

# LCE6.5A~LCE28A

## LOW CAPACITANCE TRANSIENT VOLTAGE SUPPRESSOR POWER 1500 Watt

**BREAK DOWN VOLTAGE** 6.5 to 28 Volt

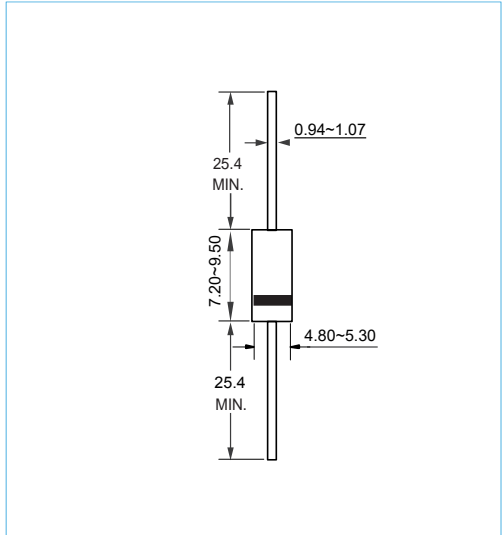
**DO-201AE** Unit:mm

### FEATURES

- Glass passivated junction and Excellent clamping capability
- Low incremental surge resistance
- Excellent clamping capability
- Lead free in compliance with EU RoHS

### MECHANICAL DATA

- Case: Molded plastic over passivated junction.
- Polarity: Color band denotes cathode end



## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

Rating	Symbol	Value	Units
Peak Pulse Power Dissipation on $T_A = 25^\circ\text{C}$ (Notes 1)	$P_{PP}$	1500	Watts
Steady State Power Dissipation	$P_{M(AV)}$	5.0	W
Peak Pulse Current on $t_p=10/1000\mu\text{s}$ waveform (Notes 1)	$I_{PPM}$	see Table 1	Amps
Operating Junction and Storage Temperature Range	$T_J, T_{STG}$	-55 to +175	$^\circ\text{C}$

NOTES :

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

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### ELECTRICAL CHARACTERISTICS @25°C

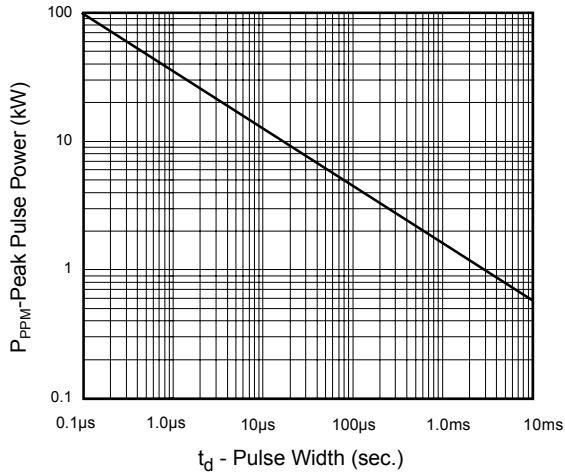
LCE PART NUMBER	STAND-OFF VOLTAGE $V_{WM}$ (VOLTS)	BREAKDOWN VOLTAGE $V_{(BR)}$ (VOLTS) MIN-MAX	TEST CURRENT AT $I_T$ (mA)	MAXIMUM REVERSE LEAKAGE AT $V_{WM}$ $I_R$ ( $\mu$ A)	MAXIMUM CLAMPING VOLTAGE AT $I_{pp} V_c$ (VOLTS)	MAXIMUM PEAK PULSE CURRENT FIG.3 $I_{PPM}$ (AMPS)	MAXIMUM JUNCTION CAPACITANCE 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)
UNI-POLAR										
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 bidirectional type having  $V_R$  of 10 volts and less, the  $I_R$  limit is double.

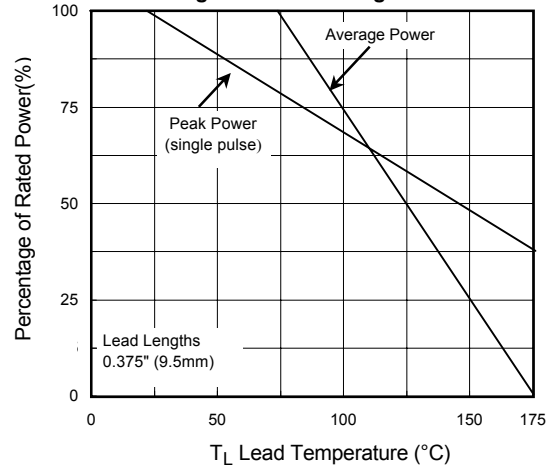
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## RATING AND CHARACTERISTIC CURVES

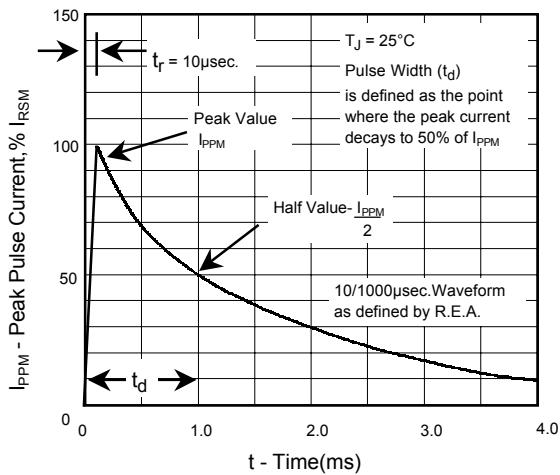
**Fig. 1 - Peak Pulse Power Rating Curve**



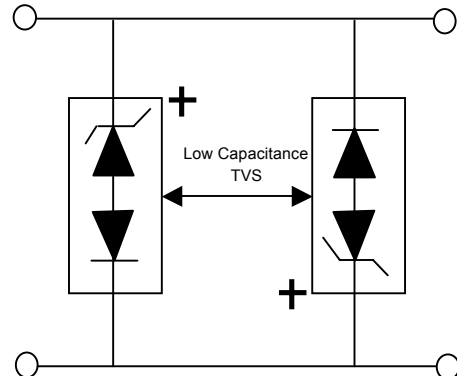
**Fig.2-Power Derating Curve**



**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.

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### ORDER INFORMATION

- Packing information

Part Number	Case	Reel Size	QUANTITY
LCE6.5A~LCE28A	DO-201AE	13 Inch	1200