



SSCZXXXHN1 Series

Zener Voltage Regulator

● Description

The SSCZXXXHN1 is packaged in a DFN1006-2L surface mount package that has a power dissipation of 200mW. They are designed to provide voltage regulation protection and are especially attractive in situations where space is at a premium. It is applicable to mobile phones, hand-held portable devices, high-density PC boards.

● Feature

- ✧ Low profile package
- ✧ Ideal for automated placement
- ✧ Low Zener Impedance
- ✧ Steady state power rating of 200mW
- ✧ RoHS compliant transient

● Mechanical data

- ✧ Package: DFN1006-2L
- ✧ Lead finish: 100% matte Sn (Tin)
- ✧ Mounting position: Any
- ✧ Qualified max reflow temperature: 260°C
- ✧ Device meets MSL 3 requirements
- ✧ Pure tin plating: 7 ~ 17 μm
- ✧ Pin flatness: ≤3mil

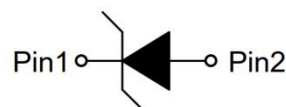
● Absolute maximum rating @T_A=25°C

Parameter	Symbol	Value	Unit
Total Device Dissipation FR-5 Board	P _D	200	mW
Forward Voltage @ I _F = 10mA	V _F	0.9	V
Thermal Resistance, Junction-to-Ambient	R _{ΘJA}	625	°C/W
Storage Temperature	T _{STG}	-55/+150	°C
Operating Temperature	T _J	-55/+150	°C

● PIN configuration



DFN1006-2L (Bottom View)



Circuit diagram



Marking

● Applications

- ✧ Hand held portables
- ✧ Cellular phones
- ✧ High density PC boards



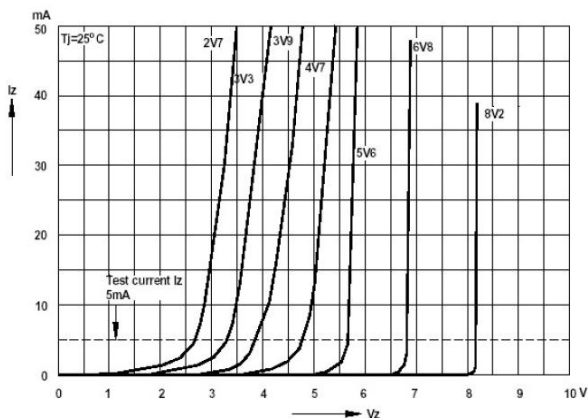
● Electrical Characteristics @T_A=25°C

Device	Marking	Zener Voltage Range				Maximum Zener Impedance			Maximum Reverse Current		Typical Temperature coefficient @ I _{ZTC} =mV/°C		Test Current I _{ZTC}
		V _Z @ I _{ZT}			I _{ZT}	Z _{ZT} @I _{ZT}	Z _{ZK} @I _{ZK}	I _{ZK}	I _R	V _R			
		Nom(V)	Min(V)	Max(V)	mA	Ω		mA	μA	V	Min	Max	mA
SSCZ2V4HN1	WX	2.4	2.2	2.6	5	100	600	1.0	50	1.0	-3.5	0	5
SSCZ2V7HN1	W1	2.7	2.5	2.9	5	100	600	1.0	20	1.0	-3.5	0	5
SSCZ3V0HN1	W2	3.0	2.8	3.2	5	95	600	1.0	10	1.0	-3.5	0	5
SSCZ3V3HN1	W3	3.3	3.1	3.5	5	95	600	1.0	5	1.0	-3.5	0	5
SSCZ3V6HN1	W4	3.6	3.4	3.8	5	90	600	1.0	5	1.0	-3.5	0	5
SSCZ3V9HN1	W5	3.9	3.7	4.1	5	90	600	1.0	3	1.0	-3.5	0	5
SSCZ4V3HN1	W6	4.3	4.0	4.6	5	90	600	1.0	3	1.0	-3.5	0	5
SSCZ4V7HN1	W7	4.7	4.4	5.0	5	80	500	1.0	3	2.0	-3.5	0.2	5
SSCZ5V1HN1	W8	5.1	4.8	5.4	5	60	480	1.0	2	2.0	-2.7	1.2	5
SSCZ5V6HN1	W9	5.6	5.2	6.0	5	40	400	1.0	1	2.0	-2.0	2.5	5
SSCZ6V2HN1	WA	6.2	5.8	6.6	5	10	150	1.0	3	4.0	0.4	3.7	5
SSCZ6V8HN1	WB	6.8	6.4	7.2	5	15	80	1.0	2	4.0	1.2	4.5	5
SSCZ7V5HN1	WC	7.5	7.0	7.9	5	15	80	1.0	1	5.0	2.5	5.3	5
SSCZ8V2HN1	WD	8.2	7.7	8.7	5	15	80	1.0	0.7	5.0	3.2	6.2	5
SSCZ9V1HN1	WE	9.1	8.5	9.6	5	15	100	1.0	0.5	6.0	3.8	7.0	5
SSCZ10VHN1	WF	10	9.4	10.6	5	20	150	1.0	0.2	7.0	4.5	8.0	5
SSCZ11VHN1	WG	11	10.4	11.6	5	20	150	1.0	0.1	8.0	5.4	9.0	5
SSCZ12VHN1	WH	12	11.4	12.7	5	25	150	1.0	0.1	8.0	6.0	10.0	5
SSCZ13VHN1	WI	13	12.4	14.1	5	30	170	1.0	0.1	8.0	7.0	11.0	5
SSCZ15VHN1	WJ	15	13.8	15.6	5	30	200	1.0	0.1	10.5	9.2	13.0	5
SSCZ16VHN1	WK	16	15.3	17.1	5	40	200	1.0	0.1	11.2	10.4	14.0	5
SSCZ18VHN1	WL	18	16.8	19.1	5	45	225	1.0	0.1	12.6	12.4	16.0	5
SSCZ20VHN1	WM	20	18.8	21.2	5	55	225	1.0	0.1	14.0	14.4	18.0	5
SSCZ22VHN1	WN	22	20.8	23.3	5	55	250	1.0	0.1	15.4	16.4	20.0	5
SSCZ24VHN1	WO	24	22.8	25.6	5	70	250	1.0	0.1	16.8	18.4	22.0	5
SSCZ27VHN1	WP	27	25.1	28.9	2	80	300	0.5	0.1	18.9	21.4	25.3	2
SSCZ30VHN1	WQ	30	28.0	32.0	2	80	300	0.5	0.1	21.0	24.4	29.4	2
SSCZ33VHN1	WR	33	31.0	35.0	2	80	325	0.5	0.1	23.1	27.4	33.4	2
SSCZ36VHN1	WS	36	34.0	38.0	2	90	350	0.5	0.1	25.2	30.4	37.4	2
SSCZ39VHN1	WT	39	37.0	41.0	2	130	350	0.5	0.1	27.3	33.4	41.2	2
SSCZ43VHN1	WU	43	40.0	46.0	2	150	375	0.5	0.1	32.0	10.0	12.0	5
SSCZ47VHN1	WV	47	44.0	50.0	2	170	375	0.5	0.1	35.0	10.0	12.0	5
SSCZ51VHN1	WW	51	48.0	54.0	2	180	400	0.5	0.1	38.0	10.0	12.0	5
SSCZ56VHN1	XW	56	52.0	60.0	2	200	425	0.5	0.1	39.0	10.0	12.0	5
SSCZ62VHN1	6E	62	58.0	66.0	2	215	450	0.5	0.2	47.0	10.0	12.0	5
SSCZ68VHN1	6F	68	64.0	72.0	2	240	475	0.5	0.2	52.0	10.0	12.0	5

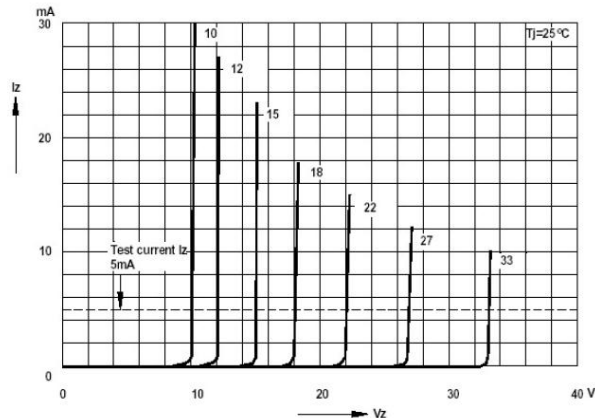


SSCZ75VHN1	6H	75	70.0	79.0	2	255	500	0.5	0.2	57.0	10.0	12.0	5
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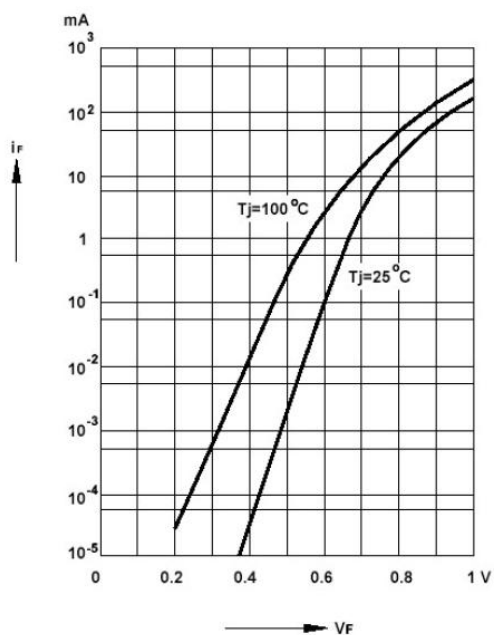
● Typical Performance Characteristics



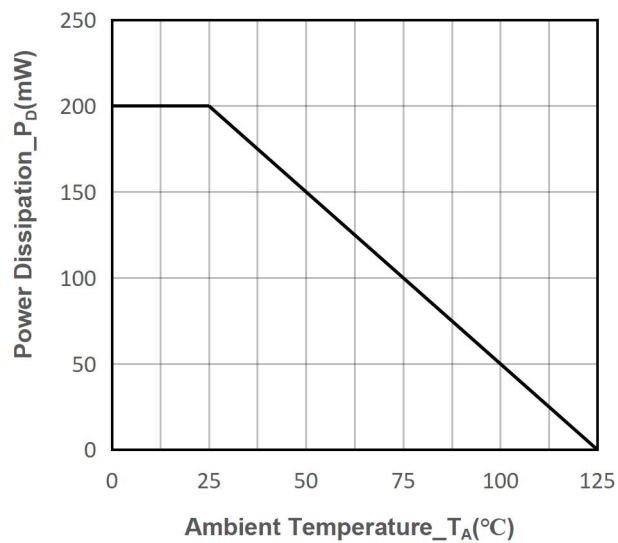
Zener Current vs. Zener Voltage



Zener Current vs. Zener Voltage



Forward Current vs. Forward Voltage



Power Derating vs. Ambient Temperature



● Package Information

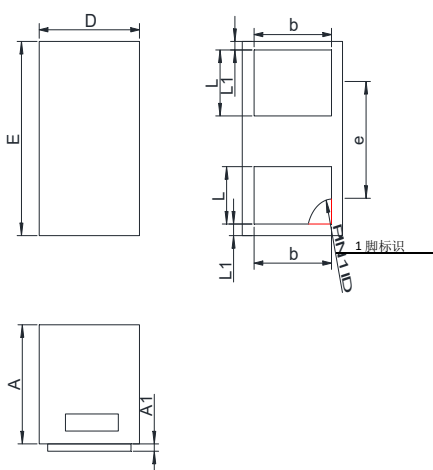
Ordering Information

Device	Package	Qty per Reel	Reel Size
SSCZXXXHN1	DFN1006-2L	10000	7 Inch

Mechanical Data

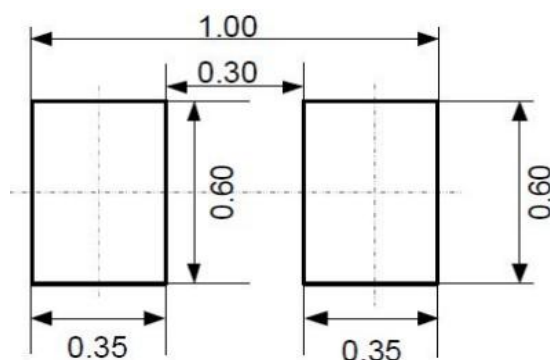
Case: DFN1006-2L

Case Material: Molded Plastic. UL Flammability



DIM	Millimeters	
	Min	Max
A	0.45	0.55
A1	0.00	0.05
D	0.55	0.65
E	0.95	1.05
b	0.45	0.60
e	0.65TYP	
L	0.2	0.3
L1	0.05REF	

Recommended Pad outline





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