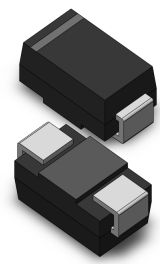
SMA5J5.0A(CA) - SMA5J440A(CA)

SURFACE MOUNT TRANSIENT VOLTAGE SUPPRESSOR DIODE

VOLTAGE RANGE: 5.0 - 440 V
POWER: 500Watts



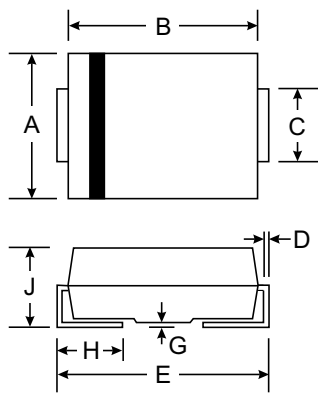
Features

- Glass Passivated Die Construction
- Uni- and Bi-Directional Versions Available
- Excellent Clamping Capability
- Fast Response Time
- Plastic Material: UL Flammability Classification Rating 94V-0

Mechanical Data

- Case: SMA/DO-214AC, Molded Plastic
- Terminals: Solder Plated, Solderable per MIL-STD-750, Method 2026
- Polarity: Cathode Band or Cathode Notch
- Marking: Type Number
- Weight: 0.064 grams (approx.)

RoHS COMPLIANT



SMA(DO-214AC)		
Dim	**Min**	**Max**
A	2.29	2.92
B	4.00	4.60
C	1.27	1.63
D	0.15	0.31
E	4.80	5.59
G	0.10	0.20
H	0.76	1.52
J	2.01	2.62
All Dimensions in mm		

Maximum Ratings @ T_A = 25°C unless otherwise specified

Characteristic	Symbol	Value	Unit
Peak pulse power dissipation with a 10/1000 µs waveform (1)(2) (Fig. 1)	P_{PPM}	500	W
Peak pulse current with a 10/1000 µs waveform (1)	I_{PPM}	See next table	A
Peak forward surge current 8.3 ms single half sine-wave uni-directional only (2)	I_{FSM}	40	A
Operating junction and storage temperature range	T_J, T_{STG}	- 55 to + 150	°C

Notes:

(1) Non-repetitive current pulse, per Fig. 3 and derated above T_A = 25 °C per Fig. 2.

(2) Mounted on 0.2 x 0.2" (5.0 x 5.0 mm) copper pads to each terminal

TYPE		Reverse Stand-Off Voltage	Breakdown Voltage Min. @I_T	Breakdown Voltage Max. @ I_T	Test Current	Maximum Clamping Voltage @I_{PP}	Peak Pulse Current	Reverse Leakage @V_{RWM}
(Uni)	(Bi)	V_{RWM}(V)	$V_{BR\ MIN}$(V)	$V_{BR\ MAX}$(V)	I_T (mA)	V_C(V)	I_{PP}(A)	I_R(uA)
SMA5J5.0	SMA5J5.0C	5.0	6.40	7.55	10.0	9.6	41.7	800.0
SMA5J5.0A	SMA5J5.0CA	5.0	6.40	7.25	10.0	9.2	43.5	800.0
SMA5J6.0	SMA5J6.0C	6.0	6.67	8.45	10.0	11.4	35.1	800.0
SMA5J6.0A	SMA5J6.0CA	6.0	6.67	7.67	10.0	10.3	38.8	800.0
SMA5J6.5	SMA5J6.5C	6.5	7.22	9.14	10.0	12.3	32.5	500.0
SMA5J6.5A	SMA5J6.5CA	6.5	7.22	8.30	10.0	11.2	35.7	500.0
SMA5J7.0	SMA5J7.0C	7.0	7.78	9.86	10.0	13.3	30.1	200.0
SMA5J7.0A	SMA5J7.0CA	7.0	7.78	8.95	10.0	12.0	33.3	200.0
SMA5J7.5	SMA5J7.5C	7.5	8.33	10.67	1.0	14.3	28.0	100.0
SMA5J7.5A	SMA5J7.5CA	7.5	8.33	9.58	1.0	12.9	31.0	100.0
SMA5J8.0	SMA5J8.0C	8.0	8.89	11.3	1.0	15.0	26.7	50.0
SMA5J8.0A	SMA5J8.0CA	8.0	8.89	10.23	1.0	13.6	29.4	50.0
SMA5J8.5	SMA5J8.5C	8.5	9.44	11.92	1.0	15.9	25.2	20.0
SMA5J8.5A	SMA5J8.5CA	8.5	9.44	10.82	1.0	14.4	27.8	20.0
SMA5J9.0	SMA5J9.0C	9.0	10.0	12.6	1.0	16.9	23.7	10.0
SMA5J9.0A	SMA5J9.0CA	9.0	10.0	11.5	1.0	15.4	26.0	10.0
SMA5J10	SMA5J10C	10	11.1	14.1	1.0	18.8	21.3	5.0
SMA5J10A	SMA5J10CA	10	11.1	12.8	1.0	17.0	23.5	5.0
SMA5J11	SMA5J11C	11	12.2	15.4	1.0	20.1	19.9	5.0
SMA5J11A	SMA5J11CA	11	12.2	14.0	1.0	18.2	22.0	5.0
SMA5J12	SMA5J12C	12	13.3	16.9	1.0	22.0	18.2	5.0
SMA5J12A	SMA5J12CA	12	13.3	15.3	1.0	19.9	20.1	5.0
SMA5J13	SMA5J13C	13	14.4	18.2	1.0	23.8	16.8	5.0
SMA5J13A	SMA5J13CA	13	14.4	16.5	1.0	21.5	18.6	5.0
SMA5J14	SMA5J14C	14	15.6	19.8	1.0	25.8	15.5	5.0
SMA5J14A	SMA5J14CA	14	15.6	17.9	1.0	23.2	17.2	5.0
SMA5J15	SMA5J15C	15	16.7	21.1	1.0	26.9	14.9	5.0
SMA5J15A	SMA5J15CA	15	16.7	19.2	1.0	24.4	16.4	5.0
SMA5J16	SMA5J16C	16	17.8	22.6	1.0	28.8	13.9	5.0
SMA5J16A	SMA5J16CA	16	17.8	20.5	1.0	26.0	15.4	5.0
SMA5J17	SMA5J17C	17	18.9	23.9	1.0	30.5	13.1	5.0
SMA5J17A	SMA5J17CA	17	18.9	21.7	1.0	27.6	14.5	5.0
SMA5J18	SMA5J18C	18	20.0	25.3	1.0	32.2	12.4	5.0
SMA5J18A	SMA5J18CA	18	20.0	23.3	1.0	29.2	13.7	5.0
SMA5J20	SMA5J20C	20	22.2	28.1	1.0	35.8	11.2	5.0
SMA5J20A	SMA5J20CA	20	22.2	25.5	1.0	32.4	12.3	5.0
SMA5J22	SMA5J22C	22	24.4	30.9	1.0	39.4	10.2	5.0

TYPE		Reverse Stand-Off Voltage	Breakdown Voltage Min. @I_T	Breakdown Voltage Max. @ I_T	Test Current	Maximum Clamping Voltage @I_{PP}	Peak Pulse Current	Reverse Leakage @V_{RWM}
(Uni)	(Bi)	V_{RWM}(V)	$V_{BR\ MIN}$(V)	$V_{BR\ MAX}$(V)	I_T (mA)	V_C(V)	I_{PP}(A)	I_R(uA)
SMA5J22A	SMA5J22CA	22	24.4	28.0	1.0	35.5	11.3	5.0
SMA5J24	SMA5J24C	24	26.7	33.8	1.0	43.0	9.3	5.0
SMA5J24A	SMA5J24CA	24	26.7	30.7	1.0	38.9	10.3	5.0
SMA5J26	SMA5J26C	26	28.9	36.6	1.0	46.6	8.6	5.0
SMA5J26A	SMA5J26CA	26	28.9	33.2	1.0	42.1	9.5	5.0
SMA5J28	SMA5J28C	28	31.1	39.4	1.0	50.0	8.0	5.0
SMA5J28A	SMA5J28CA	28	31.1	35.8	1.0	45.4	8.8	5.0
SMA5J30	SMA5J30C	30	33.3	42.2	1.0	53.5	7.5	5.0
SMA5J30A	SMA5J30CA	30	33.3	38.3	1.0	48.4	8.3	5.0
SMA5J33	SMA5J33C	33	36.7	46.5	1.0	59.0	6.8	5.0
SMA5J33A	SMA5J33CA	33	36.7	42.2	1.0	53.3	7.5	5.0
SMA5J36	SMA5J36C	36	40.0	50.7	1.0	64.3	6.2	5.0
SMA5J36A	SMA5J36CA	36	40.0	46.0	1.0	58.1	6.9	5.0
SMA5J40	SMA5J40C	40	44.4	56.3	1.0	71.4	5.6	5.0
SMA5J40A	SMA5J40CA	40	44.4	51.1	1.0	64.5	6.2	5.0
SMA5J43	SMA5J43C	43	47.7	60.5	1.0	76.7	5.2	5.0
SMA5J43A	SMA5J43CA	43	47.8	54.9	1.0	69.4	5.8	5.0
SMA5J45	SMA5J45C	45	50.0	63.3	1.0	80.3	5.0	5.0
SMA5J45A	SMA5J45CA	45	50.0	57.5	1.0	72.7	5.5	5.0
SMA5J48	SMA5J48C	48	53.3	67.5	1.0	85.5	4.7	5.0
SMA5J48A	SMA5J48CA	48	53.3	61.3	1.0	77.4	5.2	5.0
SMA5J51	SMA5J51C	51	56.7	71.8	1.0	91.1	4.4	5.0
SMA5J51A	SMA5J51CA	51	56.7	65.2	1.0	82.4	4.9	5.0
SMA5J54	SMA5J54C	54	60.0	76.0	1.0	96.3	4.2	5.0
SMA5J54A	SMA5J54CA	54	60.0	69.0	1.0	87.1	4.6	5.0
SMA5J58	SMA5J58C	58	64.4	81.6	1.0	103	3.9	5.0
SMA5J58A	SMA5J58CA	58	64.4	74.1	1.0	93.6	4.3	5.0
SMA5J60	SMA5J60C	60	66.7	84.5	1.0	107	3.7	5.0
SMA5J60A	SMA5J60CA	60	66.7	76.7	1.0	96.8	4.1	5.0
SMA5J64	SMA5J64C	64	71.1	90.1	1.0	114	3.5	5.0
SMA5J64A	SMA5J64CA	64	71.1	81.8	1.0	103	3.9	5.0
SMA5J70	SMA5J70C	70	77.8	98.6	1.0	125	3.2	5.0
SMA5J70A	SMA5J70CA	70	77.8	89.5	1.0	113	3.5	5.0
SMA5J75	SMA5J75C	75	83.0	105.7	1.0	134	3.0	5.0
SMA5J75A	SMA5J75CA	75	83.0	95.8	1.0	121	3.3	5.0
SMA5J78	SMA5J78C	78	86.0	109.8	1.0	139	2.9	5.0
SMA5J78A	SMA5J78CA	78	86.0	99.7	1.0	126	3.2	5.0
SMA5J85	SMA5J85C	85	94.0	119.2	1.0	151	2.6	5.0
SMA5J85A	SMA5J85CA	85	94.0	108.2	1.0	137	2.9	5.0

TYPE		Reverse Stand-Off Voltage	Breakdown Voltage Min. @I_T	Breakdown Voltage Max. @ I_T	Test Current	Maximum Clamping Voltage @I_{PP}	Peak Pulse Current	Reverse Leakage @V_{RWM}
(Uni)	(Bi)	V_{RWM}(V)	$V_{BR\ MIN}$(V)	$V_{BR\ MAX}$(V)	I_T (mA)	V_C(V)	I_{PP}(A)	I_R(uA)
SMA5J90	SMA5J90C	90	100	126.5	1.0	160	2.5	5.0
SMA5J90A	SMA5J90CA	90	100	115.5	1.0	146	2.7	5.0
SMA5J100	SMA5J100C	100	111	141.0	1.0	179	2.2	5.0
SMA5J100A	SMA5J100CA	100	111	128.0	1.0	162	2.5	5.0
SMA5J110	SMA5J110C	110	122	154.5	1.0	196	2.0	5.0
SMA5J110A	SMA5J110CA	110	122	140.5	1.0	177	2.3	5.0
SMA5J120	SMA5J120C	120	133	169.0	1.0	214	1.9	5.0
SMA5J120A	SMA5J120CA	120	133	153.0	1.0	193	2.1	5.0
SMA5J130	SMA5J130C	130	144	182.5	1.0	231	1.7	5.0
SMA5J130A	SMA5J130CA	130	144	165.5	1.0	209	1.9	5.0
SMA5J150	SMA5J150C	150	167	211.5	1.0	268	1.5	5.0
SMA5J150A	SMA5J150CA	150	167	192.5	1.0	243	1.6	5.0
SMA5J160	SMA5J160C	160	178	226.0	1.0	287	1.4	5.0
SMA5J160A	SMA5J160CA	160	178	205.0	1.0	259	1.5	5.0
SMA5J170	SMA5J170C	170	189	239.5	1.0	304	1.3	5.0
SMA5J170A	SMA5J170CA	170	189	217.5	1.0	275	1.5	5.0
SMA5J180	SMA5J180C	180	200	253.8	1.0	321	1.2	5.0
SMA5J180A	SMA5J180CA	180	200	230.4	1.0	290	1.4	5.0
SMA5J190	SMA5J190C	190	211	267.9	1.0	339	1.2	5.0
SMA5J190A	SMA5J190CA	190	211	243.2	1.0	306	1.3	5.0
SMA5J200	SMA5J200C	200	222	282.0	1.0	356	1.1	5.0
SMA5J200A	SMA5J200CA	200	222	256.0	1.0	322	1.2	5.0
SMA5J210	SMA5J210C	210	233	296.1	1.0	375	1.1	5.0
SMA5J210A	SMA5J210CA	210	233	268.8	1.0	339	1.2	5.0
SMA5J220	SMA5J220C	220	244	310.2	1.0	392	1.0	5.0
SMA5J220A	SMA5J220CA	220	244	281.6	1.0	355	1.1	5.0
SMA5J250	SMA5J250C	250	278	342.5	1.0	447	0.9	5.0
SMA5J250A	SMA5J250CA	250	278	309.0	1.0	403	1.0	5.0
SMA5J300	SMA5J300C	300	333	411.0	1.0	535	0.7	5.0
SMA5J300A	SMA5J300CA	300	333	371.0	1.0	484	0.8	5.0
SMA5J350	SMA5J350C	350	389	479.5	1.0	624	0.6	5.0
SMA5J350A	SMA5J350CA	350	389	432.0	1.0	565	0.7	5.0
SMA5J400	SMA5J400C	400	444	548.0	1.0	687	0.6	5.0
SMA5J400A	SMA5J400CA	400	444	494.0	1.0	645	0.6	5.0
SMA5J440	SMA5J440C	440	489	602.8	1.0	786	0.5	5.0
SMA5J440A	SMA5J440CA	440	489	543.0	1.0	710	0.6	5.0