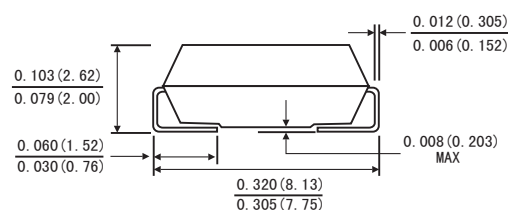
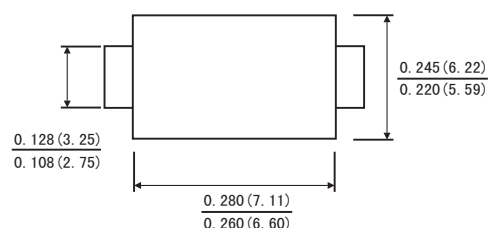


FEATURES

- 1500 Watts Pulse capability
- Excellent clamping capability
- Low incremental surge resistance
- Fast response time
- High temperature soldering guaranteed: 260°C/10 seconds at terminals
- Component in accordance to RoHS 2011/65/EU

SMC(DO-214AB)



Dimensions in inches and (millimeters)

MECHANICAL DATA

- Case: JEDEC SMC(DO-214AB) molded plastic body
- Terminals: Solder Plated
- Polarity: By cathode band denotes uni-directional device, none cathode band denotes bi-directional device.

DEVICES FOR BIDIRECTIONAL APPLICATIONS

1. For bi-directional use C suffix for Types .
2. Electrical characteristics apply in both directions.

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

	Symbols	Value	Units
Peak Pulse Power Dissipation at on 10/1000µs Waveform (Note 1.2)	P _{PK}	1500	Watts
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load (JEDEC method) (Note 2)	I _{FSM}	200	Amps
Operating junction and storage temperature range	T _J , T _{STG}	-55 to 150	°C

Note: 1. Non repetitive current pulse and derated above T_A=25°C

2. Measured on 8.3ms single half sine-wave or equivalent square wave, duty cycle=4 pulses per minute maximum

RATINGS AND CHARACTERISTIC CURVES (SMCJ SERIES)

Part number		Reverse Standoff Voltage VRWM (Volts)	Breakdown Voltage VBR (Volts)		Test Current (mA)	Maximum Clamping Voltage VC@Ipp (Volts)	Maximum Peak Pulse Current Ipp(A)	Maximum Reverse Leakage IR@VRWM (μA)
UNI	BI		MIN	MAX				
SMCJ5.0A	SMCJ5.0CA	5	6.40	7.07	10	9.6	163.0	500
SMCJ6.0A	SMCJ6.0CA	6	6.67	7.37	10	10.3	145.6	500
SMCJ6.5A	SMCJ6.5CA	6.5	7.22	7.98	10	11.2	133.9	300
SMCJ7.0A	SMCJ7.0CA	7	7.78	8.60	10	12.0	125.0	200
SMCJ7.5A	SMCJ7.5CA	7.5	8.33	9.21	1	12.9	116.3	100
SMCJ8.0A	SMCJ8.0CA	8	8.89	9.83	1	13.6	110.3	50
SMCJ8.5A	SMCJ8.5CA	8.5	9.44	10.40	1	14.4	104.2	30
SMCJ9.0A	SMCJ9.0CA	9	10.00	11.10	1	15.4	97.4	30
SMCJ10A	SMCJ10CA	10	11.10	12.30	1	17.0	88.2	5
SMCJ11A	SMCJ11CA	11	12.20	13.50	1	18.2	82.4	1
SMCJ12A	SMCJ12CA	12	13.30	14.70	1	19.9	75.4	1
SMCJ13A	SMCJ13CA	13	14.40	15.90	1	21.5	69.8	1
SMCJ14A	SMCJ14CA	14	15.60	17.20	1	23.2	64.7	1
SMCJ15A	SMCJ15CA	15	16.70	18.50	1	24.4	61.5	1
SMCJ16A	SMCJ16CA	16	17.80	19.70	1	26.0	57.7	1
SMCJ17A	SMCJ17CA	17	18.90	20.90	1	27.6	54.3	1
SMCJ18A	SMCJ18CA	18	20.00	22.10	1	29.2	51.4	1
SMCJ20A	SMCJ20CA	20	22.20	24.50	1	32.4	46.3	1
SMCJ22A	SMCJ22CA	22	24.40	26.90	1	35.5	42.3	1
SMCJ24A	SMCJ24CA	24	26.70	29.50	1	38.9	38.6	1
SMCJ26A	SMCJ26CA	26	28.90	31.90	1	42.1	35.6	1
SMCJ28A	SMCJ28CA	28	31.10	34.40	1	45.4	33.0	1
SMCJ30A	SMCJ30CA	30	33.30	36.80	1	48.4	31.0	1
SMCJ33A	SMCJ33CA	33	36.70	40.60	1	53.3	28.1	1
SMCJ36A	SMCJ36CA	36	40.00	44.20	1	58.1	25.8	1
SMCJ40A	SMCJ40CA	40	44.40	49.10	1	64.5	23.3	1
SMCJ43A	SMCJ43CA	43	47.80	52.80	1	69.4	21.6	1
SMCJ45A	SMCJ45CA	45	50.00	55.30	1	72.7	20.6	1
SMCJ48A	SMCJ48CA	48	53.30	58.90	1	77.4	19.4	1
SMCJ51A	SMCJ51CA	51	56.70	62.70	1	82.4	18.2	1
SMCJ54A	SMCJ54CA	54	60.00	66.30	1	87.1	17.2	1
SMCJ58A	SMCJ58CA	58	64.40	71.20	1	93.6	16.0	1
SMCJ60A	SMCJ60CA	60	66.70	73.70	1	96.8	15.5	1
SMCJ64A	SMCJ64CA	64	71.10	78.60	1	103.0	14.6	1

RATINGS AND CHARACTERISTIC CURVES (SMCJ SERIES)

SMCJ70A	SMCJ70CA	70	77.80	86.00	1	113.0	13.3	1
SMCJ75A	SMCJ75CA	75	83.30	92.10	1	121.0	12.4	1
SMCJ78A	SMCJ78CA	78	86.70	95.80	1	126.0	11.9	1
SMCJ85A	SMCJ85CA	85	94.40	104.00	1	137.0	10.9	1
SMCJ90A	SMCJ90CA	90	100.0	111.00	1	146.0	10.3	1
SMCJ100A	SMCJ100CA	100	111.0	123.00	1	162.0	9.3	1
SMCJ110A	SMCJ110CA	110	122.0	135.00	1	177.0	8.5	1
SMCJ120A	SMCJ120CA	120	133.0	147.00	1	193.0	7.8	1
SMCJ130A	SMCJ130CA	130	144.0	159.00	1	209.0	7.2	1
SMCJ150A	SMCJ150CA	150	167.0	185.00	1	243.0	6.2	1
SMCJ160A	SMCJ160CA	160	178.0	197.00	1	259.0	5.8	1
SMCJ170A	SMCJ170CA	170	189.0	209.00	1	275.0	5.5	1
SMCJ180A	SMCJ180CA	180	201.0	222.00	1	292.0	5.2	1
SMCJ190A	SMCJ190CA	190	211.0	233.00	1	306.0	4.9	1
SMCJ200A	SMCJ200CA	200	224.0	247.00	1	324.0	4.7	1
SMCJ210A	SMCJ210CA	210	233.0	258.00	1	324.0	4.4	1
SMCJ220A	SMCJ220CA	220	246.0	272.00	1	356.0	4.2	1
SMCJ250A	SMCJ250CA	250	279.0	309.00	1	405.0	3.7	1
SMCJ300A	SMCJ300CA	300	335.0	371.00	1	486.0	3.1	1
SMCJ350A	SMCJ350CA	350	391.0	432.00	1	567.0	2.7	1
SMCJ400A	SMCJ400CA	400	447.0	494.00	1	648.0	2.3	1

For Bi-directional type having VRWM of 10 Volts and less, the IR limit is double

1.A transient suppressor is normally selected according to the working peak reverse voltage (VRWM), which should be equal to or greater than the DC or continuous peak operating voltage level.

2.VBR measured at pulse test current IT at an ambient temperature of 25°C.

3.Surge current waveform per Figure 2 and derate per Figure 3

RATINGS AND CHARACTERISTIC CURVES (SMCJ SERIES)

FIG. 1-PEAK PULSE POWER CURVE

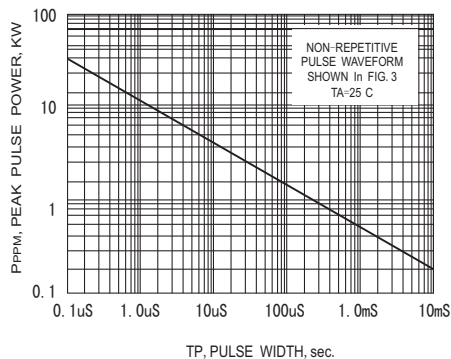


FIG. 2-PULSE DERATING CURVE

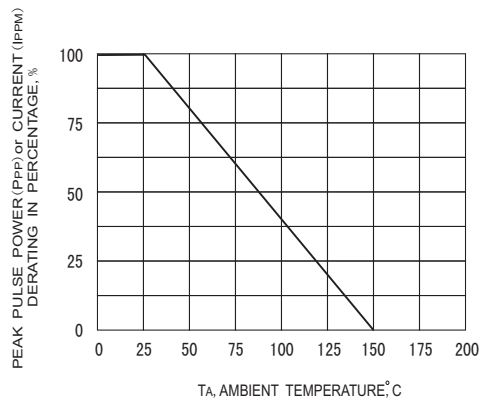


FIG. 3-PULSE WAVEFORM

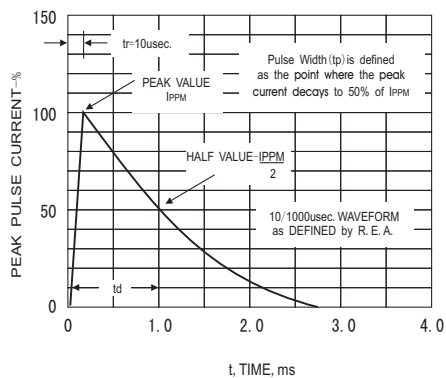


FIG. 4-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

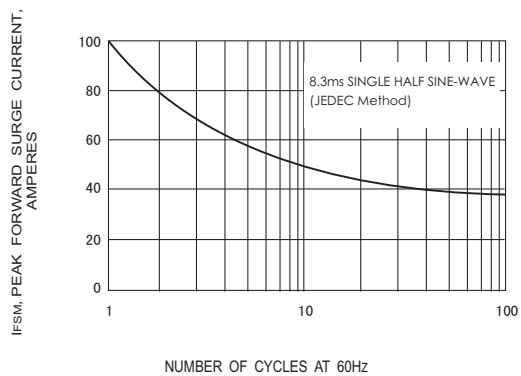


FIG. 5-Steady State Power Derating Curve

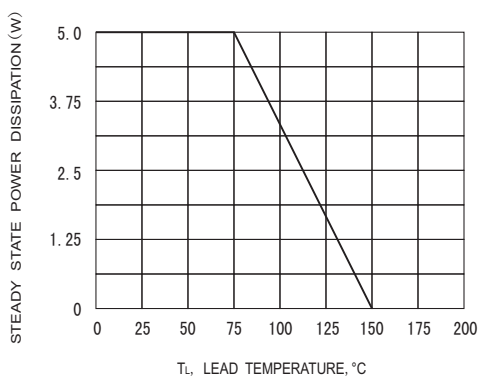


FIG. 6-TYPICAL JUNCTION CAPACITANCE

