ELECTRICAL CHARACTERISTICS

(Ratings at T_A=25°C ambient temperature unless otherwise specified,
and V_F Forward Voltage = 1V Maximum @ I_F = 10 mA for all part numbers)

Device type	Marking code	Zener voltage range				Maximum zener impedance			Maximum reverse current	
		V_Z @ I_{ZT}			I_{ZT}	Z_{ZT} @ I_{ZT}	Z_{ZK} @ I_{ZK}	I_{ZK}	I_R	V_R
		Min (V)	Nom (V)	Max (V)	mA	Ohm		mA	μA	V
BZT52B2V4	2V4B	2.35	2.40	2.45	5	100	564	1	45	1
BZT52B2V7	2V7B	2.65	2.70	2.75	5	100	564	1	18	1
BZT52B3V0	3V0B	2.94	3.00	3.06	5	100	564	1	9	1
BZT52B3V3	3V3B	3.23	3.30	3.37	5	95	564	1	4.5	1
BZT52B3V6	3V6B	3.53	3.60	3.67	5	90	564	1	4.5	1
BZT52B3V9	3V9B	3.82	3.90	3.98	5	90	564	1	2.7	1
BZT52B4V3	4V3B	4.21	4.30	4.39	5	90	564	1	2.7	1
BZT52B4V7	4V7B	4.61	4.70	4.79	5	80	470	1	2.7	2.0
BZT52B5V1	5V1B	5.00	5.10	5.20	5	60	451	1	1.8	2.0
BZT52B5V6	5V6B	5.49	5.60	5.71	5	40	376	1	0.9	2.0
BZT52B6V2	6V2B	6.08	6.20	6.32	5	10	141	1	2.7	4.0
BZT52B6V8	6V8B	6.66	6.80	6.94	5	15	75	1	1.8	4.0
BZT52B7V5	7V5B	7.35	7.50	7.65	5	15	75	1	0.9	5.0
BZT52B8V2	8V2B	8.04	8.20	8.36	5	15	75	1	0.63	5.0
BZT52B9V1	9V1B	8.92	9.10	9.28	5	15	94	1	0.45	6.0
BZT52B10	10VB	9.80	10.00	10.20	5	20	141	1	0.18	7.0
BZT52B11	11VB	10.78	11.00	11.22	5	20	141	1	0.09	8.0
BZT52B12	12VB	11.76	12.00	12.24	5	25	141	1	0.09	8.0
BZT52B13	13VB	12.74	13.00	13.26	5	30	160	1	0.09	8.0
BZT52B15	15VB	14.70	15.00	15.30	5	30	188	1	0.045	10.5
BZT52B16	16VB	15.68	16.00	16.32	5	40	188	1	0.045	11.2
BZT52B18	18VB	17.64	18.00	18.36	5	45	212	1	0.045	12.6
BZT52B20	20VB	19.60	20.00	20.40	5	55	212	1	0.045	14.0
BZT52B22	22VB	21.56	22.00	22.44	5	55	235	1	0.045	15.4
BZT52B24	24VB	23.52	24.00	24.48	5	70	235	1	0.045	16.8
BZT52B27	27VB	26.46	27.00	27.54	2	80	282	0.5	0.045	18.9
BZT52B30	30VB	29.40	30.00	30.60	2	80	282	0.5	0.045	21.0
BZT52B33	33VB	32.34	33.00	33.66	2	80	306	0.5	0.045	23.0
BZT52B36	36VB	35.28	36.00	36.72	2	90	329	0.5	0.045	25.2
BZT52B39	39VB	38.22	39.00	39.78	2	130	329	0.5	0.045	27.3
BZT52B43	43VB	42.14	43.00	43.86	2	150	353	0.5	0.045	30.1
BZT52B47	47VB	46.06	47.00	47.94	2	170	353	0.5	0.045	33.0
BZT52B51	51VB	49.98	51.00	52.02	2	180	376	0.5	0.045	35.7
BZT52B56	56VB	54.88	56.00	57.12	2	200	400	0.5	0.045	39.2
BZT52B62	62VB	60.76	62.00	63.24	2	215	423	0.5	0.045	43.4
BZT52B68	68VB	66.64	68.00	69.36	2	240	447	0.5	0.045	47.6
BZT52B75	75VB	73.50	75.00	76.50	2	255	470	0.5	0.045	52.5

Notes： 1. The Zener Voltage (V_Z) is tested under pulse condition of 10ms.

2. The device numbers listed have a standard tolerance on the normal zener voltage of ±2%.

3. For detailed information on price, availability and delivery of normal zener voltages between the voltages shown and tighter voltage tolerances, contact your nearest Taiwan Semiconductor representative.

4. 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 is superimposed to I_{ZT} or I_{ZK}.

RATINGS AND CHARACTERISTICS CURVES

(T_A=25°C unless otherwise noted)

Fig. 1 Typical Forward Characteristics

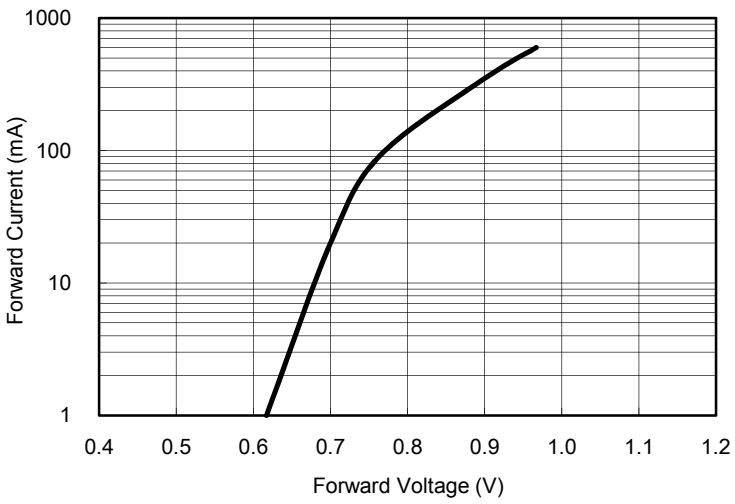


Fig. 2 Zener Breakdown Characteristics

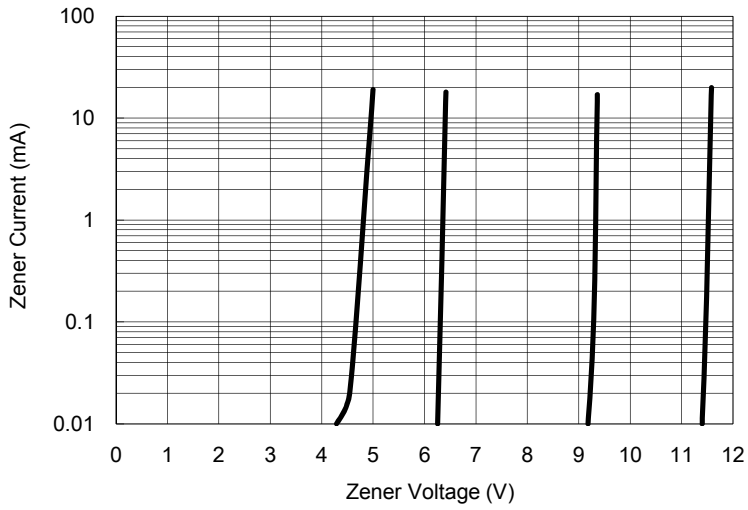


Fig. 3 Zener Breakdown Characteristics

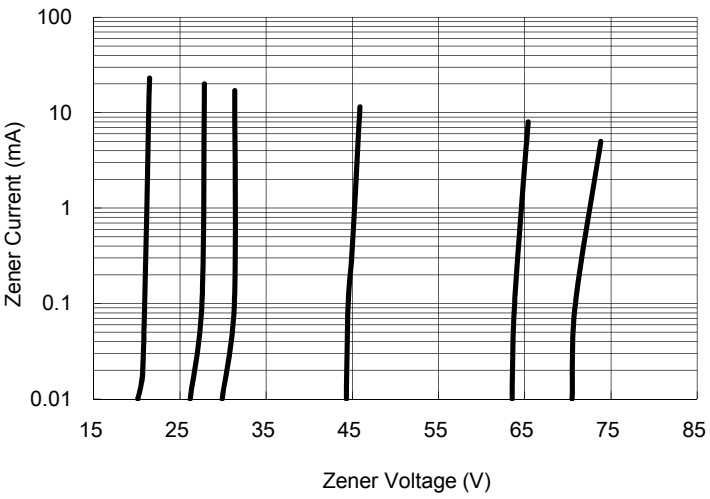


Fig. 4 Admissible Power Dissipation Curve

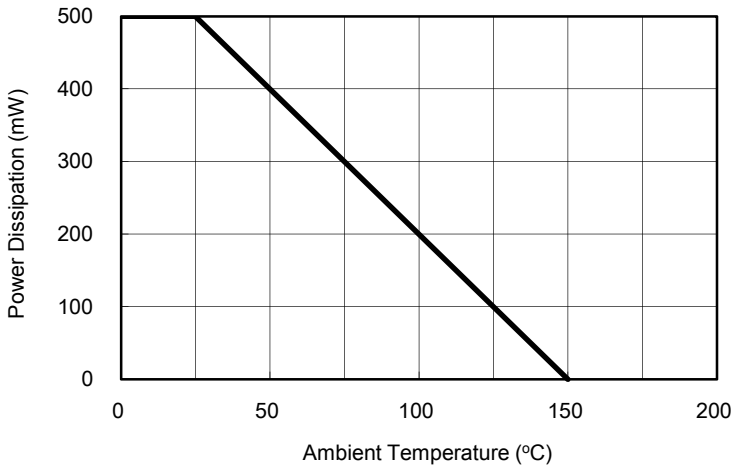


Fig. 5 Typical Capacitance

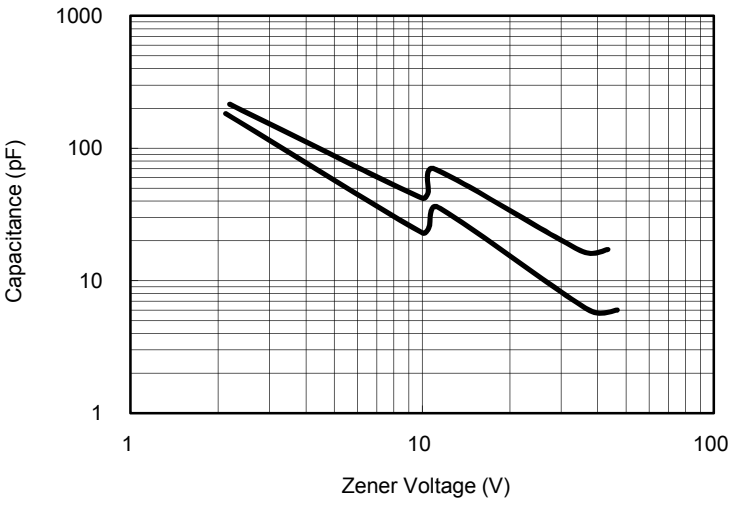
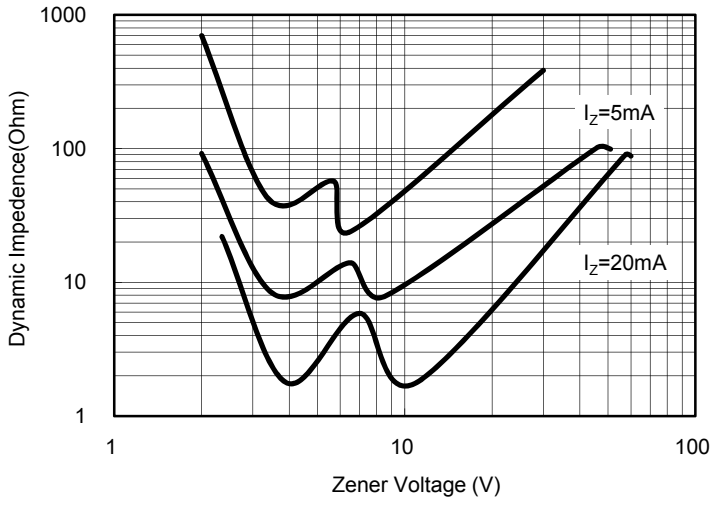


Fig. 6 Effect of Zener Voltage on Impedence



ORDERING INFORMATION				
PART NO.	PACKING CODE	PACKING CODE SUFFIX (*)	PACKAGE	PACKING
BZT52Bxxx (Note 1)	RH	G	SOD-123F	3K / 7" Reel

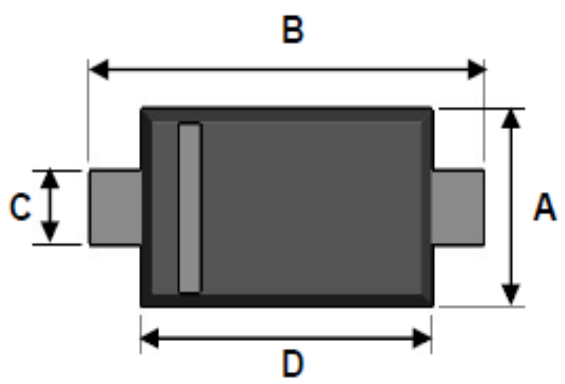
Note 1: "xxx" is device code from "2V4" - "75", detail could follow the previous page

*: Optional available, packing code with suffix "G" means green compound (halogen free)

EXAMPLE				
EXAMPLE P/N	PART NO.	PACKING CODE	PACKING CODE SUFFIX	DESCRIPTION
BZT52B2V4 RHG	BZT52B2V4	RH	G	Green compound

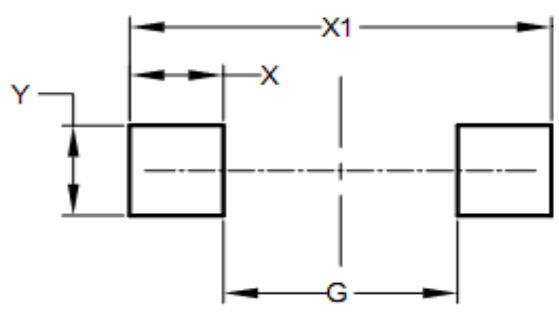
DIMENSIONS

SOD-123F



DIM.	Unit (mm)		Unit (inch)	
	Min	Max	Min	Max
A	1.50	1.70	0.059	0.067
B	3.30	3.90	0.130	0.154
C	0.50	0.70	0.020	0.028
D	2.50	2.70	0.098	0.106
E	0.80	1.15	0.031	0.045
F	0.05	0.20	0.002	0.008

SUGGESTED PAD LAYOUT



DIM.	Unit (mm)	Unit (inch)
	Typ.	Typ.
G	2.50	0.098
X	0.80	0.031
X1	4.10	0.161
Y	0.80	0.031

Notice

Specifications of the products displayed herein are subject to change without notice. TSC or anyone on its behalf, assumes no responsibility or liability for any errors or inaccuracies.

Information contained herein is intended to provide a product description only. No license, express or implied, to any intellectual property rights is granted by this document. Except as provided in TSC's terms and conditions of sale for such products, TSC assumes no liability whatsoever, and disclaims any express or implied warranty, relating to sale and/or use of TSC products including liability or warranties relating to fitness for a particular purpose, merchantability, or infringement of any patent, copyright, or other intellectual property right.

The products shown herein are not designed for use in medical, life-saving, or life-sustaining applications. Customers using or selling these products for use in such applications do so at their own risk and agree to fully indemnify TSC for any damages resulting from such improper use or sale.

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Taiwan Semiconductor:

BZT52B62 BZT52B68 BZT52B75 BZT52B10 BZT52B11 BZT52B12 BZT52B13 BZT52B15 BZT52B16 BZT52B18 BZT52B20 BZT52B22 BZT52B24 BZT52B27 BZT52B2V4 BZT52B2V7 BZT52B30 BZT52B33 BZT52B36 BZT52B39 BZT52B3V0 BZT52B3V3 BZT52B3V6 BZT52B3V9 BZT52B43 BZT52B47 BZT52B4V3 BZT52B4V7 BZT52B51 BZT52B56 BZT52B5V1 BZT52B5V6 BZT52B6V2 BZT52B6V8 BZT52B7V5 BZT52B8V2 BZT52B9V1 BZT52B68 RH BZT52B62 RH BZT52B75 RH BZT52B5V6 RHG BZT52B56 RHG BZT52B11 RHG BZT52B39 RHG BZT52B2V7 RHG BZT52B12 RHG BZT52B6V8 RHG BZT52B24 RHG BZT52B9V1 RHG BZT52B62 RHG BZT52B16 RHG BZT52B2V4 RHG BZT52B22 RHG BZT52B4V7 RHG BZT52B8V2 RHG BZT52B4V3 RHG BZT52B6V2 RHG BZT52B27 RHG BZT52B18 RHG BZT52B51 RHG BZT52B36 RHG BZT52B68 RHG BZT52B3V6 RHG BZT52B7V5 RHG BZT52B13 RHG BZT52B3V9 RHG BZT52B20 RHG BZT52B3V3 RHG BZT52B15 RHG BZT52B10 RHG BZT52B75 RHG BZT52B43 RHG BZT52B30 RHG BZT52B47 RHG BZT52B3V0 RHG BZT52B5V1 RHG BZT52B33 RHG BZT52B4V3 RH BZT52B5V6 RH BZT52B16 RH BZT52B9V1 RH BZT52B56 RH BZT52B2V4 RH BZT52B22 RH BZT52B3V3 RH BZT52B10 RH BZT52B6V2 RH BZT52B30 RH BZT52B13 RH BZT52B43 RH BZT52B5V1 RH BZT52B33 RH BZT52B24 RH BZT52B12 RH BZT52B18 RH BZT52B27 RH BZT52B3V6 RH BZT52B2V7 RH BZT52B51 RH BZT52B11 RH