.0	88	100	75	1	100				
LC11	110	1220	14.9	1	5	20.1	74	100	75	1	100				
LC11A	110	1220	13.5	1	5	18.2	82	100	75	1	100				
LC12	120	1330	16.3	1	5	22.0	68	100	75	1	100				
LC12A	120	1330	14.7	1	5	19.9	75	100	75	1	100				
LC13	130	1440	17.6	1	5	23.8	63	100	75	1	100				
LC13A	130	1440	15.9	1	5	21.5	70	100	75	1	100				
LC14	140	1550	19.1	1	5	25.8	58	100	75	1	100				
LC14A	140	1550	17.2	1	5	23.2	65	100	75	1	100				
LC15	150	1670	20.4	1	5	26.9	56	100	75	1	100				
LC15A	150	1670	18.5	1	5	24.4	61	100	75	1	100				
LC16	160	1780	21.8	1	5	28.8	52	100	75	1	100				
LC16A	160	1780	19.7	1	5	26.0	57	100	75	1	100				
LC17	170	1890	23.1	1	5	30.5	49	100	75	1	100				
LC17A	170	1890	20.9	1	5	27.6	54	100	75	1	100				
LC18	180	2000	24.4	1	5	32.2	46	100	75	1	100				
LC18A	180	2000	22.1	1	5	29.9	51	100	75	1	100				
LC20	200	2220	27.1	1	5	35.8	42	100	75	1	100				
LC20A	200	2220	24.5	1	5	32.4	46	100	75	1	100				
LC22	220	2440	29.8	1	5	39.4	38	100	75	1	100				
LC22A	220	2440	26.9	1	5	35.5	42	100	75	1	100				
LC24	240	2670	32.6	1	5	43.0	35	100	75	1	100				
LC24A	240	2670	29.5	1	5	38.9	39	100	75	1	100				
LC26	260	2890	35.3	1	5	46.6	32	100	75	1	100				
LC26A	260	2890	31.9	1	5	42.1	36	100	75	1	100				
LC28	280	3110	38.0	1	5	50.1	30	100	75	1	100				
LC28A	280	3110	34.4	1	5	45.4	33	100	75	1	100				
LC30	300	3330	40.7	1	5	53.5	28	100	75	1	100				
LC30A	300	3330	36.8	1	5	48.4	31	100	75	1	100				
LC33	330	3670	44.9	1	5	58.0	25.4	100	75	1	100				
LC33A	330	3670	40.6	1	5	53.3	28.1	100	75	1	100				
LC36	360	4000	48.9	1	5	64.3	23.3	100	75	1	100				
LC36A	360	4000	44.2	1	5	58.1	25.8	100	75	1	100				
LC40	400	4440	54.3	1	5	71.4	21.0	100	75	1	100				
LC40A	400	4440	49.1	1	5	64.5	23.3	100	75	1	100				
LC43	430	4780	58.4	1	5	76.7	19.5	100	150	1	200				
LC43A	430	4780	52.8	1	5	69.4	21.6	100	150	1	200				
LC45	450	5000	61.1	1	5	80.3	18.7	100	150	1	200				
LC45A	450	5000	55.3	1	5	72.7	20.6	100	150	1	200				
LC48	480	5330	65.1	1	5	85.5	17.5	100	150	1	200				
LC48A	480	5330	58.9	1	5	77.4	19.4	100	150	1	200				
LC51	510	5670	69.3	1	5	91.1	16.5	100	150	1	200				
LC51A	510	5670	62.7	1	5	82.4	18.2	100	150	1	200				
LC54	540	6000	73.3	1	5	98.3	15.6	100	150	1	200				
LC54A	540	6000	66.3	1	5	87.1	17.2	100	150	1	200				
LC58	580	6440	78.7	1	5	103.0	14.6	100	150	1	200				
LC58A	580	6440	71.2	1	5	93.6	16.0	100	150	1	200				
LC60	600	66.7	81.5	1	5	107.0	14.0	90	150	1	200				
LC60A	600	66.7	73.7	1	5	98.8	15.5	90	150	1	200				
LC64	640	71.1	89.9	1	5	114.0	13.2	90	150	1	200				
LC64A	640	71.1	81.9	1	5	103.0	14.6	90	150	1	200				
LC70	700	77.8	95.1	1	5	125	12.0	90	150	1	200				
LC70A	700	77.8	86.0	1	5	113	13.3	90	150	1	200				
LC75	750	83.3	102.0	1	5	134	11.2	90	150	1	200				
LC75A	750	83.3	92.1	1	5	121	12.4	90	150	1	200				
LC80	800	88.7	108	1	5	142	10.6	90	150	1	200				
LC80A	800	88.7	98.0	1	5	129	11.6	90	150	1	200				
LC90	900	100	122	1	5	160	9.4	90	300	1	200				
LC90A	900	100	111	1	5	146	10.3	90	300	1	200				
LC100	1000	111	136	1	5	179	8.4	90	300	1	200				
LC100A	1000	111	123	1	5	162	9.3	90	300	1	200				
LC110	1100	122	149	1	5	196	7.7	90	300	1	400				
LC110A	1100	122	135	1	5	178	8.4	90	300	1	400				
LC120	1200	133	163	1	5	214	7.0	90	300	1	400				
LC120A	1200	133	147	1	5	193	7.8	90	300	1	400				
LC130	1300	144	176	1	5	231	6.5	90	300	1	400				
LC130A	1300	144	159	1	5	209	7.2	90	300	1	400				
LC150	1500	167	204	1	5	268	5.6	90	300	1	400				
LC150A	1500	167	185	1	5	243	6.2	90	300	1	400				
LC160	1600	178	218	1	5	287	5.2	90	300	1	400				
LC160A	1600	178	197	1	5	259	5.8	90	300	1	400				
LC170	1700	189	231	1	5	304	4.9	90	300	1	400				
LC170A	1700	189	209	1	5	275	5.4	90	300	1	400				

NOTE 1: TAZ are normally selected according to the reverse "Stand Off Voltage (V_{WM})" which should be equal to or greater than the DC or continuous peak operating voltage level.