



Solid State Devices, Inc.

14701 Firestone Blvd * La Mirada, Ca 90638
 Phone: (562) 404-4474 * Fax: (562) 404-1773
ssdi@ssdi-power.com * www.ssdi-power.com

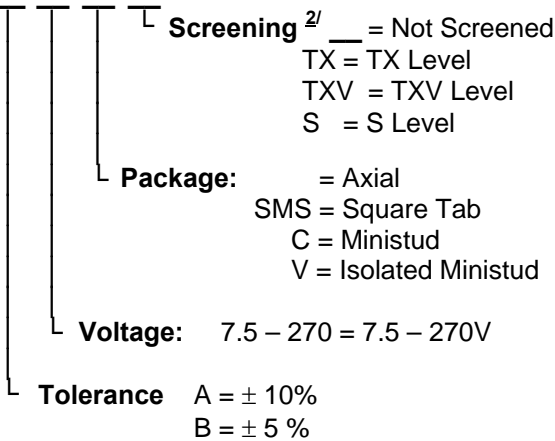
DESIGNER'S DATA SHEET

FEATURES:

- Hermetically Sealed in Glass
- Metallurgically Bonded
- Surface Mount Versions Available
- Ministud Versions Available
- Solid Silver Leads for High Power Dissipation
- TX, TXV, and Space Level Screening Available^{2/}

Part Number / Ordering Information ^{1/}

ST1.5K

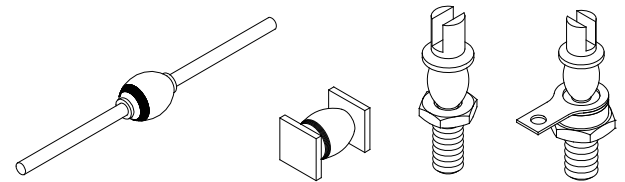


Maximum Ratings	Symbol	Value	Units
Stand Off Voltage	V_{RWM}	5.6-200	V
Peak Pulse Power @ 1.0msec	P_{PP}	1500	W
Steady State Power Dissipation	P_D	6	W
Forward Surge Current	I_{FSM}	150	A
Operating and Storage Temp.	T_{op} & T_{stg}	-65 to +175	°C

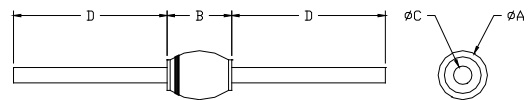
NOTE: SSDI's Transient Suppressors offer standard breakdown voltage tolerances of ±10%(A) and ±5%(B). For other voltages and voltage tolerances, contact SSDI's Marketing Department.

ST1.5KA7.5 thru ST1.5KA270

1500 W Transient Voltage Suppressors 7.5 – 270 VOLTS

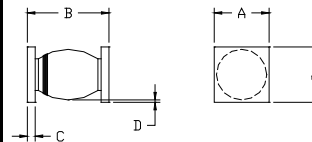


Axial



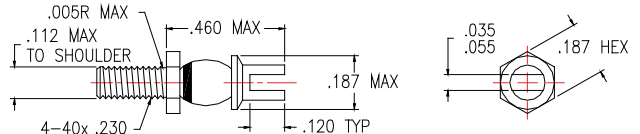
DIM	MIN	MAX
A	0.150"	0.170"
B	0.175"	0.200"
C	0.037"	0.043"
D	1.0"	—

SMS

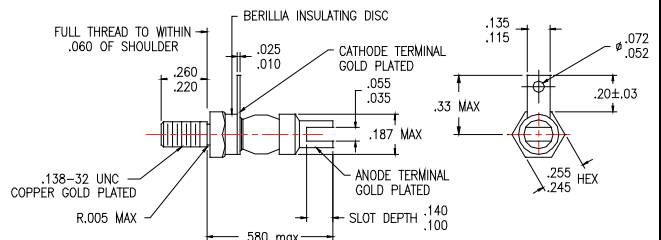


DIM	MIN	MAX
A	0.172"	0.180"
B	0.220"	0.250"
C	0.023"	0.027"
D	0.005"	—

Ministud (C)



Isolated Ministud (V)



*For reverse polarity (anode to stud) add suffix "R"

NOTE: All specifications are subject to change without notification. SCD's for these devices should be reviewed by SSDI prior to release.

DATA SHEET #: T0002C

DOC



Solid State Devices, Inc.

14701 Firestone Blvd * La Mirada, CA 90638
Phone: (562) 404-4474 * Fax: (562) 404-1773
ssdi@ssdi-power.com * www.ssdi-power.com

**ST1.5KA7.5 thru
ST1.5KA270**

ELECTRICAL CHARACTERISTICS

Part Number For 5% Voltage Tolerance specify "B" in place of "A"	Breakdown ^{3/}		Maximum Reverse Standoff		Peak Pulse Clamping		Maximum Continuous Current ^{5/}	Dynamic Impedance ^{4/}	Maximum Temperature Coefficient
	Nominal Voltage	Test Current	Voltage	Reverse Leakage Current	Voltage (max.)	@ Current t _p = 1 ms ^{6/}			
	V _{BR} @ I _{BRT}	I _{BRT}	V _{RWM}	I _R @ V _{RWM}	V _C	I _{PP}			
V	mA	V	µA	V	A	mA	Ω	%/°C	
ST1.5KA7.5	7.5	175	5.6	1500	11.7	128	1250	0.7	0.0615
ST1.5KA8.2	8.2	150	6.2	1200	12.5	120	1150	0.8	0.0655
ST1.5KA9.1	9.1	150	6.8	40	13.8	109	1020	0.9	0.0685
ST1.5KA10	10	125	7.5	20	15.0	100	950	1.0	0.0735
ST1.5KA11	11	125	8.2	15	16.2	93	860	1.1	0.0755
ST1.5KA12	12	100	9.1	10	17.3	87	770	1.1	0.0765
ST1.5KA13	13	100	10	4	19.0	79	700	1.2	0.0815
ST1.5KA15	15	75	11	2	22.0	68	600	1.2	0.0845
ST1.5KA16	16	75	12	2	23.5	64	550	1.3	0.0865
ST1.5KA18	18	65	13	2	26.5	57	500	1.3	0.0885
ST1.5KA20	20	65	15	2	29.0	52	440	1.5	0.0905
ST1.5KA22	22	50	16	2	31.9	47	390	1.6	0.0925
ST1.5KA24	24	50	18	2	34.7	43	360	1.8	0.0945
ST1.5KA27	27	50	20	2	38.5	39	310	2.5	0.0965
ST1.5KA30	30	40	22	2	42.9	35	280	4.0	0.0975
ST1.5KA33	33	40	24	2	46.9	32	260	5.0	0.0985
ST1.5KA36	36	30	27	2	50.0	30	240	6.0	0.0995
ST1.5KA39	39	30	30	2	55.6	27	210	7.0	0.1005
ST1.5KA43	43	30	33	2	60.0	25	180	10	0.1015
ST1.5KA47	47	25	36	2	65.2	23	175	12	0.1015
ST1.5KA51	51	25	39	2	71.4	21	170	14	0.1025
ST1.5KA56	56	20	43	2	78.9	19	160	18	0.1035
ST1.5KA62	62	20	47	2	88.2	17	150	20	0.1045
ST1.5KA68	68	20	51	2	93.7	16	130	22	0.1045
ST1.5KA75	75	20	56	2	107.1	14	120	25	0.1055
ST1.5KA82	82	15	62	2	115.4	13	110	30	0.1055
ST1.5KA91	91	15	68	2	125.0	12	100	40	0.1065
ST1.5KA100	100	12	75	2	136.4	11	90	45	0.1065
ST1.5KA110	110	12	82	2	152.0	9.9	82	65	0.1075
ST1.5KA120	120	10	91	2	167.0	9.0	75	90	0.1075
ST1.5KA130	130	10	100	2	185.0	8.1	69	100	0.1075
ST1.5KA150	150	8	110	2	204.0	7.2	60	150	0.1085
ST1.5KA160	160	8	120	2	224.0	6.6	56	180	0.1085
ST1.5KA180	180	5	130	2	249.0	6.0	50	210	0.1085
ST1.5KA200	200	5	150	2	276.0	5.4	45	250	0.1085
ST1.5KA220	220	5	160	2	305.0	4.8	41	350	0.1085
ST1.5KA240	240	5	180	2	336.0	4.5	37	450	0.1105
ST1.5KA270	270	5	200	2	380.0	3.9	34	600	0.1105

NOTES: For optional high reliability screening or higher nominal voltages, consult SSDI Marketing Department.

- For ordering information, price, operating curves, and availability- contact factory.
- Screening based on MIL-PRF-19500. Screening flows available on request.
- All voltages are measured with an automated test set using a 35 msec test time. Longer or shorter test times will have a corresponding effect on the measured value due to heating effects.
- Dynamic Impedance is derived from the AC voltage divided by the AC current with RMS value of 10% of DC test current superimposed on the test current.
- Ratings based on 100°C Tab temperature (SMS and C devices); multiply by 0.6 for L devices; multiply by 0.8 for V/W devices.
- Pulse width (tp) is defined as the time from rated peak pulse current IPP to the point where peak pulse current decayed to 50% of rated IPP. (10µs x 1000µs waveform as defined by R.E.A.)

NOTE: All specifications are subject to change without notification. SCD's for these devices should be reviewed by SSDI prior to release.

DATA SHEET #: T0002C

DOC