

CentralTM Semiconductor Corp.

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Manufacturers of World Class Discrete Semiconductors

SA5.0A THRU SA170A

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

DO-15 CASE

DESCRIPTION

The CENTRAL SEMICONDUCTOR SA5.0A Series types are 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 SA5.0CA Series data sheet.

MAXIMUM RATINGS (T_A=25°C unless otherwise noted)

	SYMBOL		UNITS
Peak Power Dissipation	P _{DM}	500	W
Peak Forward Surge Current (JEDEC Method)	I _{FSM}	70	A
Operating and Storage Junction Temperature	T _J , T _{stg}	-65 to +150	°C

ELECTRICAL CHARACTERISTICS (T_A=25°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	
SA5.0A	5.0	6.40	7.00	10	600	9.2	54.3	SA5.0A
SA6.0A	6.0	6.67	7.37	10	600	10.3	48.5	SA6.0A
SA6.5A	6.5	7.22	7.98	10	400	11.2	44.7	SA6.5A
SA7.0A	7.0	7.78	8.60	10	150	12.0	41.7	SA7.0A
SA7.5A	7.5	8.33	9.21	1.0	50	12.9	38.8	SA7.5A
SA8.0A	8.0	8.89	9.83	1.0	25	13.6	36.7	SA8.0A
SA8.5A	8.5	9.44	10.40	1.0	10	14.4	34.7	SA8.5A
SA9.0A	9.0	10.0	11.10	1.0	5.0	15.4	32.5	SA9.0A
SA10A	10	11.10	12.30	1.0	3.0	17.0	29.4	SA10A
SA11A	11	12.20	13.50	1.0	3.0	18.2	27.4	SA11A
SA12A	12	13.30	14.70	1.0	3.0	19.9	25.1	SA12A
SA13A	13	14.40	15.90	1.0	3.0	21.5	23.2	SA13A

(Continued on Reverse Side)

ELECTRICAL CHARACTERISTICS Continued

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	
SA14A	14	15.60	17.20	1.0	3.0	23.2	21.5	SA14A
SA15A	15	16.70	18.50	1.0	3.0	24.4	20.6	SA15A
SA16A	16	17.80	19.70	1.0	3.0	26.0	19.2	SA16A
SA17A	17	18.90	20.90	1.0	3.0	27.6	16.1	SA17A
SA18A	18	20.00	22.10	1.0	3.0	29.2	17.2	SA18A
SA20A	20	22.20	24.50	1.0	3.0	32.4	15.4	SA20A
SA22A	22	24.40	26.90	1.0	3.0	35.5	14.1	SA22A
SA24A	24	26.70	29.50	1.0	3.0	38.9	12.8	SA24A
SA26A	26	28.90	31.90	1.0	3.0	42.1	11.9	SA26A
SA28A	28	31.10	34.40	1.0	3.0	45.4	11.0	SA28A
SA30A	30	33.30	36.80	1.0	3.0	48.4	10.3	SA30A
SA33A	33	36.70	40.60	1.0	3.0	53.3	9.4	SA33A
SA36A	36	40.00	44.20	1.0	3.0	58.1	8.6	SA36A
SA40A	40	44.40	49.10	1.0	3.0	64.5	7.8	SA40A
SA43A	43	47.80	52.80	1.0	3.0	69.4	7.2	SA43A
SA45A	45	50.00	55.30	1.0	3.0	72.7	6.9	SA45A
SA48A	48	53.30	58.90	1.0	3.0	77.4	6.5	SA48A
SA51A	51	56.70	62.70	1.0	3.0	82.4	6.1	SA51A
SA54A	54	60.00	66.30	1.0	3.0	87.1	5.7	SA54A
SA58A	58	64.40	71.20	1.0	3.0	93.6	5.3	SA58A
SA60A	60	66.70	73.70	1.0	3.0	96.8	5.2	SA60A
SA64A	64	71.10	78.60	1.0	3.0	103	4.9	SA64A
SA70A	70	77.80	86.00	1.0	3.0	113	4.4	SA70A
SA75A	75	83.30	92.10	1.0	3.0	121	4.1	SA75A
SA78A	78	86.70	95.80	1.0	3.0	126	4.0	SA78A
SA85A	85	94.40	104.00	1.0	3.0	137	3.6	SA85A
SA90A	90	100.00	111.00	1.0	3.0	146	3.4	SA90A
SA100A	100	111.00	123.00	1.0	3.0	162	3.1	SA100A
SA110A	110	122.00	135.00	1.0	3.0	177	2.8	SA110A
SA120A	120	133.00	147.00	1.0	3.0	193	2.0	SA120A
SA130A	130	144.00	159.00	1.0	3.0	209	2.4	SA130A
SA150A	150	167.00	185.00	1.0	3.0	243	2.1	SA150A
SA160A	160	178.00	197.00	1.0	3.0	259	1.9	SA160A
SA170A	170	189.00	209.0	1.0	3.0	275	1.8	SA170A