

3SMC5.0A
THRU
3SMC170A

**SURFACE MOUNT UNI-DIRECTIONAL
GLASS PASSIVATED JUNCTION
TRANSIENT VOLTAGE SUPPRESSOR
3000 WATTS, 5.0 THRU 170 VOLTS**



SMC CASE

CentralTM
Semiconductor Corp.

DESCRIPTION

The CENTRAL SEMICONDUCTOR 3SMC5.0A 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 3SMC5.0CA Series data sheet.

MAXIMUM RATINGS ($T_A=25^{\circ}\text{C}$ unless otherwise noted)

	<u>SYMBOL</u>		<u>UNITS</u>
Peak Power Dissipation	P_{DM}	3000	W
Peak Forward Surge Current (JEDEC Method)	I_{FSM}	200	A
Operating and Storage Junction Temperature	T_J, T_{stg}	65 to +150	$^{\circ}\text{C}$

ELECTRICAL CHARACTERISTICS ($T_A=25^{\circ}\text{C}$ unless otherwise noted)

TYPE NO.	REVERSE STAND-OFF VOLTAGE	BREAKDOWN VOLTAGE			MAXIMUM REVERSE LEAKAGE @ V_{RWM}	MAXIMUM CLAMPING VOLTAGE @ I_{PPM}	MAXIMUM PEAK PULSE CURRENT	MARKING CODE
		V_{BR}		@ I_T				
	V_{RWM}	VOLTS			I_R	V_C	I_{PPM}	
	VOLTS	MIN	MAX	mA	µA	VOLTS	A	
3SMC5.0A	5.0	6.40	7.25	10	1000	9.2	326.0	CHDE
3SMC6.0A	6.0	6.67	7.67	10	1000	10.3	291.3	CHDG
3SMC6.5A	6.5	7.22	8.30	10	500	11.2	267.9	CHDK
3SMC7.0A	7.0	7.78	8.95	10	200	12.0	250.0	CHDM
3SMC7.5A	7.5	8.33	9.58	1.0	100	12.9	232.6	CHDP
3SMC8.0A	8.0	8.89	10.23	1.0	50	13.6	220.6	CHDR
3SMC8.5A	8.5	9.44	10.82	1.0	25	14.4	208.4	CHDT
3SMC9.0A	9.0	10.0	11.5	1.0	10	15.4	194.8	CHDV
3SMC10A	10	11.1	12.8	1.0	5.0	17.0	176.4	CHDX
3SMC11A	11	12.2	14.0	1.0	5.0	18.2	184.8	CHDZ
3SMC12A	12	13.3	15.3	1.0	5.0	19.9	150.6	CHEE
3SMC13A	13	14.4	16.5	1.0	5.0	21.5	139.4	CHEG

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		V_{BR}		@ I_T					
	V_{RWM}		VOLTS		I_R	V_C	I_{PPM}		
	VOLTS	MIN	MAX		mA	μA	VOLTS		A
3SMC14A	14	15.6	17.9	1.0	5.0	23.2	129.4	CHEK	
3SMC15A	15	16.7	19.2	1.0	5.0	24.4	123.0	CHEM	
3SMC16A	16	17.8	20.5	1.0	5.0	26.0	115.4	CHEP	
3SMC17A	17	18.9	21.7	1.0	5.0	27.6	106.6	CHER	
3SMC18A	18	20.0	23.3	1.0	5.0	29.2	102.8	CHET	
3SMC20A	20	22.2	25.5	1.0	5.0	32.4	92.6	CHEV	
3SMC22A	22	24.4	28.0	1.0	5.0	35.5	84.4	CHEX	
3SMC24A	24	26.7	30.7	1.0	5.0	38.9	77.2	CHEZ	
3SMC26A	26	28.9	33.2	1.0	5.0	42.1	71.2	CHFE	
3SMC28A	28	31.1	35.8	1.0	5.0	45.4	66.0	CHFG	
3SMC30A	30	33.3	38.3	1.0	5.0	48.4	62.0	CHFK	
3SMC33A	33	36.7	42.2	1.0	5.0	53.3	56.2	CHFM	
3SMC36A	36	40.0	46.0	1.0	5.0	58.1	51.6	CHFP	
3SMC40A	40	44.4	51.1	1.0	5.0	64.5	46.4	CHFR	
3SMC43A	43	47.8	54.9	1.0	5.0	69.4	43.2	CHFT	
3SMC45A	45	50.0	57.5	1.0	5.0	72.7	41.2	CHFV	
3SMC48A	48	53.3	61.3	1.0	5.0	77.4	38.8	CHFX	
3SMC51A	51	56.7	65.2	1.0	5.0	82.4	36.4	CHFZ	
3SMC54A	54	60.0	69.0	1.0	5.0	87.1	34.4	CHGE	
3SMC58A	58	64.4	74.1	1.0	5.0	93.6	32.0	CHGG	
3SMC60A	60	66.7	76.7	1.0	5.0	96.8	31.0	CHGK	
3SMC64A	64	71.1	81.8	1.0	5.0	103	29.2	CHGM	
3SMC70A	70	77.8	89.5	1.0	5.0	113	26.6	CHGP	
3SMC75A	75	83.3	95.8	1.0	5.0	121	24.8	CHGR	
3SMC78A	78	86.7	99.7	1.0	5.0	126	22.8	CHGT	
3SMC85A	85	94.4	108.2	1.0	5.0	137	20.8	CHGV	
3SMC90A	90	100.0	115.5	1.0	5.0	146	20.6	CHGX	
3SMC100A	100	111.0	128.0	1.0	5.0	162	18.6	CHGZ	
3SMC110A	110	122.0	140.5	1.0	5.0	177	16.8	CHHE	
3SMC120A	120	133.0	153.0	1.0	5.0	193	15.6	CHHG	
3SMC130A	130	144.0	165.5	1.0	5.0	209	14.4	CHHK	
3SMC150A	150	167.0	192.5	1.0	5.0	243	12.4	CHHM	
3SMC160A	160	178.0	205.0	1.0	5.0	259	11.6	CHHP	
3SMC170A	170	189.0	217.5	1.0	5.0	275	11.0	CHHR	