

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1.5mm处
Resistance to soldering heat: 250 °C /10S, terminal 1.5mm.
- ◆ 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
- ◆ 端子: 镀锡, 无铅 Terminals: Pure tin plated, lead free
- ◆ 极性: 色带表示阴极, Polarity: Color band denotes cathode except Bipolar
- ◆ 安装位置: 任意 Mounting position: Any



SMC/DO-214AB

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
最大峰值正向浪涌电流 (注释3) 仅对单向型 Maximum Peak Forward surge Current (Note 3) For unidirectional only	IFSM	200.0	A
最大瞬态正向电压 @ 100A 仅对单向型 (注释4) Maximum instantaneous forward voltage @ 100A, For unidirectional only (Note2)	VF	3.5	V
工作及储存温度 Operating and Storage Temperature Range	TJ, TSTG	-55 ~ +150	℃

注 释: NOTES:

1. 脉冲电流时间10 / 1000μs。
2. 使用单相正弦半波, 时间10ms; 或使用等效的方波, 4周波/分。
1. 10 / 1000μs waveform non-repetitive current pulse
2. Measured on 10ms single half sine-wave or equivalent square wave, duty cycle = 4 pulses per minute maximum.

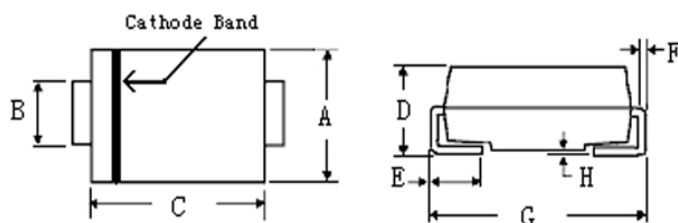
双向型器件应用说明: DEVICES FOR BIDIRECTIONAL APPLICATIONS :

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.

产品外形尺寸:

PRODUCT APPEARANCE SIZE

SMC/DO-214AB



DIM	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.220	0.236	5.6	6.0
B	0.112	0.124	2.85	3.15
C	0.258	0.27	6.55	6.85
D	0.083	0.098	2.1	2.5
E	0.031	0.055	0.8	1.4
F	0.006	0.013	0.18	0.32
G	0.309	0.321	7.85	8.15
H		0.008		0.203

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
SMCJLCE6.5	7.22	8.82	10	6.5	1000	100	12.3	75	1	100	75
SMCJLCE6.5A	7.22	7.98	10	6.5	1000	100	11.2	75	1	100	75
SMCJLCE7.0	7.78	9.51	10	7.0	500	100	13.3	75	1	100	75
SMCJLCE7.0A	7.78	8.60	10	7.0	500	100	12.0	75	1	100	75
SMCJLCE7.5	8.33	10.2	10	7.5	250	100	14.3	75	1	100	100
SMCJLCE7.5A	8.33	9.21	10	7.5	250	100	12.9	75	1	100	100
SMCJLCE8.0	8.89	10.9	1	8.0	100	100	15.0	75	1	100	100
SMCJLCE8.0A	8.89	9.83	1	8.0	100	100	13.6	75	1	100	100
SMCJLCE8.5	9.44	11.5	1	8.5	50	94	15.9	75	1	100	100
SMCJLCE8.5A	9.44	10.4	1	8.5	50	100	14.4	75	1	100	100
SMCJLCE9.0	10.0	12.2	1	9.0	10	89	16.9	75	1	100	100
SMCJLCE9.0A	10.0	11.1	1	9.0	10	97	15.4	75	1	100	100
SMCJLCE10	11.1	13.6	1	10	5	80	18.8	75	1	100	100
SMCJLCE10A	11.1	12.3	1	10	5	88	17.0	75	1	100	100
SMCJLCE11	12.2	14.9	1	11	5	74	20.1	75	1	100	100
SMCJLCE11A	12.2	13.5	1	11	5	82	18.2	75	1	100	100
SMCJLCE12	13.3	16.3	1	12	5	68	22.0	75	1	100	100
SMCJLCE12A	13.3	14.7	1	12	5	75	19.9	75	1	100	100
SMCJLCE13	14.4	17.6	1	13	5	63	23.8	75	1	100	100
SMCJLCE13A	14.4	15.9	1	13	5	70	21.5	75	1	100	100
SMCJLCE14	15.6	19.1	1	14	5	58	25.8	75	1	100	100
SMCJLCE14A	15.6	17.2	1	14	5	65	23.2	75	1	100	100
SMCJLCE15	16.7	20.4	1	15	5	56	26.9	75	1	100	100
SMCJLCE15A	16.7	18.5	1	15	5	61	24.4	75	1	100	100
SMCJLCE16	17.8	21.8	1	16	5	52	28.8	75	1	100	100
SMCJLCE16A	17.8	19.7	1	16	5	57	26.0	75	1	100	100
SMCJLCE17	18.9	23.1	1	17	5	49	30.5	75	1	100	100
SMCJLCE17A	18.9	20.9	1	17	5	54	27.6	75	1	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
SMCJLCE18	20.0	24.4	1	18	5	45	32.2	75	1	100	100
SMCJLCE18A	20.0	22.1	1	18	5	51	29.2	75	1	100	100
SMCJLCE20	22.2	27.1	1	20	5	42	35.8	75	1	100	100
SMCJLCE20A	22.2	24.5	1	20	5	46	32.4	75	1	100	100
SMCJLCE22	24.4	29.8	1	22	5	38	39.4	75	1	100	100
SMCJLCE22A	24.4	26.9	1	22	5	42	35.5	75	1	100	100
SMCJLCE24	26.7	32.6	1	24	5	35	43.0	75	1	100	100
SMCJLCE24A	26.7	29.5	1	24	5	39	38.9	75	1	100	100
SMCJLCE26	28.9	35.3	1	26	5	32	46.6	75	1	100	100
SMCJLCE26A	28.9	31.9	1	26	5	36	42.1	75	1	100	100
SMCJLCE28	31.1	38.0	1	28	5	30	50.1	75	1	100	100
SMCJLCE28A	31.1	34.4	1	28	5	33	45.5	75	1	100	100
SMCJLCE30	33.3	40.7	1	30	5	28	53.5	75	1	100	100
SMCJLCE33	36.7	44.9	1	33	5	25.4	59.0	75	1	100	100
SMCJLCE33A	36.7	40.6	1	33	5	28.1	53.3	75	1	100	100
SMCJLCE36	40.0	48.9	1	36	5	23.3	64.3	75	1	100	100
SMCJLCE36A	40.0	44.2	1	36	5	25.8	58.1	75	1	100	100
SMCJLCE40	44.4	54.3	1	40	5	21.0	71.4	75	1	100	100
SMCJLCE40A	44.4	49.1	1	40	5	23.3	64.5	75	1	100	100
SMCJLCE43	47.8	58.4	1	43	5	19.5	76.7	150	1	200	100
SMCJLCE43A	47.8	52.8	1	43	5	21.6	69.4	150	1	200	100
SMCJLCE45	50.0	61.1	1	45	5	18.7	80.3	150	1	200	100
SMCJLCE45A	50.0	55.3	1	45	5	20.6	72.7	150	1	200	100
SMCJLCE48	53.3	65.1	1	48	5	17.5	85.5	150	1	200	100
SMCJLCE48A	53.3	58.9	1	48	5	19.4	77.4	150	1	200	100
SMCJLCE51	56.7	69.3	1	51	5	16.5	91.1	150	1	200	100
SMCJLCE51A	56.7	62.7	1	51	5	18.2	82.4	150	1	200	100
SMCJLCE54	60.0	73.3	1	54	5	15.6	96.3	150	1	200	100
SMCJLCE54A	60.0	66.3	1	54	5	17.2	87.1	150	1	200	100
SMCJLCE58	64.4	78.7	1	58	5	14.6	103	150	1	200	100
SMCJLCE58A	64.4	71.2	1	58	5	16.0	93.6	150	1	200	100
SMCJLCE60	66.7	81.5	1	60	5	14.0	107	150	1	200	90
SMCJLCE60A	66.7	73.7	1	60	5	15.5	96.8	150	1	200	90
SMCJLCE64	71.1	86.9	1	64	5	13.2	114	150	1	200	90
SMCJLCE64A	71.1	78.6	1	64	5	14.6	103	150	1	200	90
SMCJLCE70	77.8	95.1	1	70	5	12.0	125	150	1	200	90
SMCJLCE70A	77.8	85.0	1	70	5	13.3	113	150	1	200	90
SMCJLCE75	83.3	102	1	75	5	11.2	134	150	1	200	90

[SMCJLCE Series]

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

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
SMCJLCE75A	83.3	92.1	1	75	5	12.4	121	150	1	200	90
SMCJLCE80	88.7	108	1	80	5	10.6	142	150	1	200	90
SMCJLCE80A	88.7	98.0	1	80	5	11.6	129	150	1	200	90
SMCJLCE90	100	122	1	90	5	9.4	160	300	1	200	90
SMCJLCE90A	100	111	1	90	5	10.3	146	300	1	200	90
SMCJLCE100	111	136	1	100	5	8.4	179	300	1	200	90
SMCJLCE100A	111	123	1	100	5	9.3	162	300	1	200	90
SMCJLCE110	122	149	1	110	5	7.7	196	300	1	400	90
SMCJLCE110A	122	135	1	110	5	8.4	178	300	1	400	90
SMCJLCE120	133	163	1	120	5	7.0	214	300	1	400	90
SMCJLCE120A	133	147	1	120	5	7.8	193	300	1	400	90
SMCJLCE130	144	176	1	130	5	6.5	231	300	1	400	90
SMCJLCE130A	144	159	1	130	5	7.2	209	300	1	400	90
SMCJLCE150	167	204	1	150	5	5.6	268	300	1	400	90
SMCJLCE150A	167	185	1	150	5	6.2	243	300	1	400	90
SMCJLCE160	178	218	1	160	5	5.2	287	300	1	400	90
SMCJLCE160A	178	197	1	160	5	5.8	259	300	1	400	90
SMCJLCE170	189	231	1	170	5	4.9	304	300	1	400	90
SMCJLCE170A	189	209	1	170	5	5.4	275	300	1	400	90

特性曲线图:

RATINGS AND CHARACTERISTIC CURVES

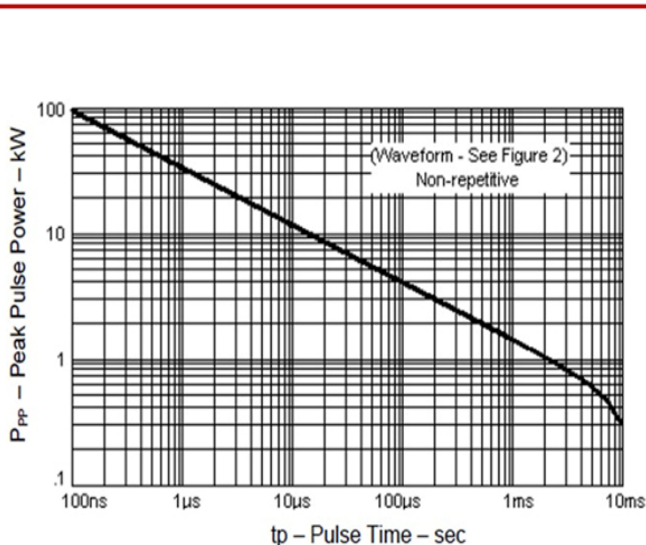


FIGURE 1 PEAK PULSE POWER vs. PULSE TIME

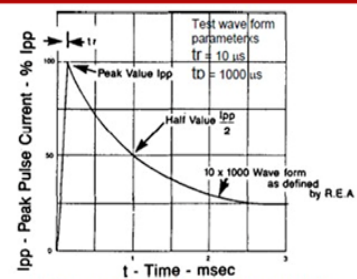


FIGURE 2 PULSE WAVEFORM

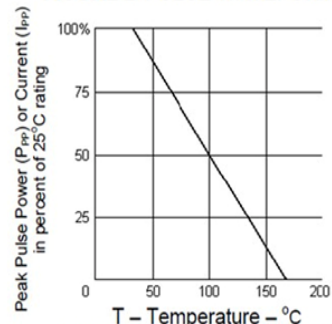


FIGURE 3 DERATING CURVE