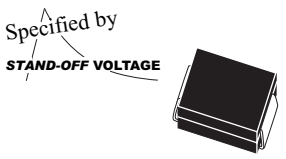
1SMC5.0A
THRU
1SMC170A

UNI-DIRECTIONAL
GLASS PASSIVATED JUNCTION
TRANSIENT VOLTAGE SUPPRESSOR
1500 WATTS, 5.0 THRU 170 VOLTS



SMC CASE

Central™
Semiconductor Corp.

DESCRIPTION:
The CENTRAL SEMICONDUCTOR 1SMC5.0A Series types are Surface Mount Uni-Directional Glass Passivated Junction Transient Voltage Suppressors designed to protect voltage sensitive components from high voltage transients. **THIS DEVICE IS MANUFACTURED WITH A GLASS PASSIVATED CHIP FOR OPTIMUM RELIABILITY**.
Note: For Bi-directional devices, please refer to the 1SMC5.0CA Series data sheet.
MARKING CODE: SEE MARKING CODE ON ELECTRICAL CHARACTERISTICS TABLE

• This series is UL listed, UL file number E130224

MAXIMUM RATINGS: (T_A=25°C unless otherwise noted)	**SYMBOL**		**UNITS**
Peak Power Dissipation (Note 1)	P_{DM}	1500	W
Peak Forward Surge Current (JEDEC Method)	I_{FSM}	200	A
Operating and Storage Junction Temperature	T_J, Tstg	-65 to +150	°C

ELECTRICAL CHARACTERISTICS: (T_A=25°C unless otherwise noted)

TYPE NO.	REVERSE STAND-OFF VOLTAGE	BREAKDOWN VOLTAGE		@ I_T	MAXIMUM REVERSE LEAKAGE @ V_{RWM}	MAXIMUM CLAMPING VOLTAGE @ I_{PPM}	MAXIMUM PEAK PULSE CURRENT (Note 1)	MARKING CODE
	V_{RWM}	V_{BR}			I_R	V_C	I_{PPM}	
	V	MIN	MAX	mA	µA	V	A	
1SMC5.0A	5.0	6.40	7.25	10.0	1000	9.2	163.0	CGDE
1SMC6.0A	6.0	6.67	7.67	10.0	1000	10.3	145.6	CGDG
1SMC6.5A	6.5	7.22	8.30	10.0	500	11.2	133.9	CGDK
1SMC7.0A	7.0	7.78	8.95	10.0	200	12.0	125.0	CGDM
1SMC7.5A	7.5	8.33	9.58	1.0	100	12.9	116.3	CGDP
1SMC8.0A	8.0	8.89	10.23	1.0	50	13.6	110.3	CGDR
1SMC8.5A	8.5	9.44	10.82	1.0	20.0	14.4	104.2	CGDT
1SMC9.0A	9.0	10.0	11.5	1.0	10.0	15.4	97.4	CGDV
1SMC10A	10	11.1	12.8	1.0	5.0	17.0	88.2	CGDX
1SMC11A	11	12.2	14.0	1.0	5.0	18.2	82.4	CGDZ
1SMC12A	12	13.3	15.3	1.0	5.0	19.9	75.3	CGEE
1SMC13A	13	14.4	16.5	1.0	5.0	21.5	69.7	CGEG
1SMC14A	14	15.6	17.9	1.0	5.0	23.2	64.7	CGEK
1SMC15A	15	16.7	19.2	1.0	5.0	24.4	61.5	CGEM
1SMC16A	16	17.8	20.5	1.0	5.0	26.0	57.7	CGEP
1SMC17A	17	18.9	21.7	1.0	5.0	27.6	53.3	CGER
1SMC18A	18	20.0	23.3	1.0	5.0	29.2	51.4	CGET
1SMC20A	20	22.2	25.5	1.0	5.0	32.4	46.3	CGEV
1SMC22A	22	24.4	28.0	1.0	5.0	35.5	42.2	CGEX
1SMC24A	24	26.7	30.7	1.0	5.0	38.9	38.6	CGEZ
1SMC26A	26	28.9	33.2	1.0	5.0	42.1	35.6	CGFE
1SMC28A	28	31.1	35.8	1.0	5.0	45.4	33.0	CGFG
1SMC30A	30	33.3	38.3	1.0	5.0	48.4	31.0	CGFK

Notes: (1) Non-repetitive 10x1,000µs pulse.

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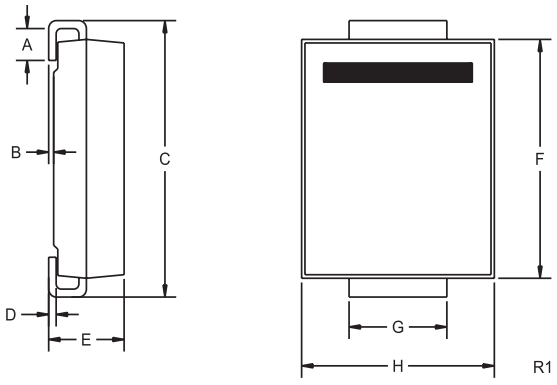
ELECTRICAL CHARACTERISTICS - Continued:

TYPE NO.	REVERSE STAND-OFF VOLTAGE	BREAKDOWN VOLTAGE			MAXIMUM REVERSE LEAKAGE	MAXIMUM CLAMPING VOLTAGE	MAXIMUM PEAK PULSE CURRENT (Note 1)	MARKING CODE
		V_{BR}		@ I_T	@ V_{RWM}	@ I_{PPM}		
	V_{RWM}	V			I_R	V_C	I_{PPM}	
	V	MIN	MAX	mA	µA	V	A	
1SMC33A	33	36.7	42.2	1.0	5.0	53.3	28.1	CGFM
1SMC36A	36	40.0	46.0	1.0	5.0	58.1	25.8	CGFP
1SMC40A	40	44.4	51.1	1.0	5.0	64.5	23.2	CGFR
1SMC43A	43	47.8	54.9	1.0	5.0	69.4	21.6	CGFT
1SMC45A	45	50.0	57.5	1.0	5.0	72.7	20.6	CGFV
1SMC48A	48	53.3	61.3	1.0	5.0	77.4	19.4	CGFX
1SMC51A	51	56.7	65.2	1.0	5.0	82.4	18.2	CGFX
1SMC54A	54	60.0	69.0	1.0	5.0	87.1	17.2	CGGE
1SMC58A	58	64.4	74.1	1.0	5.0	93.6	16.0	CGGG
1SMC60A	60	66.7	76.7	1.0	5.0	96.8	15.5	CGGK
1SMC64A	64	71.1	81.8	1.0	5.0	103	14.6	CGGM
1SMC70A	70	77.8	89.5	1.0	5.0	113	13.3	CGGP
1SMC75A	75	83.3	95.8	1.0	5.0	121	12.4	CGGR
1SMC78A	78	86.7	99.7	1.0	5.0	126	11.4	CGGT
1SMC85A	85	94.4	108.2	1.0	5.0	137	10.4	CGGV
1SMC90A	90	100.0	115.5	1.0	5.0	146	10.3	CGGX
1SMC100A	100	111.0	128.0	1.0	5.0	162	9.3	CGGZ
1SMC110A	110	122.0	140.5	1.0	5.0	177	8.4	CGHE
1SMC120A	120	133.0	153.0	1.0	5.0	193	7.9	CGHG
1SMC130A	130	144.0	165.5	1.0	5.0	209	7.2	CGHK
1SMC150A	150	167.0	192.5	1.0	5.0	243	6.2	CGHM
1SMC160A	160	178.0	205.0	1.0	5.0	259	5.8	CGHP
1SMC170A	170	189.0	217.5	1.0	5.0	275	5.5	CGHR

SMC CASE - MECHANICAL OUTLINE



DIMENSIONS				
	INCHES		MILLIMETERS	
SYMBOL	MIN	MAX	MIN	MAX
A	0.030	0.060	0.76	1.52
B	0.004	0.008	0.10	0.20
C	0.305	0.320	7.75	8.13
D	0.006	0.012	0.15	0.31
E	0.079	0.103	2.00	2.62
F	0.260	0.280	6.60	7.11
G	0.108	0.124	2.75	3.15
H	0.220	0.245	5.59	6.22

SMC (REV: R1)

R3 (20-June 2008)