

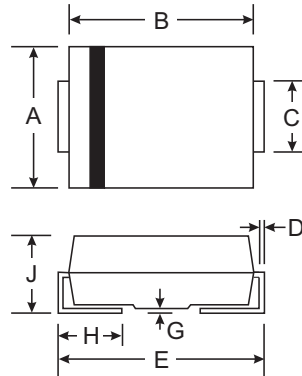
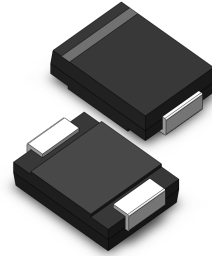
**VOLTAGE RANGE: 6.5 - 170V**  
**POWER: 1500 Watts**

### Features

- 1500 Watts of Peak Pulse Power Dissipation
- Available in stand-off voltage range of 6.5 to 170 V
- Low Capacitance of 100 pF or less
- Molding compound flammability rating : UL94V-O

### Mechanical Data

- Case : SMC Molded plastic
- Epoxy : UL94V-O rate flame retardant
- Lead : Lead Formed for Surface Mount
- Polarity : Color band denotes cathode end except Bipolar.
- Mounting position : Any



SMC		
Dim	Min	Max
A	5.59	6.22
B	6.60	7.11
C	2.75	3.18
D	0.15	0.31
E	7.75	8.13
G	0.10	0.20
H	0.76	1.52
J	2.00	2.62
All Dimensions in mm		

### MAXIMUM RATINGS

Rating at 25 °C ambient temperature unless otherwise specified

Rating	Symbol	Value	Unit
Peak Pulse Power Dissipation on 10/1000 $\mu$ s waveform (Note 1, Figure 1)	$P_{PP}$	1500	W
Steady State Power Dissipation at $T_L = 75\text{ }^\circ\text{C}$ Lead Lengths 0.375", (9.5mm) (Note 2)	$P_D$	5.0	W
Thermal Resistance (Junction to Lead)	$R_{\theta JL}$	20	$^\circ\text{C/W}$
Operating and Storage Temperature Range	$T_J, T_{STG}$	- 65 to + 175	$^\circ\text{C}$

#### Notes :

- (1) Non-repetitive Current pulse, per Fig. 3 and derated above  $T_a = 25\text{ }^\circ\text{C}$  per Fig. 2
- (2) 8.3 ms single half sine-wave, duty cycle = 4 pulses per minutes maximum.



## ELECTRICAL CHARACTERISTICS (Rating at 25 °C ambient temperature unless otherwise specified)

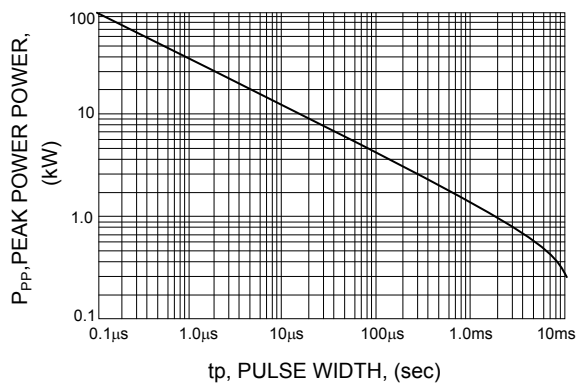
Type Number	Reverse Stand-off Voltage	Breakdown Voltage @ $I_{(BR)}$			Maximum Reverse Leakage @ $V_{WM}$	Maximum Clamping Voltage @ $I_{PP}$	Maximum Peak Pulse Current @ 10/1000	Maximum Junction Capacitance @ 0 Volt	Working Inverse Blocking Voltage	Inverse Blocking Leakage Current	Peak Inverse Blocking Voltage
	$V_{WM}$	$V_{BR}$ (V)		$I_{(BR)}$	$I_D$	$V_C$	$I_{PP}$	$V_{WIB}$	$I_{IB}$	$V_{PIB}$	
	(V)	Min.	Max.	(mA)	( $\mu$ A)	(V)	(A)	(V)	( $\mu$ A)	(V)	
SMCJLCE6.5CA	6.5	7.22	8.82	10	1000	12.3	100	100	75	10	100
SMCJLCE6.5A	6.5	7.22	7.98	10	1000	11.2	100	100	75	10	100
SMCJLCE7.0CA	7.0	7.78	9.51	10	500	13.3	100	100	75	10	100
SMCJLCE7.0A	7.0	7.78	8.60	10	500	12.0	100	100	75	10	100
SMCJLCE7.5CA	7.5	8.33	10.2	10	250	14.3	100	100	75	10	100
SMCJLCE7.5A	7.5	8.33	9.21	10	250	12.9	100	100	75	10	100
SMCJLCE8.0CA	8.0	8.89	10.9	1	100	15.0	100	100	75	10	100
SMCJLCE8.0A	8.0	8.89	9.83	1	100	13.6	100	100	75	10	100
SMCJLCE8.5CA	8.5	9.44	11.5	1	50	15.9	94	100	75	10	100
SMCJLCE8.5A	8.5	9.44	10.4	1	50	14.4	100	100	75	10	100
SMCJLCE9.0CA	9.0	10.0	12.2	1	10	16.9	89	100	75	10	100
SMCJLCE9.0A	9.0	10.0	11.1	1	10	15.4	97	100	75	10	100
SMCJLCE10CA	10	11.1	13.6	1	5	18.8	80	100	75	10	100
SMCJLCE10A	10	11.1	12.3	1	5	17.0	88	100	75	10	100
SMCJLCE11CA	11	12.2	14.9	1	5	20.1	74	100	75	10	100
SMCJLCE11A	11	12.2	13.5	1	5	18.2	82	100	75	10	100
SMCJLCE12CA	12	13.3	16.3	1	5	22.0	68	100	75	10	100
SMCJLCE12A	12	13.3	14.7	1	5	19.9	75	100	75	10	100
SMCJLCE13CA	13	14.4	17.6	1	5	23.8	63	100	75	10	100
SMCJLCE13A	13	14.4	15.9	1	5	21.5	70	100	75	10	100
SMCJLCE14CA	14	15.6	19.1	1	5	25.8	58	100	75	10	100
SMCJLCE14A	14	15.6	17.2	1	5	23.2	65	100	75	10	100
SMCJLCE15CA	15	16.7	20.4	1	5	26.9	56	100	75	10	100
SMCJLCE15A	15	16.7	18.5	1	5	24.4	61	100	75	10	100
SMCJLCE16CA	16	17.8	21.8	1	5	28.8	52	100	75	10	100
SMCJLCE16A	16	17.8	19.7	1	5	26.0	57	100	75	10	100
SMCJLCE17CA	17	18.9	23.1	1	5	30.5	49	100	75	10	100
SMCJLCE17A	17	18.9	20.9	1	5	27.6	54	100	75	10	100
SMCJLCE18CA	18	20.0	24.4	1	5	32.2	46	100	75	10	100
SMCJLCE18A	18	20.0	22.1	1	5	29.2	51	100	75	10	100
SMCJLCE20CA	20	22.2	27.1	1	5	35.8	42	100	75	10	100
SMCJLCE20A	20	22.2	24.5	1	5	32.4	46	100	75	10	100
SMCJLCE22CA	22	24.4	29.8	1	5	39.4	38	100	75	10	100
SMCJLCE22A	22	24.4	26.9	1	5	35.5	42	100	75	10	100
SMCJLCE24CA	24	26.7	32.6	1	5	43.0	35	100	75	10	100
SMCJLCE24A	24	26.7	29.5	1	5	38.9	39	100	75	10	100
SMCJLCE26CA	26	28.9	35.3	1	5	46.6	32	100	75	10	100
SMCJLCE26A	26	28.9	31.9	1	5	42.1	36	100	75	10	100
SMCJLCE28CA	28	31.1	38.0	1	5	50.1	30	100	75	10	100
SMCJLCE28A	28	31.1	34.4	1	5	45.5	33	100	75	10	100
SMCJLCE30CA	30	33.3	40.7	1	5	53.5	28	100	75	10	100
SMCJLCE30A	30	33.3	36.8	1	5	48.4	31	100	75	10	100
SMCJLCE33CA	33	36.7	44.9	1	5	59.0	25.4	100	75	10	100
SMCJLCE33A	33	36.7	40.6	1	5	53.3	28.1	100	75	10	100

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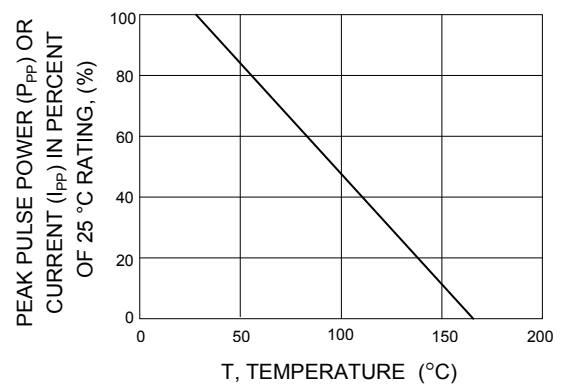
Type Number	Reverse Stand-off Voltage	Breakdown Voltage @ $I_{(BR)}$			Maximum Reverse Leakage @ $V_{WM}$	Maximum Clamping Voltage @ $I_{PP}$	Maximum Peak Pulse Current @ 10/1000	Maximum Junction Capacitance @ 0 Volt	Working Inverse Blocking Voltage	Inverse Blocking Leakage Current	Peak Inverse Blocking Voltage
	$V_{WM}$	$V_{BR}$ (V)		$I_{(BR)}$	$I_D$	$V_C$	$I_{PP}$	$pF$	$V_{WIB}$	$I_{IB}$	$V_{PIB}$
	(V)	Min.	Max.	(mA)	( $\mu A$ )	(V)	(A)		(V)	( $\mu A$ )	(V)
SMCJLCE36CA	36	40.0	48.9	1	5	64.3	23.3	100	75	10	100
SMCJLCE36A	36	40.0	44.2	1	5	58.1	25.8	100	75	10	100
SMCJLCE40CA	40	44.4	54.3	1	5	71.4	21	100	75	10	100
SMCJLCE40A	40	44.4	49.1	1	5	64.5	23.3	100	75	10	100
SMCJLCE43CA	43	47.8	58.4	1	5	76.7	19.5	100	150	10	200
SMCJLCE43A	43	47.8	52.8	1	5	69.4	21.6	100	150	10	200
SMCJLCE45CA	45	50.0	61.1	1	5	80.3	18.7	100	150	10	200
SMCJLCE45A	45	50.0	55.3	1	5	72.7	20.6	100	150	10	200
SMCJLCE48CA	48	53.3	65.1	1	5	85.5	17.5	100	150	10	200
SMCJLCE48A	48	53.3	58.9	1	5	77.4	19.4	100	150	10	200
SMCJLCE51CA	51	56.7	69.3	1	5	91.1	16.5	100	150	10	200
SMCJLCE51A	51	56.7	62.7	1	5	82.4	18.2	100	150	10	200
SMCJLCE54CA	54	60.0	73.3	1	5	96.3	15.6	100	150	10	200
SMCJLCE54A	54	60.0	66.3	1	5	87.1	17.2	100	150	10	200
SMCJLCE58CA	58	64.4	78.7	1	5	103	14.6	100	150	10	200
SMCJLCE58A	58	64.4	71.2	1	5	93.6	16	100	150	10	200
SMCJLCE60CA	60	66.7	81.5	1	5	107	14	90	150	10	200
SMCJLCE60A	60	66.7	73.7	1	5	96.8	15.5	90	150	10	200
SMCJLCE64CA	64	71.1	86.9	1	5	114	13.2	90	150	10	200
SMCJLCE64A	64	71.1	78.6	1	5	103	14.6	90	150	10	200
SMCJLCE70CA	70	77.8	95.1	1	5	125	12.0	90	150	10	200
SMCJLCE70A	70	77.8	86.0	1	5	113	13.3	90	150	10	200
SMCJLCE75CA	75	83.3	102	1	5	134	11.2	90	150	10	200
SMCJLCE75A	75	83.3	92.1	1	5	121	12.4	90	150	10	200
SMCJLCE80CA	80	88.7	108	1	5	142	10.6	90	150	10	200
SMCJLCE80A	80	88.7	98.0	1	5	129	11.6	90	150	10	200
SMCJLCE90CA	90	100	122	1	5	160	9.4	90	300	10	200
SMCJLCE90A	90	100	111	1	5	146	10.3	90	300	10	200
SMCJLCE100CA	100	111	136	1	5	179	8.4	90	300	10	200
SMCJLCE100A	100	111	123	1	5	162	9.3	90	300	10	200
SMCJLCE110CA	110	122	149	1	5	196	7.7	90	300	10	400
SMCJLCE110A	110	122	135	1	5	178	8.4	90	300	10	400
SMCJLCE120CA	120	133	163	1	5	214	7.0	90	300	10	400
SMCJLCE120A	120	133	147	1	5	193	7.8	90	300	10	400
SMCJLCE130CA	130	144	176	1	5	231	6.5	90	300	10	400
SMCJLCE130A	130	144	159	1	5	209	7.2	90	300	10	400
SMCJLCE150CA	150	167	204	1	5	268	5.6	90	300	10	400
SMCJLCE150A	150	167	185	1	5	243	6.2	90	300	10	400
SMCJLCE160CA	160	178	218	1	5	287	5.2	90	300	10	400
SMCJLCE160A	160	178	197	1	5	259	5.8	90	300	10	400
SMCJLCE170CA	170	189	231	1	5	304	4.9	90	300	10	400
SMCJLCE170A	170	189	209	1	5	275	5.4	90	300	10	400

### RATING AND CHARACTERISTIC CURVES ( SMCJLCE Series )

**FIG.1 - PEAK PULSE POWER VS. PULSE TIME**



**FIG.2 - DERATING CURVE**



**FIG.3 - PULSE WAVEFORM**

