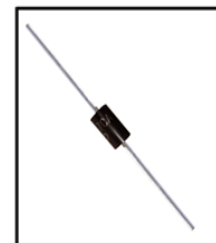


特性/机械性能:
FEATURES/MECHANICAL DATA

- ◆ 1500W 峰值脉冲功率 1500W peak pulse power capability
- ◆ 优良的箝制能力 Excellent clamping capability
- ◆ 较小的箝位因子 Smaller clamping factor
- ◆ 快速响应时间: 从: 0 v到 VBR, 单向型小于1.0ps, 双向型小于5.0ns
Fast response time: typically less than 1.0ps from 0v to VBR for unidirectional and 5.0ns for bidirectional types.
- ◆ 耐焊接热: 250℃/10S, 引出端0.375" (9.5mm) 处
Resistance to soldering heat: 250 °C /10S, terminal 0.375" (9.5mm) .
- ◆ 封装: 模塑封装 Case: Molded plastic
- ◆ 塑封材料: 用UL94V-0认可的阻燃环氧料 Epoxy: UL94V-0 rate flame retardant
- ◆ 引线: 电镀轴式引线可焊性符合MIL-STD-202,方法208
Lead: Axial lead solderable per MIL-STD-202, method 208
- ◆ 极性: 色带表示阴极, Polarity: Color band denotes cathode except Bipolar
- ◆ 安装位置: 任意 Mounting position: Any



DO-201AE

最大额定值及电气特性:
MAXIMUM RATINGS AND CHARACTERISTICS

测量环境温度为25℃, 除非另有规定。

Rating at 25℃ ambient temperature unless otherwise specified.

参数名称 Papt Number	符号Symbol	额定值 Value	单位Unit
最大峰值脉冲功率 Peak power dissipation	Pppm	最小 (Min) 1500	W
最大峰值反向脉冲电流 (注释1) Peak pulse reverse current (Note1)	Ippm	见表 (See Table)	A
稳态功率 (注释2) Steady state power dissipation (Note2)	Pm(AV)	5.0	W
最大峰值正向浪涌电流(注释3) 仅对单向型 Maximum Peak Forward surge Current (Note3)For unidirectional only	IFSM	200.0	A
工作及储存温度 Operating and Storage Temperature Range	TJ,TSTG	-55~+175	℃

注 释: NOTES:

1. 脉冲电流时间10 / 1000μs。 10 / 1000μs waveform non-repetitive current pulse
 2. T1=75℃, 在引线9.5mm处, 安装面积为 (40×40×1mm) 的散热铜片。
T1=75℃, lead lengths 0.375inches, Mounted on copper pad area of (40×40×1mm)
 3. 使用单相正弦半波, 时间10ms; 或使用等效的方波, 4周波/分。
Measured on 10ms single half sine-wave or equivalent square wave, duty cycle = 4 pulses per minute maximum.
- 双向型器件应用说明: DEVICES FOR BIDIRECTIONAL APPLICATIONS :
1. 在型号名称后注有C 或CA, 表示双向型。 For bidirectional use C or CA suffix for types
 2. 电气特性适用于两个方向。 Electrical characteristics apply in both directions.

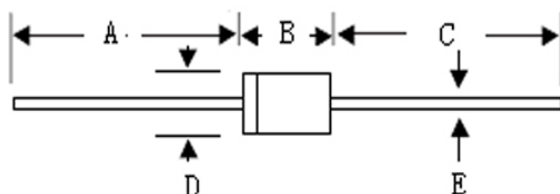
[LCE Series]

Transient Voltage Suppressor 瞬变电压抑制二极管 TVS

产品外形尺寸:

PRODUCT APPEARANCE SIZE

DO-201AE



DIM	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	1.0		25.4	
B	0.335	0.375	8.5	9.5
C	1.0		25.4	
D	0.197	0.220	5.0	5.6
E	0.0380	0.0420	0.96	1.06

电特性:

ELECTRICAL CHARACTERISTICS

型 号	击穿电压		测试电流	变位电压	最大反向漏 电流@VWM	最大峰值 脉冲浪涌 电流	最大箝位 电压 @Ippm	反向工作 截止电压	最大反向 截止电流 @ VW IB	峰值反向 截止电压	最大结电容
	V(BR)(注释1)		IT	VWM	ID(注释2)	Ippm	VC	VWIB	IIB	VPIB	
	V最小	V最大	mA	V	A	A	V	(V)	mA	(V)	PF
LCE6.5	7.22	8.82	10	6.5	1000	100	12.3	75	10	100	100
LCE6.5A	7.22	7.98	10	6.5	1000	100	11.2	75	10	100	100
LCE7.0	7.78	9.51	10	7.0	500	100	13.3	75	10	100	100
LCE7.0A	7.78	8.60	10	7.0	500	100	12.0	75	10	100	100
LCE7.5	8.33	10.2	10	7.5	250	100	14.3	75	10	100	100
LCE7.5A	8.33	9.21	10	7.5	250	100	12.9	75	10	100	100
LCE8.0	8.89	10.9	10	8.0	100	100	15.0	75	10	100	100
LCE8.0A	8.89	9.83	10	8.0	100	100	13.6	75	10	100	100
LCE8.5	9.44	11.5	1.0	8.5	50	94	15.9	75	10	100	100
LCE8.5A	9.44	10.4	1.0	8.5	50	100	14.4	75	10	100	100
LCE9.0	10.0	12.2	1.0	9.0	10.0	89	16.9	75	10	100	100
LCE9.0A	10.0	11.1	1.0	9.0	10.0	97	15.4	75	10	100	100
LCE10	11.1	13.6	1.0	10	5.0	80	18.8	75	10	100	100
LCE10A	11.1	12.3	1.0	10	5.0	88	17.0	75	10	100	100
LCE11	12.2	14.9	1.0	11	5.0	74	20.1	75	10	100	100
LCE11A	12.2	13.5	1.0	11	5.0	82	18.2	75	10	100	100
LCE12	13.3	16.3	1.0	12	5.0	68	22.0	75	10	100	100
LCE12A	13.3	14.7	1.0	12	5.0	75	19.9	75	10	100	100
LCE13	14.4	17.6	1.0	13	5.0	63	23.8	75	10	100	100
LCE13A	14.4	15.9	1.0	13	5.0	70	21.5	75	10	100	100
LCE14	15.6	19.1	1.0	14	5.0	58	25.8	75	10	100	100
LCE14A	15.6	17.2	1.0	14	5.0	65	23.2	75	10	100	100
LCE15	16.7	20.4	1.0	15	5.0	56	26.9	75	10	100	100
LCE15A	16.7	18.5	1.0	15	5.0	61	24.4	75	10	100	100
LCE16	17.8	21.8	1.0	16	5.0	52	28.8	75	10	100	100
LCE16A	17.8	19.7	1.0	16	5.0	57	26.0	75	10	100	100
LCE17	18.9	23.1	1.0	17	5.0	49	30.5	75	10	100	100

电特性:
ELECTRICAL CHARACTERISTICS

型 号	击穿电压		测试电流	变位电压	最大反向漏 电流@VWM	最大峰值 脉冲浪涌 电流	最大箝位 电压 @Ippm	反向工作 截止电压	最大反向 截止电流 @ VW IB	峰值反向 截止电压	最大结电容
	V _(BR) (注释1)		I _T	V _{WM}	I _D (注释2)	I _{PPM}	V _C	V _{WIB}	I _{IB}	V _{PIB}	
	V _{最小}	V _{最大}	mA	V	A	A	V	(V)	mA	(V)	PF
LCE17A	18.9	20.9	1.0	17	5.0	54	27.6	75	10	100	100
LCE18	20	24.4	1.0	18	5.0	46	32.2	75	10	100	100
LCE18A	20	22.1	1.0	18	5.0	51	29.2	75	10	100	100
LCE20	22.2	27.1	1.0	20	5.0	42	35.8	75	10	100	100
LCE20A	22.2	24.5	1.0	20	5.0	46	32.4	75	10	100	100
LCE22	24.4	29.8	1.0	22	5.0	38	39.4	75	10	100	100
LCE22A	24.4	26.9	1.0	22	5.0	42	35.5	75	10	100	100
LCE24	26.7	32.6	1.0	24	5.0	35	43.0	75	10	100	100
LCE24A	26.7	29.5	1.0	24	5.0	39	38.9	75	10	100	100
LCE26	28.9	35.3	1.0	26	5.0	32	46.6	75	10	100	100
LCE26A	28.9	31.9	1.0	26	5.0	36	42.1	75	10	100	100
LCE28	31.1	38.0	1.0	28	5.0	30	50.1	75	10	100	100
LCE28A	31.1	34.4	1.0	28	5.0	33	45.5	75	10	100	100
LCE30	34.1	40.7	1.0	30	5.0	28	53.5	75	10	100	100
LCE30A	33.3	36.8	1.0	30	5.0	31	48.4	75	10	100	100
LCE33A	36.7	40.6	1.0	33	5.0	28.1	53.3	75	10	100	100
LCE36	40.0	48.9	1.0	36	5.0	23.3	64.3	75	10	100	100
LCE36A	40.0	44.2	1.0	36	5.0	25.8	58.1	75	10	100	100
LCE40	44.4	54.3	1.0	40	5.0	21	71.4	75	10	100	100
LCE40A	44.4	49.1	1.0	40	5.0	23.3	64.5	75	10	100	100
LCE43	47.8	58.4	1.0	43	5.0	19.5	76.7	150	10	200	100
LCE43A	47.8	52.8	1.0	43	5.0	21.6	69.4	150	10	200	100
LCE45	50.0	61.1	1.0	45	5.0	18.7	80.3	150	10	200	100
LCE45A	50.0	55.3	1.0	45	5.0	20.6	72.7	150	10	200	100
LCE48	53.3	65.1	1.0	48	5.0	17.5	85.5	150	10	200	100
LCE48A	53.3	58.9	1.0	48	5.0	19.4	77.4	150	10	200	100
LCE51	56.7	69.3	1.0	51	5.0	16.5	91.1	150	10	200	100
LCE51A	56.7	62.7	1.0	51	5.0	18.2	82.4	150	10	200	100
LCE54	60.0	73.3	1.0	54	5.0	15.6	96.3	150	10	200	100
LCE54A	60.0	66.3	1.0	54	5.0	17.2	87.1	150	10	200	100
LCE58	64.4	78.7	1.0	58	5.0	14.6	103	150	10	200	100
LCE58A	64.4	71.2	1.0	58	5.0	16	93.6	150	10	200	100
LCE60	66.7	81.5	1.0	60	5.0	14	107	150	10	200	90
LCE60A	66.7	73.7	1.0	60	5.0	15.5	96.8	150	10	200	90
LCE64	71.1	86.9	1.0	64	5.0	13.2	114	150	10	200	90
LCE64A	71.1	78.6	1.0	64	5.0	14.6	103	150	10	200	90
LCE70	77.8	95.1	1.0	70	5.0	12	125	150	10	200	90
LCE70A	77.8	86.0	1.0	70	5.0	13.3	113	150	10	200	90

电特性:
ELECTRICAL CHARACTERISTICS

型号	击穿电压		测试电流	变位电压	最大反向漏 电流@VWM	最大峰值 脉冲浪涌 电流	最大箝位 电压 @Ippm	反向工作 截止电压	最大反向 截止电流 @ VW IB	峰值反向 截止电压	最大结电容
	V _(BR) (注释1)		I _T	V _{WM}	I _D (注释2)	I _{PPM}	V _C	V _{WIB}	I _{IB}	V _{PIB}	
	V _{最小}	V _{最大}	mA	V	A	A	V	(V)	mA	(V)	PF
LCE75	83.3	102	1.0	75	5.0	11.2	134	150	10	200	90
LCE75A	83.3	92.1	1.0	75	5.0	12.4	121	150	10	200	90
LCE80	88.7	108	1.0	80	5.0	10.6	142	150	10	200	90
LCE80A	88.7	98.0	1.0	80	5.0	11.6	129	150	10	200	90
LCE90	100	122	1.0	90	5.0	9.4	160	300	10	200	90
LCE90A	100	111	1.0	90	5.0	10.3	146	300	10	200	90
LCE100	111	136	1.0	100	5.0	8.4	179	300	10	400	90
LCE100A	111	123	1.0	100	5.0	9.3	162	300	10	400	90
LCE120	122	149	1.0	110	5.0	7.7	196	300	10	400	90
LCE120A	122	135	1.0	110	5.0	8.4	178	300	10	400	90
LCE130	133	163	1.0	120	5.0	7.0	214	300	10	400	90
LCE130A	133	147	1.0	120	5.0	7.8	193	300	10	400	90
LCE140	144	176	1.0	130	5.0	6.5	231	300	10	400	90
LCE140A	144	159	1.0	130	5.0	7.2	209	300	10	400	90
LCE150	167	204	1.0	150	5.0	5.6	268	300	10	400	90
LCE150A	167	185	1.0	150	5.0	6.2	243	300	10	400	90
LCE160	178	218	1.0	160	5.0	5.2	287	300	10	400	90
LCE160A	178	197	1.0	160	5.0	5.8	259	300	10	400	90
LCE170	189	231	1.0	170	5.0	4.9	304	300	10	400	90
LEC170A	189	209	1.0	170	5.0	5.4	275	300	10	400	90

特性曲线图:

RATINGS AND CHARACTERISTIC CURVES

FIG.1 - PEAK PULSE POWER RATING CURVE

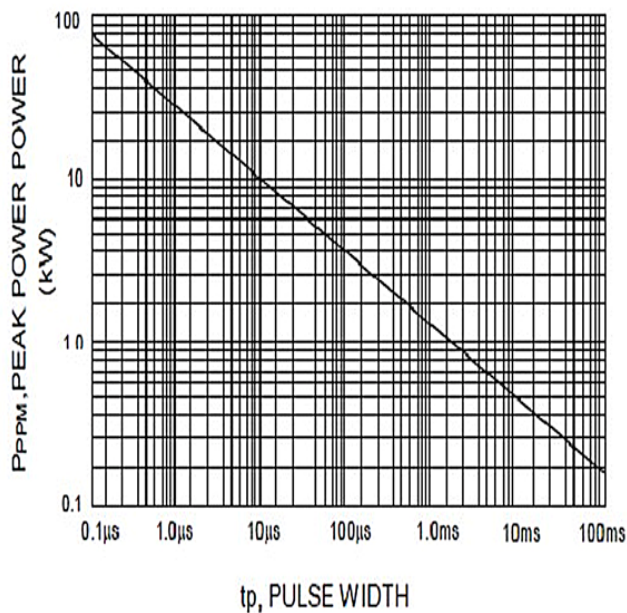


FIG.2 - PULSE DERATING CURVE

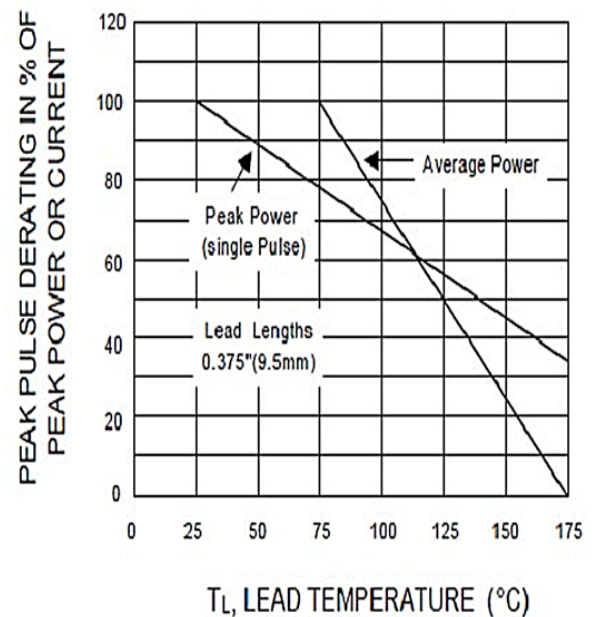


FIG.3 - PULSE WAVEFORM

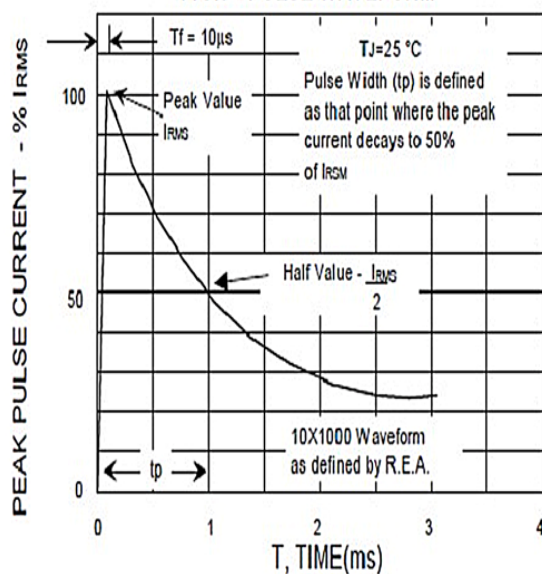
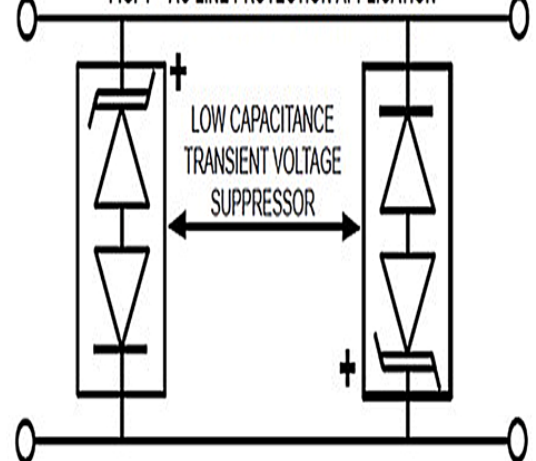


FIG. 4 - AC LINE PROTECTION APPLICATION



APPLICATION NOTE: Device must be used with two units in parallel, opposite in polarity as shown in circuit for AC signal Line protection