

### 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

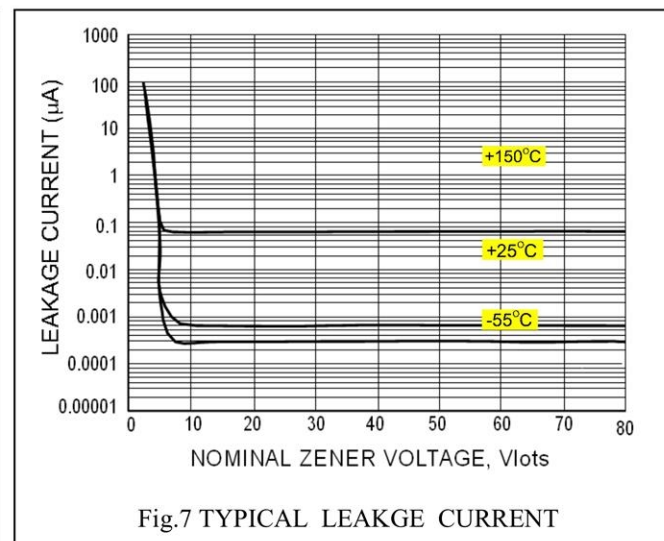
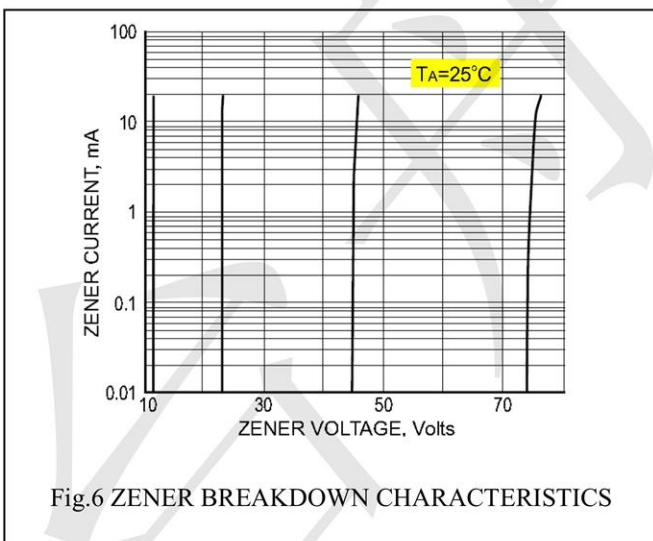
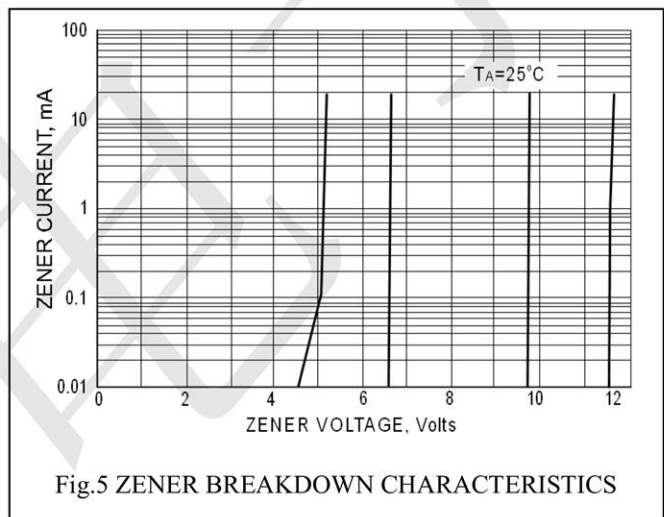
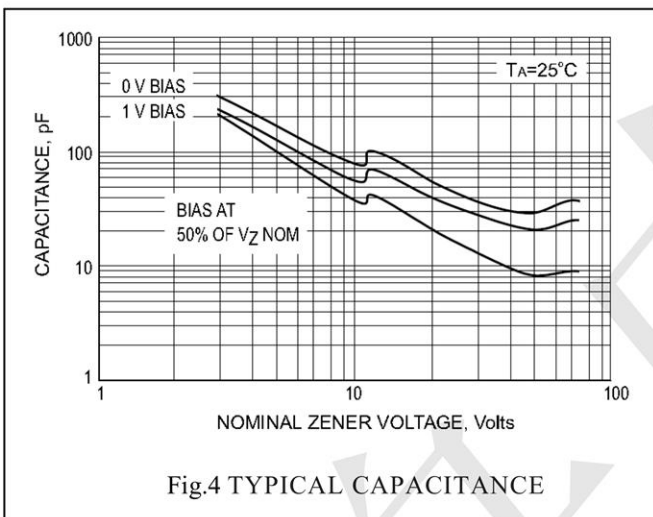
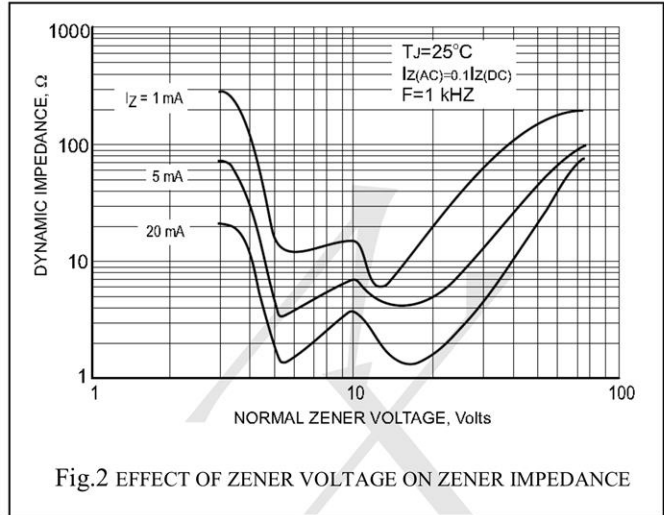
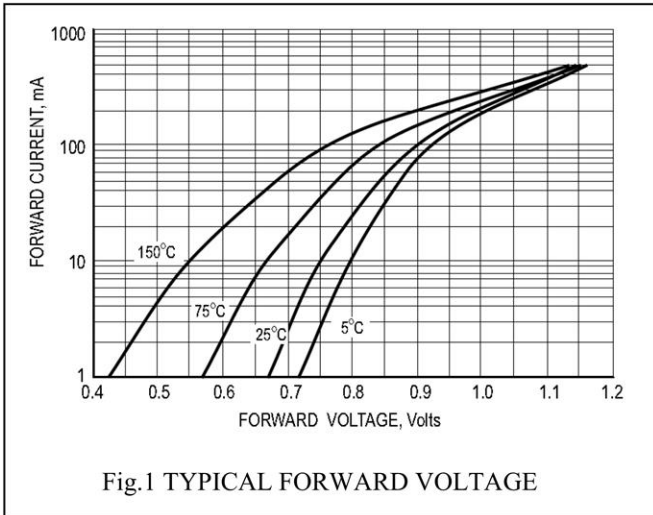
Device Type	$V_Z @ I_{ZT}$ (Volts)			$I_{ZT}$ (mA)	$Z_{ZT} @ I_{ZT}$ (W) Max	$I_{ZK}$ (mA)	$Z_{ZK} @ I_{ZK}$ (W) Max	$I_R @ V_R$ (mA) Max	$V_R$ (Volts)
	Min	Nom	Max						
B6ZT52C3V6LP	34	36	38	2	90	0.5	500	0.05	25.2

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

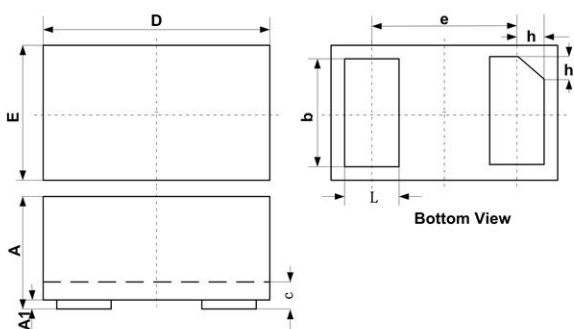
### Notes:

1. The Zener Voltage ( $V_Z$ ) is tested under pulse condition of 10mS.
2. 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.
3. 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**

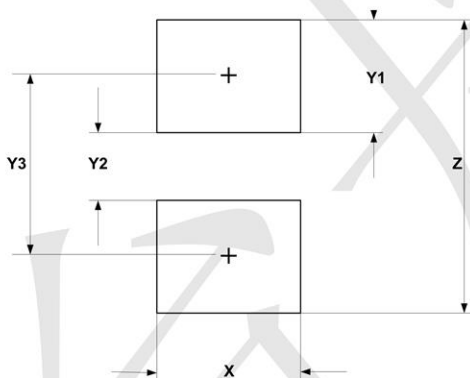


**DFN1006-2 Package Outline Drawing (0402)**



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