

1500W Low Capacitance Transient Voltage Suppressor

Features

- Stand-off voltage from 6.5 to 90 volts
- Low Capacitance
- 1500W Peak Pulse Power capability on 10/1000 μ s waveform repetition rate(duty cycle): 0.05%
- Fast response time: typically less than 1.0ps from 0v to VBR
- High temperature soldering guaranteed 265°C/10 seconds / .037" (9.5mm) lead length, 5lbs (2.3kg), tension
- This series is UL recognized under component index. File number E315008
- RoHS Compliant



Mechanical Data

Case:	1.5KE, Molded plastic
Terminals:	Plated axial leads, solderable per MIL-STD-750, Method 2026
Polarity:	Cathode indicated by color band
Weight:	1.2 gram

Maximum Ratings ($T_{Ambient}=25^{\circ}C$ unless noted otherwise)

Symbol	Description	Value	Unit
V_{WM}	Stand-Off Voltage	6.5 to 90	V
P_{PPM}	Peak Pulse Power Dissipation on 10/1000 μ s waveform(Note)	Minimum 1500	W
P_D	Steady State Power Dissipation on infinite heat sink at $T_L=75^{\circ}C$	6.5	W
W	Peak Pulse current on 10/1000 μ s waveform	See Table	A
C_J	Max. Junction Capacitance at 0V	100	pF
T_J, T_{STG}	Operating Junction and Storage Temperature Range	-55 to 175	$^{\circ}C$

Note: Non-repetitive current pulse, per Fig.3 and derated above $T_A = 25^{\circ}C$ per Fig. 2

1500W Low Capacitance Transient Voltage Suppressor

LCE6.5A - LCE90A

Electrical Characteristics ($T_{Ambient}=25^{\circ}C$ unless noted otherwise)

P/N Uni- Polar	Stand- Off Voltage V _{WM} (V)	Breakdown Voltage @ I _T			Max. Clamping Voltage. @ I _{PPM} V _C (V)	Max. Peak Pulse Current I _{PPM} (A) (Figure3)	Max. Reverse Leakage Current @ V _{WM} I _D (μA)	Working Inverse Blocking Voltage V _{WIB} (V)	Inverse Blocking Leakage Current @ V _{WIB} I _{IB} (mA)	Peak Blocking Leakage Voltage V _{PIB} (V)
		V _{BR}		I _T (mA)						
		Min.	Max.							
LCE6.5A	6.5	7.22	7.98	10	11.2	100.0	1000	75	1	100
LCE7.0A	7.0	7.78	8.60	10	12.0	100.0	500	75	1	100
LCE7.5A	7.5	8.33	9.21	10	12.9	100.0	250	75	1	100
LCE8.0A	8.0	8.89	9.83	1	13.6	100.0	100	75	1	100
LCE8.5A	8.5	9.44	10.40		14.4	100.0	50	75	1	100
LCE9.0A	9.0	10.00	11.10		15.4	97.0	10	75	1	100
LCE10A	10.0	11.10	12.30		17.0	88.0	5	75	1	100
LCE11A	11.0	12.20	13.50		18.2	82.0	1	75	1	100
LCE12A	12.0	13.30	14.70		19.9	75.0	1	75	1	100
LCE13A	13.0	14.40	15.90		21.5	70.0	1	75	1	100
LCE14A	14.0	15.60	17.20		23.2	65.0	1	75	1	100
LCE15A	15.0	16.70	18.50		24.4	61.0	1	75	1	100
LCE16A	16.0	17.80	19.70		26.0	57.0	1	75	1	100
LCE17A	17.0	18.90	20.90		27.6	54.0	1	75	1	100
LCE18A	18.0	20.00	22.10		29.2	51.0	1	75	1	100
LCE20A	20.0	22.20	24.50		32.4	46.0	1	75	1	100
LCE22A	22.0	24.40	26.90		35.5	42.0	1	75	1	100
LCE24A	24.0	26.70	29.50		38.9	39.0	1	75	1	100
LCE26A	26.0	28.90	31.90		42.1	36.0	1	75	1	100
LCE28A	28.0	31.10	34.40		45.5	33.0	1	75	1	100
LCE30A	30.0	33.30	36.80		48.4	31.0	1	75	1	100
LCE33A	33.0	36.70	40.60		53.3	28.1	1	75	1	100
LCE36A	36.0	40.00	44.20		58.1	25.8	1	75	1	100
LCE40A	40.0	44.40	49.10		64.5	23.3	1	75	1	100
LCE43A	43.0	47.80	52.80		69.4	21.6	1	75	1	100
LCE45A	45.0	50.00	55.30		72.7	20.6	1	75	1	100

1500W Low Capacitance Transient Voltage Suppressor

LCE6.5A - LCE90A

P/N Uni-Polar	Stand-Off Voltage V _{WM} (V)	Breakdown Voltage @ I _T		I _T (mA)	Max. Clamping Voltage. @ I _{PPM} V _C (V)	Max. Peak Pulse Current I _{PPM} (A) (Figure3)	Max. Reverse Leakage Current @ V _{WM} I _D (μA)	Working Inverse Blocking Voltage V _{WIB} (V)	Inverse Blocking Leakage Current @ V _{WIB} I _{IB} (mA)	Peak Blocking Leakage Voltage V _{PIB} (V)
		V _{BR}								
		Min.	Max.							
LCE48A	48.0	53.30	58.90	1	77.4	19.4	1	75	1	100
LCE51A	51.0	56.70	62.70		82.4	18.2	1	75	1	100
LCE54A	54.0	60.00	66.30		87.1	17.2	1	100	1	125
LCE58A	58.0	64.40	71.20		93.6	16.0	1	100	1	125
LCE60A	60.0	66.70	73.70		96.8	15.5	1	100	1	125
LCE64A	64.0	71.10	78.60		103.0	14.6	1	100	1	125
LCE70A	70.0	77.80	86.00		113.0	13.3	1	125	1	150
LCE75A	75.0	83.30	92.10		121.0	12.4	1	125	1	150
LCE85A	85.0	94.40	104.00		129.0	11.6	1	125	1	150
LCE90A	90.0	100.00	111.00		146.0	10.3	1	125	1	150

Typical Characteristics Curves

Fig.1- Peak Pulse Power Rating Curve

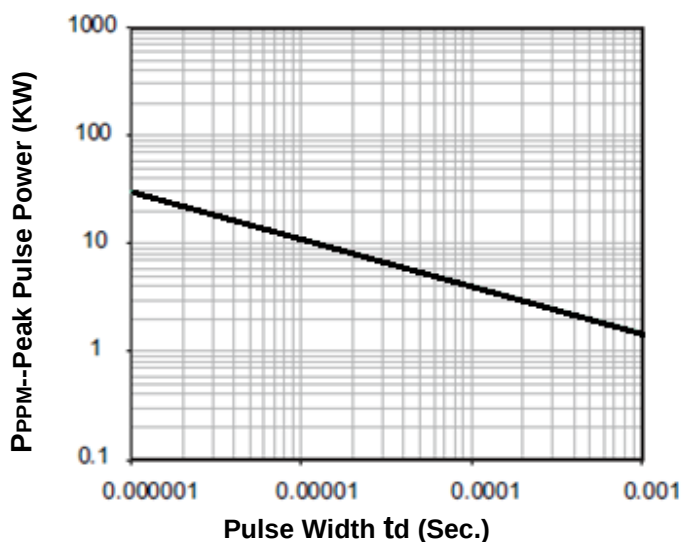
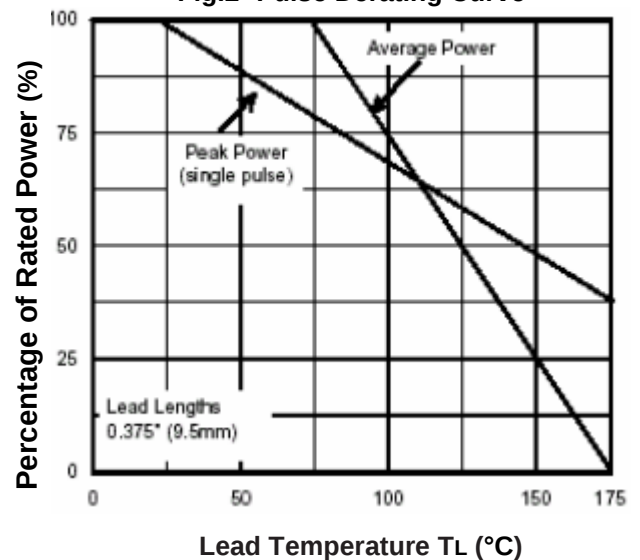


Fig.2- Pulse Derating Curve



1500W Low Capacitance Transient Voltage Suppressor

LCE6.5A - LCE90A

Fig.3- Pulse Waveform

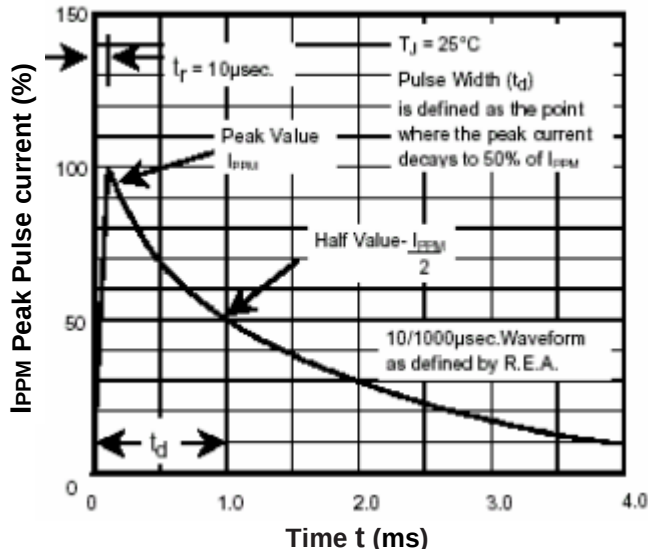
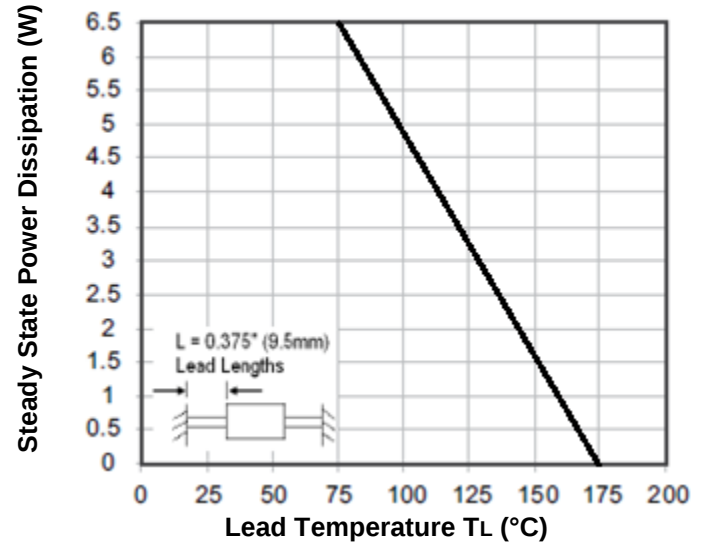
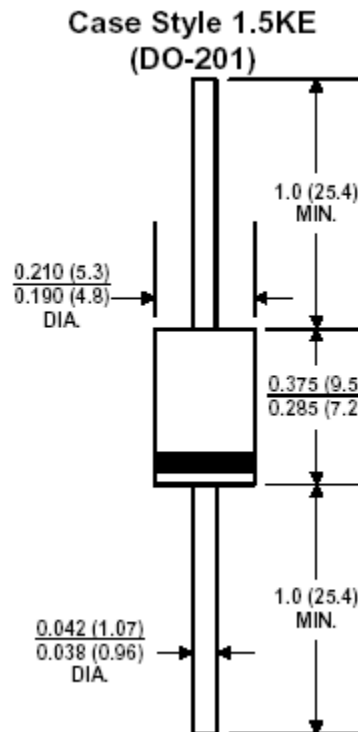


Fig.4- Steady State Power Derating Curve



Dimensions: Inch (mm)



1500W Low Capacitance Transient Voltage Suppressor

LCE6.5A - LCE90A

How to contact us

USA HEADQUARTERS

28040 WEST HARRISON PARKWAY, VALENCIA, CA 91355-4162

Tel: (800)-TAITRON (800)-824-8766 (661)-257-6060

Fax: (800)-TAITFAX (800)-824-8329 (661)-257-6415

Email: taitron@taitroncomponents.com

Http://www.taitroncomponents.com

TAITRON COMPONENTS INCORPORATED TAIWAN BRANCH

6F., NO.190, SEC. 2, ZHONGXING RD., XINDIAN DIST., NEW TAIPEI CITY 23146, TAIWAN R.O.C.

Tel: 886-2-2913-6238

Fax: 886-2-2913-6239

TAITRON COMPONENT TECHNOLOG SHANGHAI CORPORATION

SUITE 1503, METROBANK PLAZA, 1160 WEST YAN'AN ROAD, SHANGHAI, 200052, CHINA

Tel: +86-21-5424-9942

Fax: +86-21-2302-5027