

LCE SERIES
LOW CAPACITANCE TRANSIENT VOLTAGE SUPPRESSOR
STAND-OFF VOLTAGE-6.5 TO 28 Volts
1500 Watt Peak Pulse Power

LCE PART NUMBER	STAND-OFF VOLTAGE V_{WM} (VOLTS)	BREAKDOWN VOLTAGE V(BR) (VOLTS) MIN-MAX	TEST CURRENT AT I_T (mA)	MAXIMUM REVERSE LEAKAGE AT V_{WM} I_R (μ A)	MAXIMUM CLAMPING VOLTAGE AT I_{pp} V_c (VOLTS)	MAXIMUM PEAK PULSE CURRENT FIG.3 I_{PPM} (AMPS)	MAXIMUM JUNCTION CAPACITANCE AT 0 VOLTS (pF)	WORKING INVERSE BLOCKING VOLTAGE V_{WIB} (VOLTS)	WORKING INVERSE BLOCKING VOLTAGE V_{WIB} (VOLTS)	PEAK INVERSE BLOCKING VOLTAGE V_{PIB} (VOLTS)
LCE6.5A	6.5	7.22-7.98	10	1000	11.2	100	100	75	1.0	100
LCE7.0A	7.0	7.78-8.60	10	500	12.0	100	100	75	1.0	100
LCE7.5A	7.5	8.33-9.21	10	250	12.9	100	100	75	1.0	100
LCE8.0A	8.0	8.89-9.83	1	100	13.6	100	100	75	1.0	100
LCE8.5A	8.5	9.44-10.40	1	50	14.4	100	100	75	1.0	100
LCE9.0A	9.0	10.00-11.10	1	10	15.4	97	100	75	1.0	100
LCE10A	10.0	11.10-12.30	1	5	17.0	88	100	75	1.0	100
LCE11A	11.0	12.20-13.50	1	5	18.2	82	100	75	1.0	100
LCE12A	12.0	13.30-14.70	1	5	19.9	75	100	75	1.0	100
LCE13A	13.0	14.40-15.90	1	5	21.5	70	100	75	1.0	100
LCE14A	14.0	15.60-17.20	1	5	23.2	65	100	75	1.0	100
LCE15A	15.0	16.70-18.50	1	5	24.4	61	100	75	1.0	100
LCE16A	16.0	17.80-19.70	1	5	26.0	57	100	75	1.0	100
LCE17A	17.0	18.90-20.90	1	5	27.6	54	100	75	1.0	100
LCE18A	18.0	20.00-22.10	1	5	29.2	51	100	75	1.0	100
LCE20A	20.0	22.20-24.50	1	5	32.4	46	100	75	1.0	100
LCE22A	22.0	24.40-26.90	1	5	35.5	42	100	75	1.0	100
LCE24A	24.0	26.70-29.50	1	5	38.9	39	100	75	1.0	100
LCE26A	26.0	28.90-31.90	1	5	42.1	36	100	75	1.0	100
LCE28A	28.0	31.10-34.40	1	5	45.5	33	100	75	1.0	100

For Parts without A , the V_{BR} is $\pm 10\%$

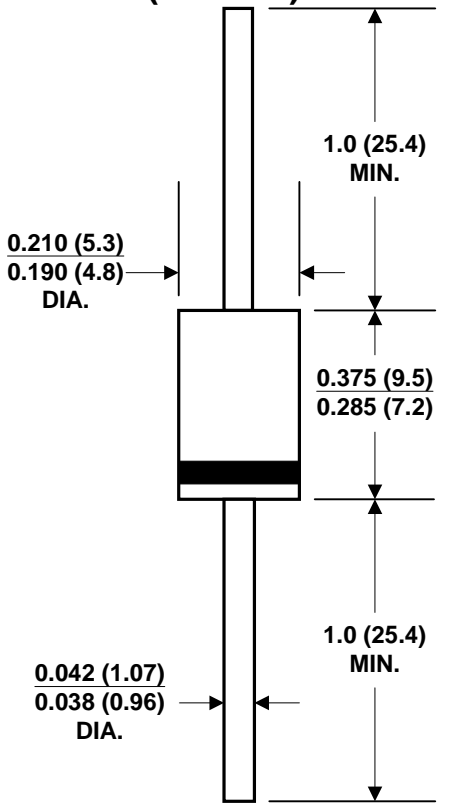
LCE SERIES

LOW CAPACITANCE TRANSIENT VOLTAGE SUPPRESSOR

STAND-OFF VOLTAGE-6.5 TO 28 Volts

1500 Watt Peak Pulse Power

Case Style 1.5KE (DO-201)



Dimensions in inches and (millimeters)

FEATURES

Plastic package has Underwriters Laboratory

Flammability Classification 94V-O

Glass passivated junction

1500W Peak Pulse Power capability with a 10/1000 μ s waveform,
repetition rate (duty cycle):0.05%

Excellent clamping capability

Low incremental surge resistance

Fast response time: typically less than 5.0ns from 0 Volts to V(BR)

Ideal for data line applications

High temperature soldering guaranteed:

265°C/10 seconds,0.375"(9.5mm) lead length, 5lbs., (2.3kg) tension

MECHANICAL DATA

Case: JEDEC DO-201 molded plastic body over a passivated junction

Terminal: Plated axial leads, solderable per MIL-STD-750

,Method 2026

Polarity: Color band denotes positive end (cathode)

Mounting Position: Any

Weight: 0.045 ounce, 1.2 grams

MAXIMUM RATINGS AND CHARACTERISTICS

Ratings at 25 ambient temperature unless otherwise specified.

RATING	SYMBOL	VALUE	UNITS
Peak Pulse Power Dissipation With a 10/1000 μ s waveform (Note 1,FIG.1)	P_{PPM}	Minimum 1500	Watts
Steady State Power Dissipation , $T_L = 75$ With at lead lengths 0.375"(9.5mm)	$P_{M(AV)}$	5	Watts
Peak Power Pules Surge Current With a 10/1000 μ s Waveform (FIG.3,NOTE 1)	I_{PPM}	SEE TABLE 1	Amps
Operating junction and Storage Temperature Range	T_J, T_{STG}	-55 to + 175	

Notes :

1.Non-repetitive current pulse , per Fig. 3 and derated above $T_A = 25$ per Fig. 2 .

LCE SERIES

LOW CAPACITANCE TRANSIENT VOLTAGE SUPPRESSOR

Ratings and
Characteristic Curves ($T_A=25^\circ\text{C}$ unless otherwise noted)

Fig. 1 - Peak Pulse Power Rating Curve

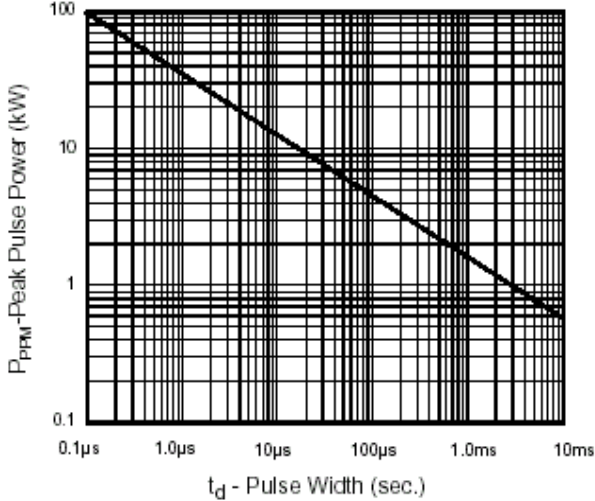


Fig.2-Power Derating Curve

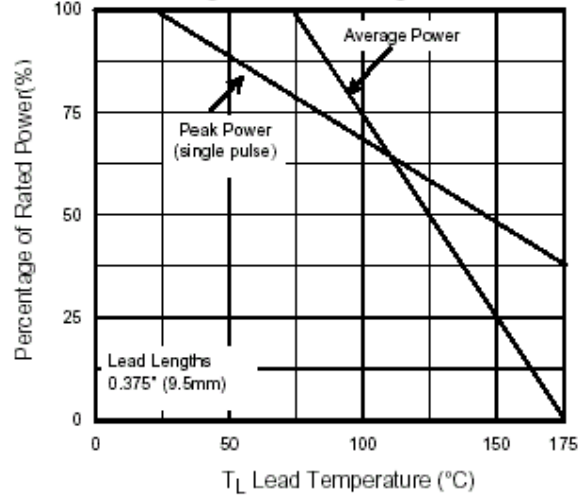


Fig.3 - Pulse Waveform

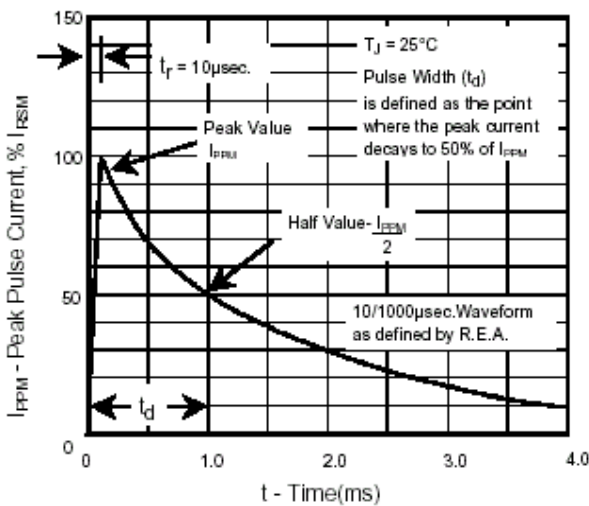
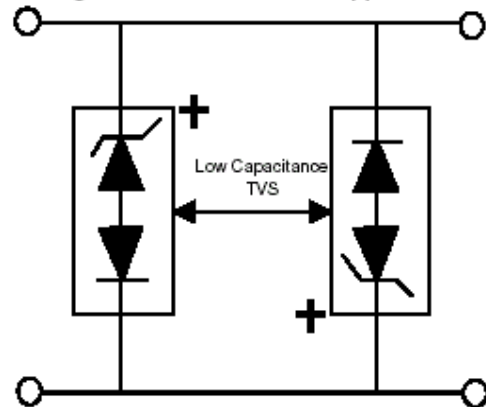


Fig. 4 - AC Line Protection Application



Application Note: Device must be used with two units in parallel, opposite in polarity as shown in circuit for AC signal line protection.