

1.5SMC SERIES

GLASS PASSOVATED JUNCTION TRANSIENT VOLTAGE SUPPRESSOR VOLTAGE - 6.8 to 91 Volts 1500 Watts Peak Power

1.5SMC PART NUMBER	MARKING CODE		REVERSE STAND- OFF VOLTAGE V _{RWM} (V)	BREAKDOWN VOLTAGE V _{BR} (V) MIN.@I _T	BREAKDOWN VOLTAGE V _{BR} (V) MAX.@I _T	TEST CURRENT I _T (mA)	MAXIMUM CLAMPING VOLTAGE @I _{pp} V _c (V)	PEAK PULSE CURRENT I _{pp} (A)	REVERSE LEAKAGE @ V _{RWM} I _R (μA)
	UNI- POLAR	BI- POLAR							
1.5SMC 6.8A	6V8A	6V8C	5.80	6.45	7.14	10	10.5	143.0	1000
1.5SMC 7.5A	7V5A	7V5C	6.40	7.13	7.88	10	11.3	133.0	500
1.5SMC 8.2A	8V2A	8V2C	7.02	7.79	8.61	10	12.1	124.0	200
1.5SMC 9.1A	9V1A	9V1C	7.78	8.65	9.50	1	13.4	112.0	50
1.5SMC 10A	10A	10C	8.55	9.50	10.50	1	14.5	103.0	10
1.5SMC 11A	11A	11C	9.40	10.50	11.60	1	15.6	96.2	5
1.5SMC 12A	12A	12C	10.20	11.40	12.60	1	16.7	89.8	5
1.5SMC 13A	13A	13C	11.10	12.40	13.70	1	18.2	82.4	5
1.5SMC 15A	15A	15C	12.80	14.30	15.80	1	21.2	70.8	5
1.5SMC 16A	16A	16C	13.60	15.20	16.80	1	22.5	66.7	5
1.5SMC 18A	18A	18C	15.30	17.10	18.90	1	25.2	59.5	5
1.5SMC 20A	20A	20C	17.10	19.00	21.00	1	27.7	54.2	5
1.5SMC 22A	22A	22C	18.80	20.90	23.10	1	30.6	49.0	5
1.5SMC 24A	24A	24C	20.50	22.80	25.20	1	33.2	45.2	5
1.5SMC 27A	27A	27C	23.10	25.70	28.40	1	37.5	40.0	5
1.5SMC 30A	30A	30C	25.60	28.50	31.50	1	41.4	36.2	5
1.5SMC 33A	33A	33C	28.20	31.40	34.70	1	45.7	32.8	5
1.5SMC 36A	36A	36C	30.80	34.20	37.80	1	49.9	30.1	5
1.5SMC 39A	39A	39C	33.30	37.10	41.00	1	53.9	27.8	5
1.5SMC 43A	43A	43C	36.80	40.90	45.20	1	59.3	25.3	5
1.5SMC 47A	47A	47C	40.20	44.70	49.40	1	64.8	23.1	5
1.5SMC 51A	51A	51C	43.60	48.50	53.60	1	70.1	21.4	5
1.5SMC 56A	56A	56C	47.80	53.20	58.80	1	77.0	19.5	5
1.5SMC 62A	62A	62C	53.00	58.90	65.10	1	85.0	17.6	5
1.5SMC 68A	68A	68C	58.10	64.60	71.40	1	92.0	16.3	5
1.5SMC 75A	75A	75C	64.10	71.30	78.80	1	103.0	14.6	5
1.5SMC 82A	82A	82C	70.10	77.90	86.10	1	113.0	13.3	5
1.5SMC 91A	91A	91C	77.80	86.50	95.50	1	125.0	12.0	5

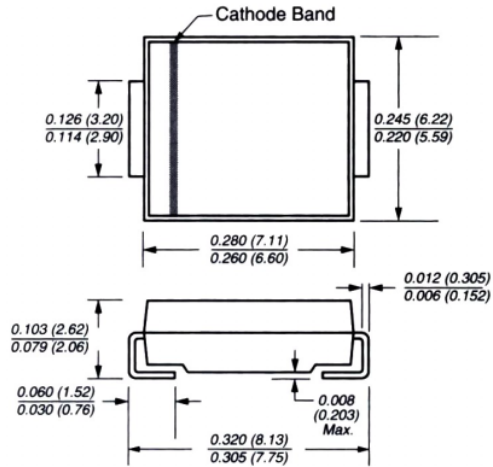
For bidirectional type having V_{rw} of 10 volts and less, the IR limit is double.

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SURFACE MOUNT TRANSIENT VOLTAGE SUPPRESSOR VOLTAGE-6.8 TO 91 Volts 1500 Watt Peak Pulse Power

DO-214AB (SMC J-Bend)



Dimensions in inches and (millimeters)

FEATURES

- For surface mounted applications in order to optimize board
- Low profile package
- Built-in strain relief
- Glass passivated junction
- Low inductance
- Excellent clamping capability
- Repetition Rate(duty cycle):0.05%
- Fast response time: typically less than 1.0ps from 0 Volts to BV min.
- Typical IR less than 1mA above 10V
- High temperature soldering: 250°C/10 seconds at terminals

MECHANICAL DATA

- Case:** JEDEC DO214AB. Molded plastic over glass passivated junction
- Terminal:** Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity:** Color band denotes positive end (cathode) except Bidirectional
- Standard Packaging:** 16mm tape(EIA STD RS-481)
- Weight:** 0.007ounce, 0.21gram

DEVICES FOR BIPOLAR APPLICATION

For Bidirectional use Suffix CA for types 1.5SMC6.8CA thru types 1.5SMC91CA
Electrical characteristics apply in both directions

MAXIMUM RATINGS AND CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified.

RATING	SYMBOL	VALUE	UNITS
Peak Pulse Power Dissipation on 10/1000 μs waveform (Note 1,FIG.1)	P _{PPM}	Minimum 1500	Watts
Peak Pulse Current of on 10/1000 μs waveform (Note 1,FIG.3)	I _{PPM}	SEE TABLE 1	Amps
Peak Forward Surge Current,8.3ms Single Half Sine-Wave Superimposed on Rated Load,(JEDEC Method) (Note 3)	I _{FSM}	200	Amps
Operating junction and Storage Temperature Range	T _J , T _{STG}	-55 to + 150	

Notes :

- Non-repetitive current pulse , per Fig. 3 and derated above T_A = 25 °C per Fig. 2 .
- Mounted on 8.0mm² Copper Pads to each terminal
- 8.3ms single half sine-wave , or equivalent square wave, Duty cycle = 4 pulses per minutes maximum.

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RATINGS AND CHARACTERISTIC CURVES

Ratings and Characteristic Curves ($T_A=25$ unless otherwise noted)

