

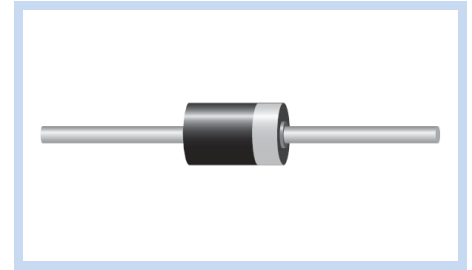
Transient Voltage Suppressors DO-201 Package

LCE Series

MERITEK

FEATURE

- Peak Pulse Power Dissipation: 1500W
- Fast response time, Duty cycle: 0.05%
- Glass passivated junction, Excellent clamping capability
- Low incremental surge resistance
- Solderable per MIL-STD-750, Method 2026
- High Temperature soldering guaranteed: 265°C, 10 seconds.
- UL Flammability Classification Rating 94V-0
- UL safety approved: certification No: E223045



MAXIMUM RATINGS AND CHARACTERISTICS

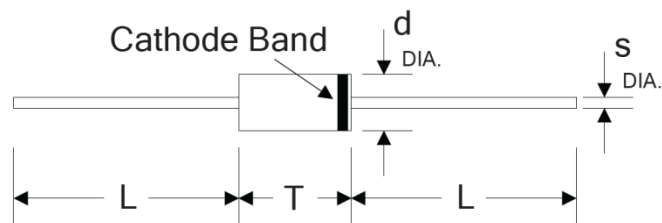
Parameter	Symbol	Value	Unit
Peak Pulse Power Dissipation on 10/1000µs waveform. (Note 1, Fig. 1)	P_{PPM}	Minimum 1500	Watts
Peak Pulse Current on 10/1000µs waveform. (Note 1, Fig. 3)	I_{PPM}	See Table	Amps
Steady State Power Dissipation at $T_L = 75^\circ\text{C}$, Lead length .375" (9.5mm). (Fig. 5)	$P_{M(AV)}$	6.5	Watts
Operating junction and Storage Temperature Range.	T_J, T_{STG}	-55 to +175	$^\circ\text{C}$

Ratings at 25°C ambient temperature unless otherwise specified.

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

DIMENSIONS

Item	DO-201 (mm)	
	Min.	Max.
L	25.40	-
T	7.20	9.50
d	4.80	5.30
S	0.96	1.07



SPECIFICATIONS

Part Number	Reverse Stand-Off Voltage	Breakdown Voltage Min. @ I_T	Breakdown Voltage Max. @ I_T	Test Current	Maximum Reverse Leakage @ V_{RWM}	Maximum Peak Pulse Current	Maximum Clamping Voltage @ I_{PP}	Maximum Junction Capacitance @ 0V	Working Inverse Blocking Voltage	Working Blocking Leakage Current	Peak Inverse Blocking Voltage
	$V_{RWM}(V)$	$V_{BR MIN.}(V)$	$V_{BR MAX.}(V)$	$I_T(mA)$	$I_R(\mu A)$	$I_{PP}(A)$	$V_C(V)$	pF	$V_{WIB}(V)$	$I_{LB}(mA)$	$V_{PIB}(V)$
LCE6.5A	6.5	7.22	7.98	10	1000	100	11.2	100	75	1.0	100
LCE7.0A	7.0	7.78	8.60	10	500	100	12.0	100	75	1.0	100
LCE7.5A	7.5	8.33	9.21	10	250	100	12.9	100	75	1.0	100
LCE8.0A	8.0	8.89	9.83	1	100	100	13.6	100	75	1.0	100
LCE8.5A	8.5	9.44	10.40	1	50	100	14.4	100	75	1.0	100
LCE9.0A	9.0	10.00	11.10	1	10	97	15.4	100	75	1.0	100
LCE10A	10.0	11.10	12.30	1	5	88	17.0	100	75	1.0	100
LCE11A	11.0	12.20	13.50	1	1	82	18.2	100	75	1.0	100

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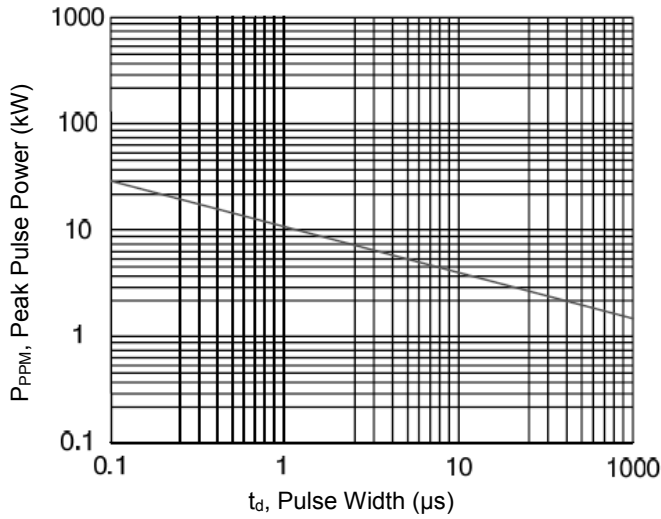
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SPECIFICATIONS (CONTINUED)

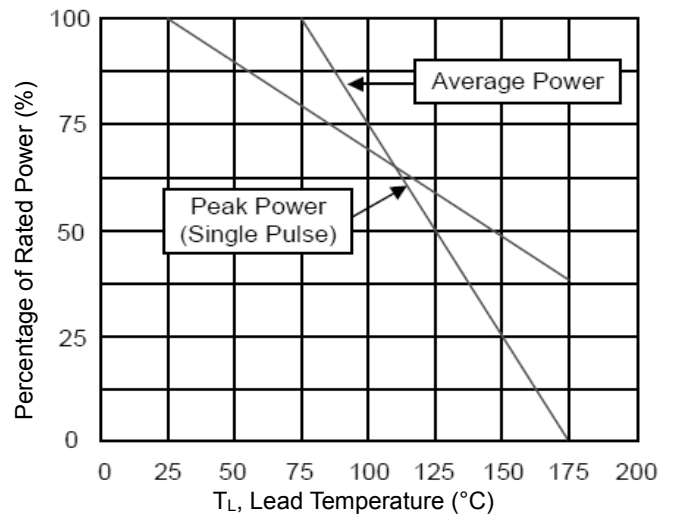
Part Number	Reverse Stand-Off Voltage	Breakdown Voltage Min.@I _T	Breakdown Voltage Max.@I _T	Test Current	Maximum Reverse Leakage @V _{RWM}	Maximum Peak Pulse Current	Maximum Clamping Voltage @I _{PP}	Maximum Junction Capacitance @0V	Working Inverse Blocking Voltage	Working Blocking Leakage Current	Peak Inverse Blocking Voltage
	V _{RWM} (V)	V _{BR MIN.} (V)	V _{BR MAX.} (V)	I _T (mA)	I _R (μA)	I _{PP} (A)	V _C (V)	pF	V _{WIB} (V)	I _{IB} (mA)	V _{PIB} (V)
LCE12A	12.0	13.30	14.70	1	1	75	19.9	100	75	1.0	100
LCE13A	13.0	14.40	15.90	1	1	70	21.5	100	75	1.0	100
LCE14A	14.0	15.60	17.20	1	1	65	23.2	100	75	1.0	100
LCE15A	15.0	16.70	18.50	1	1	61	24.4	100	75	1.0	100
LCE16A	16.0	17.80	19.70	1	1	57	26.0	100	75	1.0	100
LCE17A	17.0	18.90	20.90	1	1	54	27.6	100	75	1.0	100
LCE18A	18.0	20.00	22.10	1	1	51	29.2	100	75	1.0	100
LCE20A	20.0	22.20	24.50	1	1	46	32.4	100	75	1.0	100
LCE22A	22.0	24.40	26.90	1	1	42	35.5	100	75	1.0	100
LCE24A	24.0	26.70	29.50	1	1	39	38.9	100	75	1.0	100
LCE26A	26.0	28.90	31.90	1	1	36	42.1	100	75	1.0	100
LCE28A	28.0	31.10	34.40	1	1	33	45.5	100	75	1.0	100
LCE30A	30.0	33.3	36.8	1	5	31.0	48.4	100	75	10	100
LCE33A	33.0	36.7	40.6	1	5	28.1	53.3	100	75	10	100
LCE36A	36.0	40.0	44.2	1	5	25.8	58.1	100	75	10	100
LCE40A	40.0	44.4	49.1	1	5	23.3	64.5	100	75	10	100
LCE43A	43.0	47.8	52.8	1	5	21.6	69.4	100	150	10	200
LCE45A	45.0	50.0	55.3	1	5	20.6	72.7	100	150	10	200
LCE48A	48.0	53.3	58.9	1	5	19.4	77.4	100	150	10	200
LCE51A	51.0	56.7	62.7	1	5	18.2	82.4	100	150	10	200
LCE54A	54.0	60.0	66.3	1	5	17.2	87.1	100	150	10	200
LCE58A	58.0	64.4	71.2	1	5	16.0	93.6	100	150	10	200
LCE60A	60.0	66.7	73.7	1	5	15.5	96.8	90	150	10	200
LCE64A	64.0	71.1	78.6	1	5	14.6	103.0	90	150	10	200

CHARACTERISTIC CURVES

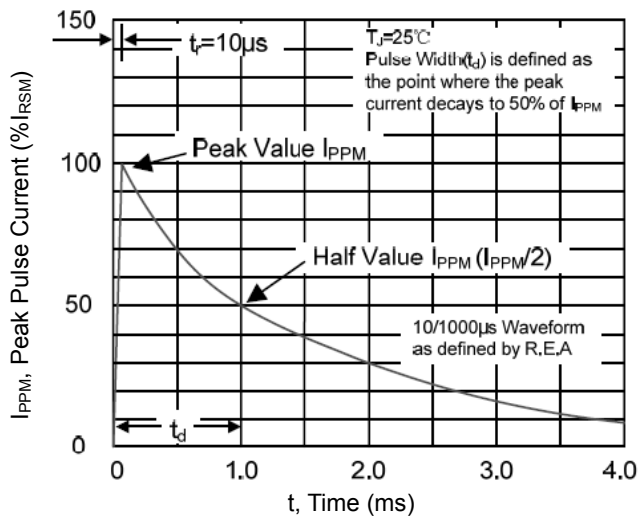
Peak Pulse Power Rating Curve



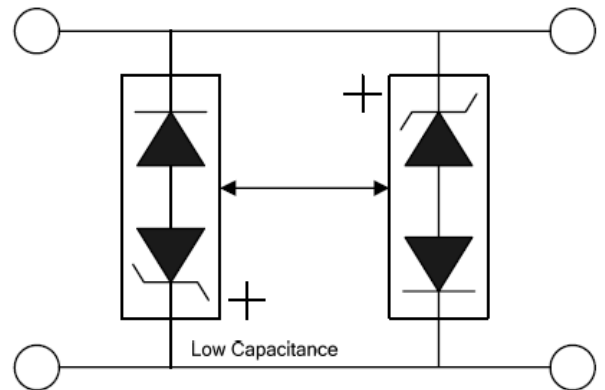
Pulse Derating Curve



Pulse Waveform

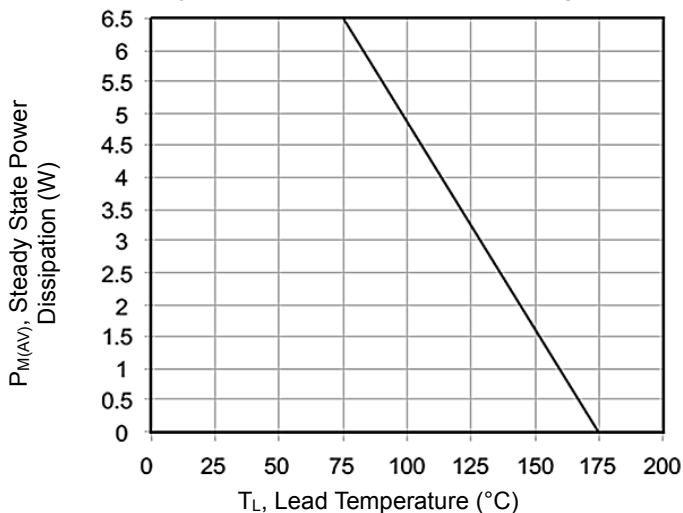


AC Line Protection Application



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

Steady State Power Dissipation Derating Curve



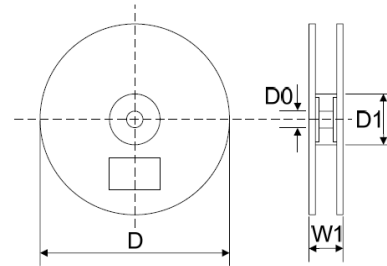
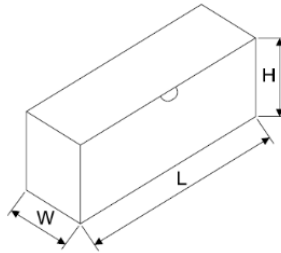
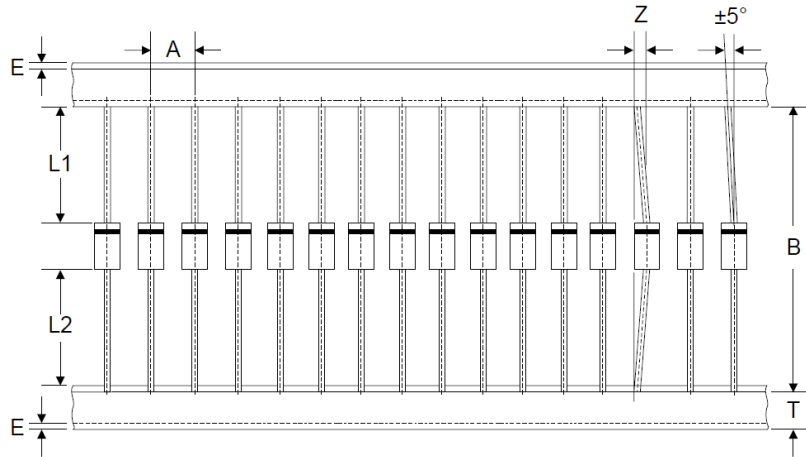
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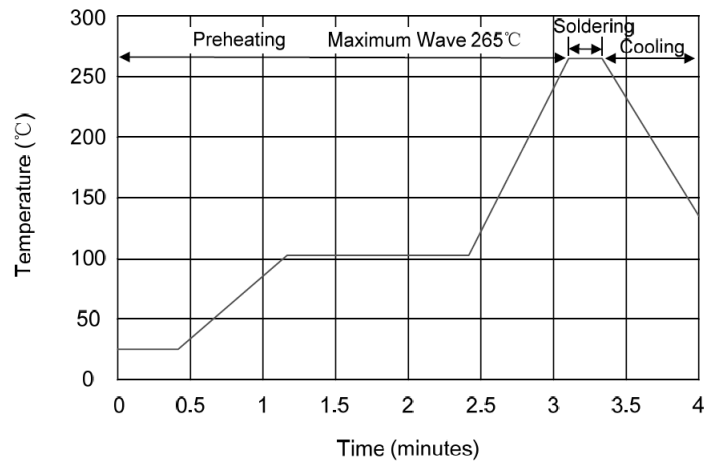
PACKAGING SPECIFICATION

Tape	
Symbol	Dimension(mm)
A	10.0±0.5
B	53.0±1.0
Z	1.2Max.
T	6.0±0.4
E	0.8Max.
L1-L2	1.0Max.
Box	
Symbol	Dimension(mm)
L	250.0±5.0
W	75.0±5.0
H	114.0±5.0
Quantity: 1000PCS	
Reel	
Symbol	Dimension(mm)
D	330.0±3.0
D0	16.4±2.0
D1	86.0±2.0
W1	76.0±3.0
Quantity: 1200PCS	



Wave SOLDERING RECOMMENDATION

Item	Conditions
Peak Temperature	265°C
Dipping Time	10 Seconds
Soldering	1 time



*Specifications subject to change without notice.