

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

Part Number / Ordering Information ^{1/}

ST

Screening 2/ ___ = Not Screened

TX = TX Level

TXV = TXV Level

S = S Level

Package:

SMS = Surface Mount Square Tab

Type Number: 4462 - 4500

ST4462SMS – ST4500SMS

Series

300 W*

Surface Mount

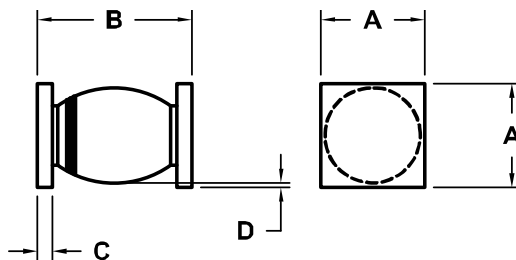
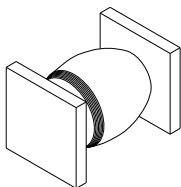
Transient Voltage Suppressor 7.5 – 300 VOLTS

FEATURES:

- **Hermetically Sealed**
- **Clamping Time in Picoseconds**
- **Voltages up to 300 V**
- **Very Small Footprint**
- **TX, TXV, and Space Level Screening Available^{2/}**

Maximum Ratings	Symbol	Value	Unit
Peak Pulse Power Dissipation* with a 10/1000 μ s waveform	P _{PPM}	300	W
Steady State Power Dissipation	P _D	4	W
Operating and Storage Temperature	T _{op} & T _{stg}	-65 to +175	°C
Maximum Forward Voltage Drop I _F = 1.0 Apk, T _A = 25°C, pulsed	V _F	1.5	V
Thermal Resistance (End Tab) Junction to Tab	R _{θJE}	22	°C/W

Surface Mount Square Tab (SMS)



DIM	MIN	MAX
A	0.134	0.153
B	0.200	0.280
C	0.022	0.028
D	0.002	—

- Dimensions prior to soldering
- Dimensions in inches

NOTES:

1/ For ordering information, price, operating curves, and availability – contact factory.

2/ Screening based on MIL-PRF-19500. Screening flows available on request.

3/ 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.

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

DATA SHEET #: T00029D

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ST4462SMS – ST4500SMS Series

Electrical Characteristics @ 25°C

Part Number	Nominal Zener Voltage ^{3/}	Minimum Reverse Breakdown Voltage ^{3/}	Test Current	Clamping Voltage		Maximum Reverse Standoff		Typical Temperature Coefficient
	V _Z @ I _{ZT}	V _Z @ I _{ZT}	I _{ZT}	V _C Max	@ I _{RMS}	I _R	V _R	T _C @ I _{ZT}
	V	V	mA	V	A	μA	V	%/°C
ST4462	7.5	7	100	11.3	26.5	1500	6.2	.07
ST4463	8.2	7.7	100	12.3	24.4	1200	6.8	.08
ST4464	9.1	8.5	50	13.3	22.7	100	7.5	.08
ST4465	10	9.4	50	14.8	20.3	20	8.2	.09
ST4466	11	10.4	50	15.7	19.1	5	9.1	.10
ST4467	12	11.4	50	17.0	17.7	5	10	.10
ST4468	13	12.4	50	18.9	15.9	5	11	.10
ST4469	15	13.8	50	20.9	14.4	5	12	.10
ST4470	16	15.3	25	22.9	13.1	5	13	.11
ST4471	18	16.8	25	25.6	11.7	5	15	.11
ST4472	20	18.8	25	28.4	10.6	5	16	.11
ST4473	22	20.8	25	31.0	9.7	5	18	.11
ST4474	24	22.8	25	33.8	8.9	5	20	.11
ST4475	27	25.1	25	38.1	7.9	5	22	.11
ST4476	30	28	25	42.2	7.1	5	24	.11
ST4477	33	31	25	46.2	6.5	5	27	.11
ST4478	36	34	10	50.1	6.0	5	30	.11
ST4479	39	37	10	54.1	5.5	5	33	.11
ST4480	43	40	10	60.7	4.9	5	36	.13
ST4481	47	44	10	65.5	4.6	5	39	.13
ST4482	51	48	10	70.8	4.2	5	43	.13
ST4483	56	52	10	78.6	3.8	5	47	.13
ST4484	62	58	10	86.5	3.5	5	51	.13
ST4485	68	64	10	94.4	3.2	5	56	.13
ST4486	75	70	10	103.5	2.9	5	62	.13
ST4487	82	77	10	114	2.6	5	68	.13
ST4488	91	85	5	126	2.4	5	75	.13
ST4489	100	94	5	139	2.2	5	82	.13
ST4490	110	104	5	152	2.0	5	91	.13
ST4491	120	114	5	167	1.8	5	100	.13
ST4492	130	124	5	185	1.6	5	110	.13
ST4493	150	138	5	204	1.5	5	120	.13
ST4494	160	153	5	224	1.3	5	130	.13
ST4495	180	168	5	249	1.2	5	150	.13
ST4496	200	188	5	276	1.1	5	160	.13
ST4497	220	208	2	305	1.0	5	180	.13
ST4498	240	228	2	336	0.9	5	200	.13
ST4499	270	251	2	380	0.8	5	220	.13
ST4500	300	280	2	419	0.72	5	240	.14

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