

Specification Features:

- High Speed Switching
- Small Surface Mounting Type (DFN1006)
- RoHS Compliant
- Green EMC
- Matte Tin(Sn) Lead Finish
- Band Indicates Cathode
- Weight: approx. 0.001g

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



SOD882 Package



Absolute Maximum Ratings $T_A = 25^\circ\text{C}$ unless otherwise noted

Symbol	Parameter	Value	Units
P_D	Power Dissipation	200	mW
T_{STG}	Storage Temperature Range	-55 to +150	°C
T_J	Operating Junction Temperature	+150	°C

These ratings are limiting values above which the serviceability of the diode may be impaired.

Electrical Characteristics $T_A = 25^\circ\text{C}$ unless otherwise noted

Device Type	$V_Z @ I_{ZT}$ (Volts)			I_{ZT} (mA)	$Z_{ZT} @ I_{ZT}$ (Ω) Max	I_{ZK} (mA)	$Z_{ZK} @ I_{ZK}$ (Ω) Max	$I_R @ V_R$ (μA) Max	V_R (Volts)
	Min	Nom	Max						
TPZ2V0C-1006	1.90	2.0	2.10	5	100	1	564	120	0.5
TPZ2V2C-1006	2.09	2.2	2.31	5	100	1	564	120	0.7
TPZ2V4C-1006	2.2	2.4	2.6	5	100	1	1000	50	1
TPZ2V7C-1006	2.5	2.7	2.9	5	100	1	1000	20	1
TPZ3V0C-1006	2.8	3.0	3.2	5	100	1	1000	10	1
TPZ3V3C-1006	3.1	3.3	3.5	5	95	1	1000	5	1
TPZ3V6C-1006	3.4	3.6	3.8	5	90	1	1000	5	1
TPZ3V9C-1006	3.7	3.9	4.1	5	90	1	1000	3	1
TPZ4V3C-1006	4.0	4.3	4.6	5	90	1	1000	3	1
TPZ4V7C-1006	4.4	4.7	5.0	5	80	1	800	3	2
TPZ5V1C-1006	4.8	5.1	5.4	5	60	1	500	2	2
TPZ5V6C-1006	5.2	5.6	6.0	5	40	1	200	1	2
TPZ6V2C-1006	5.8	6.2	6.6	5	10	1	100	3	4
TPZ6V8C-1006	6.4	6.8	7.2	5	15	1	160	2	4
TPZ7V5C-1006	7.0	7.5	7.9	5	15	1	160	1	5
TPZ8V2C-1006	7.7	8.2	8.7	5	15	1	160	0.7	5
TPZ9V1C-1006	8.5	9.1	9.6	5	15	1	160	0.2	7
TPZ10VC-1006	9.4	10	10.6	5	20	1	160	0.1	8
TPZ11VC-1006	10.4	11	11.6	5	20	1	160	0.1	8
TPZ12VC-1006	11.4	12	12.7	5	25	1	80	0.1	8
TPZ13VC-1006	12.4	13	14.1	5	30	1	80	0.1	8

Electrical Characteristics $T_A = 25^\circ\text{C}$ unless otherwise noted

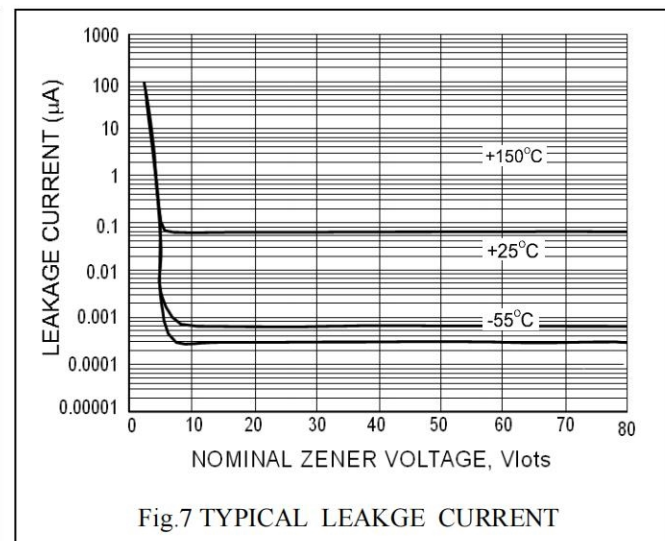
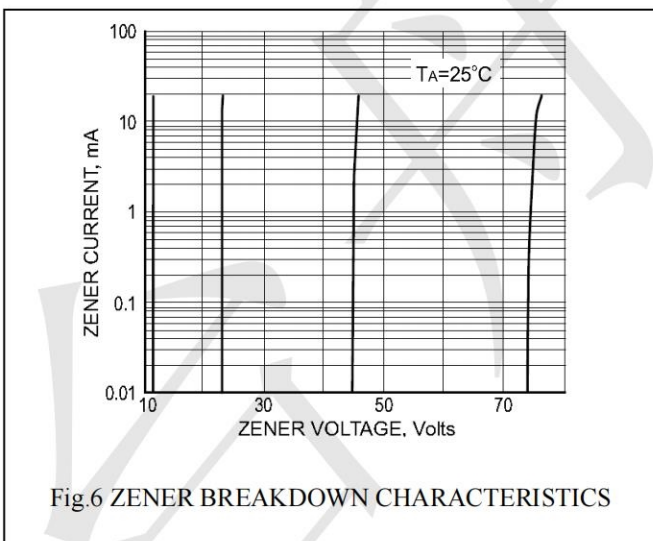
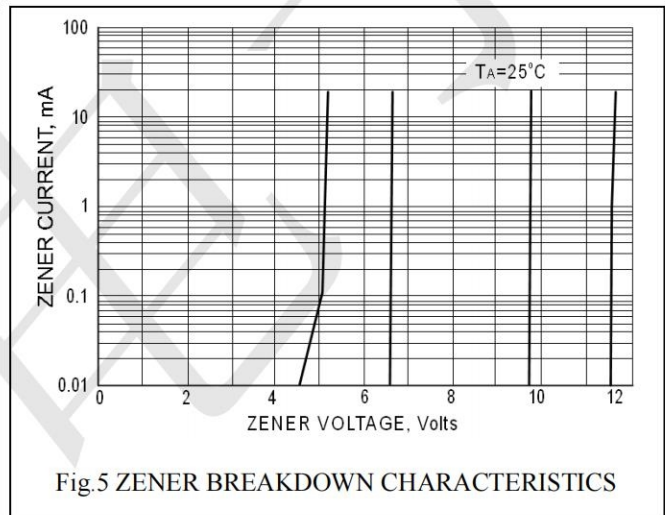
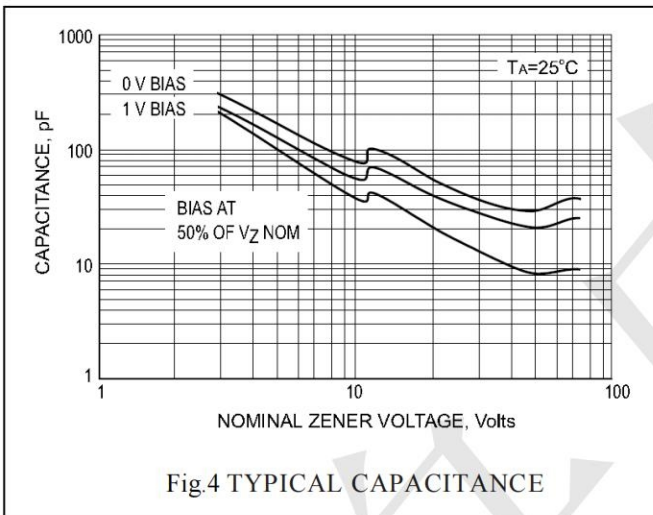
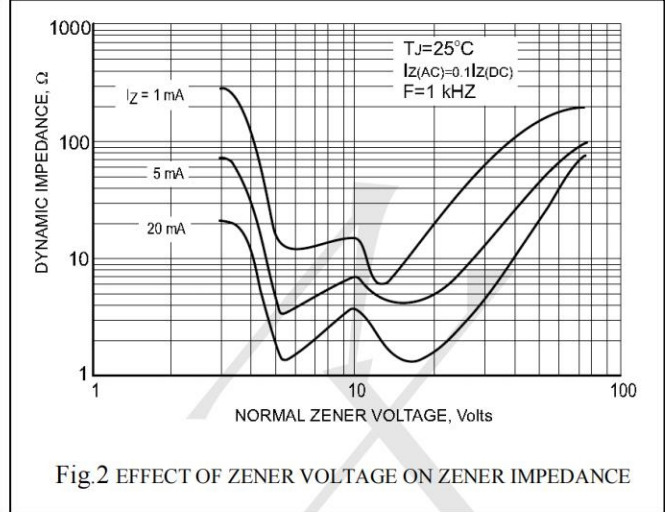
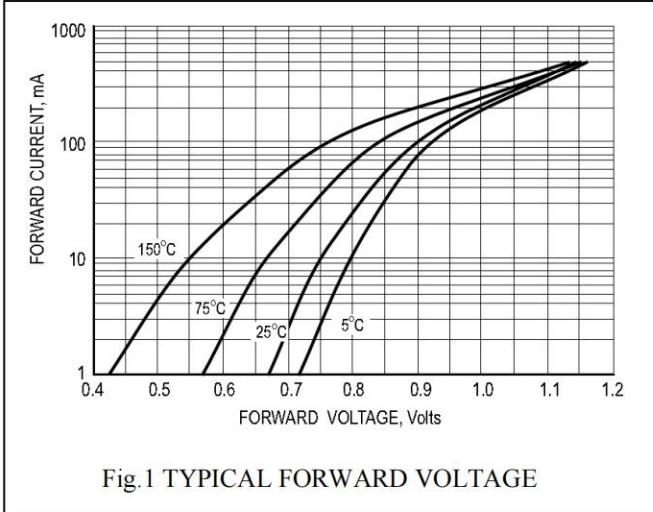
Device Type	$V_Z @ I_{ZT}$ (Volts)			I_{ZT} (mA)	$Z_{ZT} @ I_{ZT}$ (Ω) Max	I_{ZK} (mA)	$Z_{ZK} @ I_{ZK}$ (Ω) Max	$I_R @ V_R$ (μA) Max	V_R (Volts)
	Min	Nom	Max						
TPZ15VC-1006	14.3	15	15.8	5	30	1	80	0.05	10.5
TPZ16VC-1006	15.3	16	17.1	5	40	1	80	0.05	11.2
TPZ18VC-1006	16.8	18	19.1	5	45	1	80	0.05	12.6
TPZ20VC-1006	18.8	20	21.2	5	55	1	100	0.05	14
TPZ22VC-1006	20.8	22	23.3	5	55	1	100	0.05	15.4
TPZ24VC-1006	22.8	24	25.6	5	70	1	120	0.05	16.8
TPZ27VC-1006	25.1	27	28.9	2	80	0.5	300	0.05	18.9
TPZ30VC-1006	28	30	32	2	80	0.5	300	0.05	21
TPZ33VC-1006	31	33	35	2	80	0.5	300	0.05	23.2
TPZ36VC-1006	34	36	38	2	90	0.5	500	0.05	25.2
TPZ39VC-1006	37	39	41	2	130	0.5	500	0.05	27.3
TPZ43VC-1006	40	43	46	2	150	0.5	500	0.05	30.1
TPZ47VC-1006	44	47	50	2	170	0.5	500	0.05	32.9
TPZ51VC-1006	48	51	54	2	180	0.5	500	0.05	35.7
TPZ56VC-1006	52	56	60	2	200	0.5	500	0.05	39.2
TPZ62VC-1006	58	62	66	2	215	0.5	500	0.05	43.4
TPZ68VC-1006	64	68	72	2	240	0.5	500	0.05	47.6
TPZ75VC-1006	70	75	79	2	255	0.5	500	0.05	52.5

V_F Forward Voltage = 1 V Maximum @ $I_F = 10$ mA for all types

Notes:

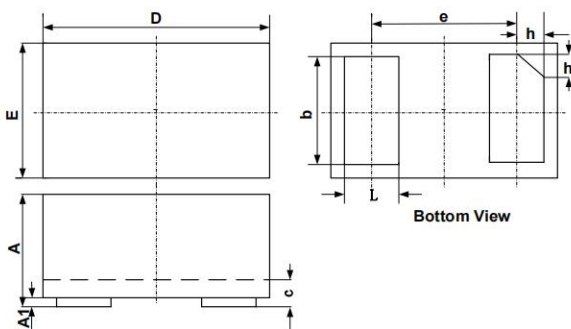
- The Zener Voltage (V_Z) is tested under pulse condition of 10ms.
- For detailed information on price, availability and delivery of nominal zener voltages between the voltages shown and tighter voltage tolerances, contact your nearest Tak Cheong Electronics representative.
- The zener impedance is derived from the 60-cycle ac voltage, which results when an ac current having an rms value equal to 10% of the dc zener current (I_{ZT} or I_{ZK}) is superimposed to I_{ZT} or I_{ZK} .

RATING AND CHARACTERISTIC CURVES



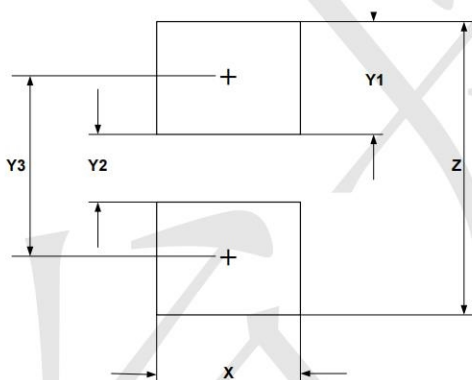


DFN1006-2 Package Outline Drawing (0402)



SYM	DIMENSIONS					
	MILLIMETERS			INCHES		
	MIN	NOM	MAX	MIN	NOM	MAX
A	0.45	0.50	0.55	0.018	0.020	0.022
A1	0.00	0.02	0.05	0.000	0.001	0.002
b	0.45	0.50	0.55	0.018	0.020	0.022
c	0.12	0.15	0.18	0.005	0.006	0.007
D	0.95	1.00	1.05	0.037	0.039	0.041
e	0.65 BSC			0.026 BSC		
E	0.55	0.60	0.65	0.022	0.024	0.026
L	0.20	0.25	0.30	0.008	0.010	0.012
h	0.07	0.12	0.17	0.003	0.005	0.007

Suggested Land Pattern



SYM	DIMENSIONS	
	MILLIMETERS	INCHES
X	0.60	0.024
Y1	0.50	0.020
Y2	0.30	0.012
Y3	0.80	0.032
Z	1.30	0.052