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

SZN4460 thru SZN4496 Series and SZN6485 thru SZN6491 Series

DESIGNER'S DATA SHEET

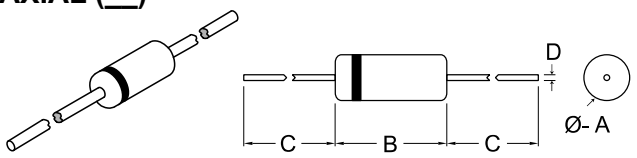
1.5 WATT 3.3 – 200 VOLTS ZENER DIODES

FEATURES:

- **Hermetically Sealed in Glass**
- **Rated at 1.5 W**
- **Available in Axial, Round Tab Surface Mount (SM), and Square Tab Surface Mount (SMS) version**
- **Available to TX, TXV, and Space Levels** [7/]
- **Tolerances of 5%, 2%, or 1% Available.**
- **Replaces 1N4460 – 4496 and 1N6485 - 6491**

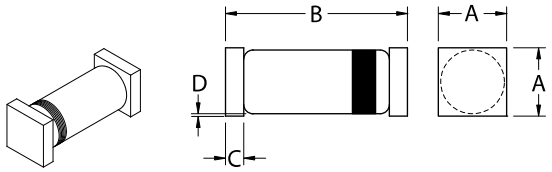
Maximum Ratings	Symbol	Value	Units
Nominal Zener Voltage	V_Z	3.3 - 200	**V**
Maximum Zener Current	I_{ZM}	7.2 - 433	**mA**
Forward Surge Current (8.3 msec Pulse)	I_{ZSM}	.072 – 4.2	**A**
Continuous Power	P_D	1.5	**W**
Operating and Storage Temp.	**Top** **Tstg**	-65 to +175 -65 to +200	**ºC**
Thermal Resistance, Junction to Lead, L=3/8" (Axial)	$R_{\theta JL}$	125	**ºC/W**
Thermal Resistance, Junction to End Cap (SMS)	$R_{\theta JE}$	83.3	**ºC/W**

AXIAL (__)



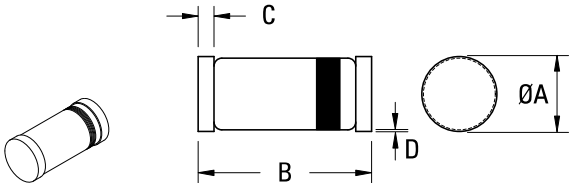
DIM	MIN.	MAX
A	.080"	.107"
B	.145"	.181"
C	1.00"	---
D	.028"	.034"

SQUARE TAB (SMS) All dimensions are prior to soldering



DIM	MIN.	MAX.
A	.125"	.135"
B	.195"	.260"
C	.023"	.027"
D	Body to Tab Clearance: .003"	---

ROUND TAB (SM) All dimensions are prior to soldering



DIM	MIN.	MAX.
A	.084"	.102"
B	.189"	.205"
C	.010"	.022"
D	Body to Tab Clearance: .001"	---

Part Number/Ordering Information [6/]

SZN __ __ __ __

Screening [7/]
__ = Not Screened
TX = TX Level
TXV = TXV
S = S Level

Package Type
__ = Axial Leaded
SMS = Surface Mount Square Tab
SM = Surface Mount Round Tab

Tolerance
__ = 5%
C = 2%
D = 1%

Voltage/Family
4460 thru 4496: 6.2V thru 200V, See Table on Page 2
6485 thru 6491: 3.3V thru 5.6V, See Table on Page 2

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

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

SZN4460 thru SZN4496 Series
And
SZN6485 thru SZN6491 Series

Electrical Characteristics @ 25°C

PART NUMBER	Nominal Zener Voltage (note 1)	Zener Test Current	Maximum Zener Impedance (note 2)	Maximum Knee Impedance		Maximum Reverse Leakage Current		Maximum Continuous Current (note 3)	Maximum Surge Current (note 4)
	VZ @ IZT	IZT	ZZ @ IZT	ZZK @ IZK		IR @ VR	VR (note 8)	IZM	IZSM
	VOLT	mA	Ohms	Ohms	mA	µA	Volts	mA	Amps
SZN6485	3.3	76	10	400	1.0	50	1.0	433	4.2
SZN6486	3.6	69	10	400	1.0	50	1.0	397	3.9
SZN6487	3.9	64	9	400	1.0	35	1.0	366	3.6
SZN6488	4.3	58	9	400	1.0	5.0	1.0	332	3.3
SZN6489	4.7	53	8	500	1.0	4.0	1.0	304	3.0
SZN6490	5.1	49	7	500	1.0	1.0	1.0	280	2.7
SZN6491	5.6	45	5	600	1.0	0.5	2.0	255	2.5
SZN4460	6.2	40.0	4	200	1.0	10.0	3.72	230	2.3
SZN4461	6.8	37.0	2.5	200	1.0	5.0	4.08	210	2.1
SZN4462	7.5	34.0	2.5	400	.5	1.0	4.50	191	1.9
SZN4463	8.2	31.0	3	400	.5	.50	4.92	174	1.7
SZN4464	9.1	28.0	4	500	.5	.30	5.46	157	1.6
SZN4465	10.0	25.0	5	500	.25	.30	8.00	143	1.4
SZN4466	11.0	23.0	6	550	.25	.30	8.80	130	1.3
SZN4467	12.0	21.0	7	550	.25	.20	9.60	119	1.2
SZN4468	13.0	19.0	8	550	.25	.05	10.40	110	1.1
SZN4469	15.0	17.0	9	600	.25	.05	12.00	95	.95
SZN4470	16.0	15.5	10	600	25	.05	12.80	90	.90
SZN4471	18.0	14.0	11	650	.25	.05	14.40	79	.79
SZN4472	20.0	12.5	12	650	.25	.05	16.00	71	.71
SZN4473	22.0	11.5	14	650	.25	.05	17.60	65	.65
SZN4474	24.0	10.5	16	700	.25	.05	19.20	60	.60
SZN4475	27.0	9.5	18	700	.25	.05	21.60	53	.53
SZN4476	30.0	8.5	20	750	.25	.05	24.00	48	.48
SZN4477	33.0	7.5	25	800	.25	.05	26.40	43	.43
SZN4478	36.0	7.0	27	850	.25	.05	28.80	40	.40
SZN4479	39.0	6.5	30	900	.25	.05	31.2	37	.37
SZN4480	43.0	6.0	40	950	.25	.05	34.4	33	.33
SZN4481	47.0	5.5	50	1000	.25	.05	37.6	30	.30
SZN4482	51.0	5.0	60	1100	.25	.05	40.8	28	.28
SZN4483	56.0	4.5	70	1300	.25	.25	44.8	26	.26
SZN4484	62.0	4.0	80	1500	.25	.25	49.6	23	.23
SZN4485	68.0	3.7	100	1700	.25	.25	54.4	21	.21
SZN4486	75.0	3.3	130	2000	.25	.25	60.4	19	.19
SZN4487	82.0	3.0	160	2500	.25	.25	65.6	17	.17
SZN4488	91.0	2.8	200	3000	.25	.25	72.8	16	.16
SZN4489	100.0	2.5	250	3100	.25	.25	80.8	14	.14
SZN4490	110.0	2.0	300	4000	.25	.25	88.0	13	.13
SZN4491	120.0	2.0	400	4500	.25	.25	96.0	12	.12
SZN4492	130.0	1.9	500	5000	.25	.25	104.0	11	.11
SZN4493	150.0	1.7	700	6000	.25	.25	120.0	9.5	.095
SZN4494	160.0	1.6	1000	6500	.25	.25	128.0	8.9	.089
SZN4495	180.0	1.4	1300	7000	.25	25	144.0	7.9	.079
SZN4496	200.0	1.2	1500	8000	.25	.25	160.0	7.2	.072

NOTES:

1/ All zener voltages are measured with an automated test set using a 35 msec test time. Longer or shorter test time will have a corresponding effect on the measured value due to heating effects.

2/ Zener impedance is derived from the AC voltage divided by the AC current with RMS value of 10% of DC zener test current superimposed on the test current.

3/ Ratings based on maximum zener voltage of individual units (leaded units).

4/ Figures shown are for a peak sinusoidal surge current of 8.3 msec duration, non-repetitive. The 8.3 msec square pulse rating is 71% of the value shown.

5/ SSDI standard marking consists of a contrasting color cathode dot or band. Part number information is included on packaging labels.

6/ For Ordering Information, Price, and Availability- Contact Factory.

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

8/ Voltages are shown for 5% tolerance devices.