

200 mW SOD– 882 Surface Mount

This series of Zener diodes is packaged in a SOD– 882 surface mount package. They are designed to provide voltage regulation protection and are especially attractive in situations where space is at a premium. They are well suited for applications such as cellular phones, hand held portables, and high density PC boards.

Specification Features:

- Standard Zener Breakdown Voltage Range – 2.4 V to 24 V
- Steady State Power Rating of 200 mW
- ESD Rating of Class 3 (>16 kV) per Human Body Model
- We declare that the material of product compliance with RoHS requirements and Halogen free.

Mechanical Characteristics:

CASE: Void-free, transfer-molded, thermosetting plastic
Epoxy Meets UL 94 V–0

LEAD FINISH: 100% Matte Sn (Tin)

MOUNTING POSITION: Any

QUALIFIED MAX REFLOW TEMPERATURE: 260°C

Device Meets MSL 1 Requirements

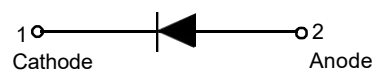
MAXIMUM RATINGS

Rating	Symbol	Max	Unit
Total Device Dissipation FR–5 Board, @ T _A = 25°C	P _D	200	mW
Junction and Storage Temperature Range	T _J , T _{stg}	–65 to +150	°C

Stresses exceeding Maximum Ratings may damage the device. Maximum Ratings are stress ratings only. Functional operation above the Recommended Operating Conditions is not implied. Extended exposure to stresses above the Recommended Operating Conditions may affect device reliability.



SOD882



ORDERING INFORMATION

Device	Package	Shipping
SXNZ8F2V4S Series	SOD882	10000/Tape&Reel

ELECTRICAL CHARACTERISTICS

($T_A = 25^\circ\text{C}$ unless otherwise noted,
 $V_F = 0.9\text{ V Max. @ } I_F = 10\text{ mA}$ for all types)

Symbol	Parameter
V_Z	Reverse Zener Voltage @ I_{ZT}
I_{ZT}	Reverse Current
Z_{ZT}	Maximum Zener Impedance @ I_{ZT}
I_{ZK}	Reverse Current
Z_{ZK}	Maximum Zener Impedance @ I_{ZK}
I_R	Reverse Leakage Current @ V_R
V_R	Reverse Voltage
I_F	Forward Current
V_F	Forward Voltage @ I_F
CV_Z	Maximum Temperature Coefficient of V_Z
C	Max. Capacitance @ $V_R = 0$ and $f = 1\text{ MHz}$

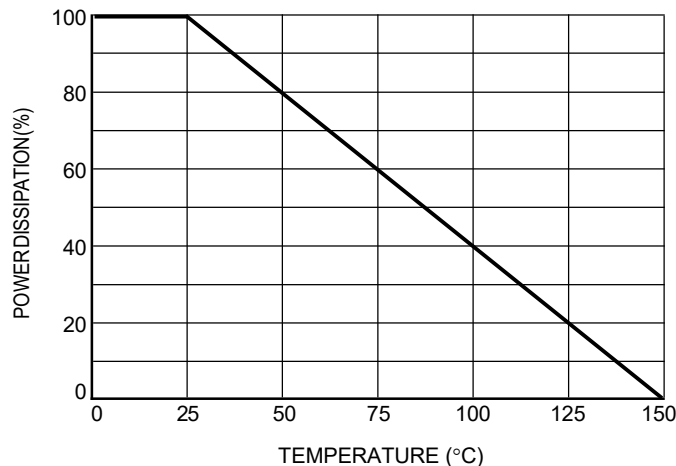
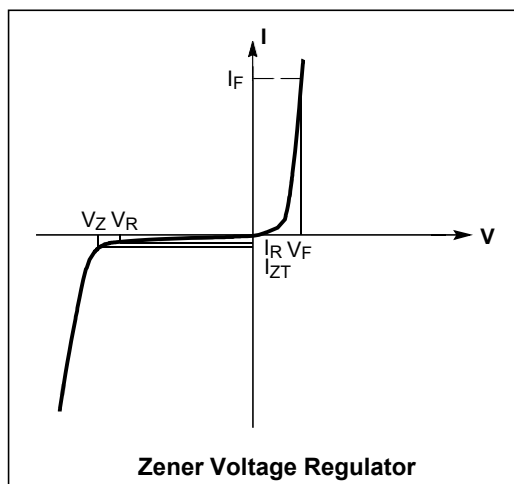


Figure 1. Steady State Power Derating

ELECTRICAL CHARACTERISTICS ($T_A = 25^\circ\text{C}$ unless otherwise noted, $V_F = 0.9\text{ V Max.}$ @ $I_F = 10\text{ mA}$ for all types)

Device	Zener Voltage (Note 1)		Zener Impedance				Leakage Current		V_Z (mV/k) @ I_{ZT}		C @ $V_R = 0$ f = 1 MHz
	V_Z (Volts)		@ I_{ZT}	Z_{ZT} @ I_{ZT}	Z_{ZK} @ I_{ZK}		I_R @ V_R		Min	Max	pF
	Min	Max	mA	fi	fi	mA	μA	Volts			
SXNZ8F2V4S	2.28	2.52	5	100	1000	1	50	1	-3.5	0	210
SXNZ8F2V7S	2.57	2.84	5	100	1000	1	20	1	-3.5	0	210
SXNZ8F3V0S	2.85	3.15	5	100	1000	1	10	1	-3.5	0	210
SXNZ8F3V3S	3.14	3.47	5	100	1000	1	10	1	-3.5	0	210
SXNZ8F3V6S	3.42	3.78	5	100	1000	1	10	1	-3.5	0	210
SXNZ8F3V9S	3.71	4.10	5	100	1000	1	5	1	-3.5	-2.5	210
SXNZ8F4V3S	4.09	4.52	5	100	1000	1	5	1	-3.5	0	210
SXNZ8F4V7S	4.47	4.94	5	100	800	0.5	2	1	-3.5	0.2	150
SXNZ8F5V1S	4.85	5.36	5	80	500	0.5	2	1.5	-2.7	1.2	130
SXNZ8F5V6S	5.32	5.88	5	60	200	0.5	1	2.5	-2.0	2.5	115
SXNZ8F6V2S	5.89	6.51	5	60	100	0.5	1	3	0.4	3.7	110
SXNZ8F6V8S	6.46	7.14	5	40	60	0.5	0.5	3.5	1.2	4.5	105
SXNZ8F7V5S	7.13	7.88	5	30	60	0.5	0.5	4	2.5	5.3	100
SXNZ8F8V2S	7.79	8.61	5	30	60	0.5	0.5	5	3.2	6.2	90
SXNZ8F9V1S	8.65	9.56	5	30	60	0.5	0.5	6	3.8	7	80
SXNZ8F10VS	9.50	10.50	5	30	60	0.5	0.1	7	4.5	8	80
SXNZ8F11VS	10.45	11.55	5	30	60	0.5	0.1	8	5.4	9	80
SXNZ8F12VS	11.40	12.60	5	30	80	0.5	0.1	9	6	10	80
SXNZ8F13VS	12.35	13.65	5	37	80	0.5	0.1	10	7	11	75
SXNZ9F15VS	14.25	15.75	5	42	80	0.5	0.1	11	9.2	13	70
SXNZ8F16VS	15.20	16.80	5	50	80	0.5	0.1	12	10.4	14	65
SXNZ8F18VS	17.10	18.90	5	50	80	0.5	0.1	14	12.4	16	60
SXNZ8F20VS	19.00	21.00	5	55	100	0.5	0.1	15.4	14.4	18	55
SXNZ8F22VS	20.90	23.10	5	55	100	0.5	0.1	16.8	15.4	20	55
SXNZ8F24VS	22.80	25.20	5	70	120	0.5	0.1	18.9	16.8	22	50

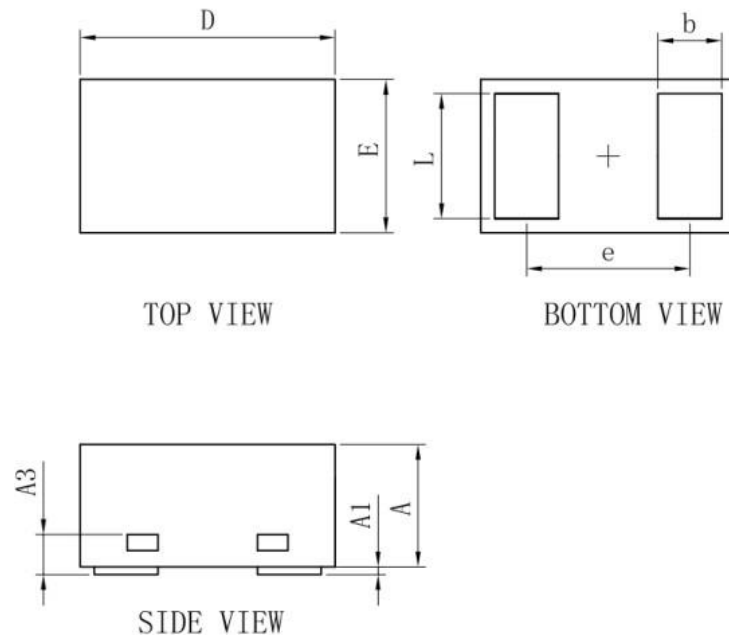
*Rotated 90°.

**Rotated 270°.

1. Zener voltage is measured with a pulse test current I_Z at an ambient temperature of 25°C.

OUTLINE AND DIMENSIONS

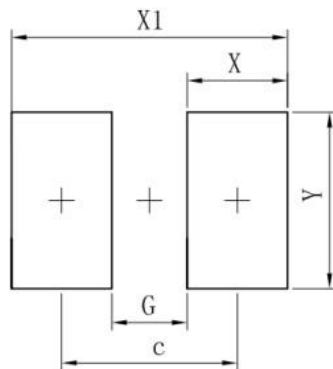
SOD882



SOD882			
Dim	Min	Typ	Max
D	0.95	1.00	1.05
E	0.55	0.60	0.65
e	-	0.64	-
L	0.44	0.49	0.54
b	0.20	0.25	0.30
A	0.43	0.48	0.53
A1	0	-	0.05
A3	0.127REF.		
All Dimensions in mm			

SOLDERING FOOTPRINT

SOD882



Dimensions	(mm)
c	0.70
G	0.30
X	0.40
X1	1.10
Y	0.70

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