

DATA SHEET

BZT52-B2V4S SERIES

SURFACE MOUNT ZENER DIODE

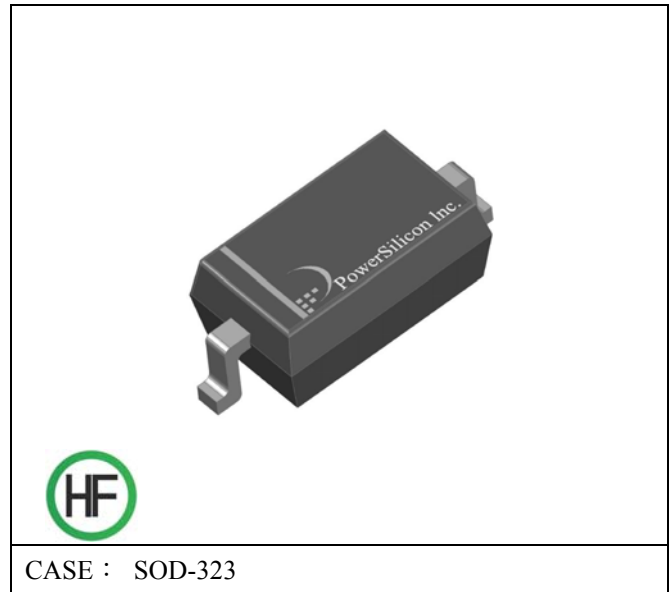
VOLTAGE 2.4~75 Volts **POWER** 200 mW

FEATURES

- PLANAR DIE CONSTRUCTION
- 200mW POWER DISSIPATION
- ZENER VOLTAGES FROM 2.4~75V
- IDEALLY SUITED FOR AUTOMATED ASSEMBLY PROCESSES
- LEAD FREE AND HALOGEN FREE

MECHANICAL DATA

- CASE:SOD-323,MOLDED PLASTIC
- TERMINALS:SOLDERABLE PER MIL-STD-202, METHOD 208
- POLARITY:SEE DIAGRAM BELOW
- APPROX. WEIGHT: 0.004 GRAMS
- MOUNTING POSITION:ANY



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

RATINGS AT 25°C AMBIENT TEMPERATURE UNLESS OTHERWISE SPECIFIED.

PARAMETER	SYMBOL	VALUE	UNITS
MAXIMUM FORWARD VOLTAGE DROP AT $I_F=10\text{mA}$	V_F	0.9	V
MAXIMUM POWER DISSIPATION AT 25°C (NOTE 1)	P_D	200	mW
JUNCTION TEMPERATURE	T_J	-65 TO +150	°C
STORAGE TEMPERATURE RANGE	T_{STG}	-65 TO +150	°C
THERMAL RESISTANCE, JUNCTION TO AMBIENT AIR	$R_{\theta JA}$	625	°C/W

NOTE: 1. VALID PROVIDED THAT DEVI-CE TERMINALS ARE KEPT AT AMBIENT TEMPERATURE.

Part Number	Nominal Zener Voltage			Max. Zener Impedance				Max Reverse Leakage Current	
	$V_Z @ I_{ZT}$			$Z_{ZT} @ I_{ZT}$		$Z_{ZK} @ I_{ZK}$		$I_R @ V_R$	
	Nom. V	Min. V	Max. V	Ω	mA	Ω	mA	μA	V
200 mWatts Zener Diodes									
BZT52-B2V4S	2.4	2.35	2.45	94	5	564	1.00	45	1
BZT52-B2V7S	2.7	2.65	2.75	94	5	564	1.00	18	1
BZT52-B3V0S	3.0	2.94	3.06	89	5	564	1.00	9	1
BZT52-B3V3S	3.3	3.23	3.37	89	5	564	1.00	4.5	1
BZT52-B3V6S	3.6	3.53	3.67	84	5	564	1.00	4.5	1
BZT52-B3V9S	3.9	3.82	3.98	84	5	564	1.00	2.7	1
BZT52-B4V3S	4.3	4.21	4.39	84	5	564	1.00	2.7	1
BZT52-B4V7S	4.7	4.61	4.79	80	5	470	1.00	2.7	2
BZT52-B5V1S	5.1	5.00	5.20	60	5	451	1.00	1.8	2
BZT52-B5V6S	5.6	5.49	5.71	40	5	376	1.00	0.9	2
BZT52-B6V2S	6.2	6.08	6.32	10	5	141	1.00	2.7	4
BZT52-B6V8S	6.8	6.66	6.94	15	5	75	1.00	1.8	4
BZT52-B7V5S	7.5	7.35	7.65	15	5	75	1.00	0.9	5
BZT52-B8V2S	8.2	8.04	8.36	15	5	75	1.00	0.63	5
BZT52-B9V1S	9.1	8.92	9.28	15	5	94	1.00	0.45	6
BZT52-B10S	10	9.80	10.20	20	5	141	1.00	0.18	7
BZT52-B11S	11	10.78	11.22	20	5	141	1.00	0.09	8
BZT52-B12S	12	11.76	12.24	25	5	141	1.00	0.09	8
BZT52-B13S	13	12.74	13.26	30	5	160	1.00	0.09	8
BZT52-B15S	15	14.70	15.30	30	5	188	1.00	0.045	10.5
BZT52-B16S	16	15.68	16.32	40	5	188	1.00	0.045	11.2
BZT52-B18S	18	17.64	18.36	45	5	212	1.00	0.045	12.6
BZT52-B20S	20	19.60	20.40	55	5	212	1.00	0.045	14.0
BZT52-B22S	22	21.56	22.44	55	5	235	1.00	0.045	15.4
BZT52-B24S	24	23.52	24.48	70	5	235	1.00	0.045	16.8
BZT52-B27S	27	26.46	27.54	80	2	282	0.50	0.045	18.9
BZT52-B30S	30	29.40	30.60	80	2	282	0.50	0.045	21.0
BZT52-B33S	33	32.34	33.66	80	2	306	0.50	0.045	23.0
BZT52-B36S	36	35.28	36.72	90	2	329	0.50	0.045	25.2
BZT52-B39S	39	38.22	39.78	130	2	329	0.50	0.045	27.3
BZT52-B43S	43	42.14	43.86	141	5	353	0.50	0.045	30.1
BZT52-B47S	47	46.06	47.94	160	5	353	0.50	0.045	33.0
BZT52-B51S	51	49.98	52.02	169	5	376	0.50	0.045	35.7
BZT52-B56S	56	54.88	57.12	188	5	400	0.50	0.045	39.2
BZT52-B62S	62	60.76	63.24	202	5	423	0.50	0.045	43.4
BZT52-B68S	68	66.64	69.36	226	5	447	0.50	0.045	47.6
BZT52-B75S	75	73.50	76.50	240	5	470	0.50	0.045	52.5

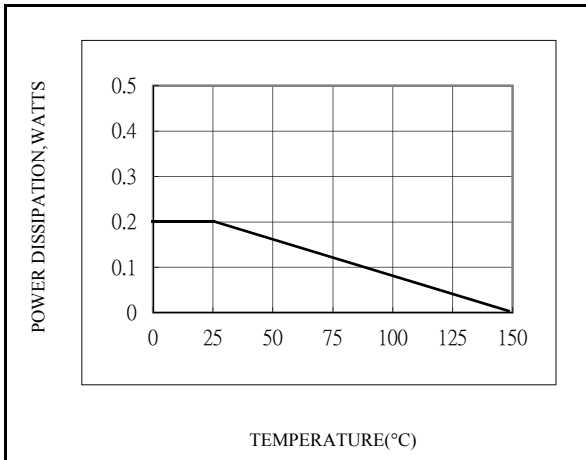


Fig.1-STEADY STATE POWER DERATING

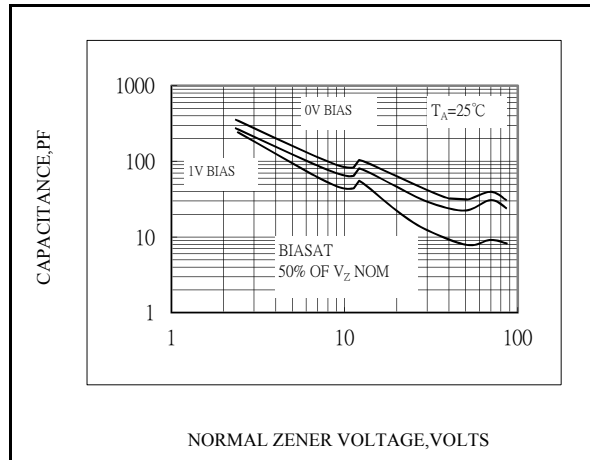


Fig.2-TYPICAL CAPACITANCE

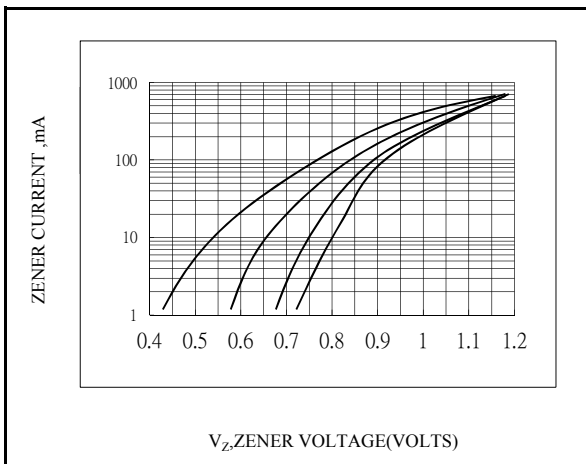


Fig.3 TYPICAL FORWARD VOLTAGE

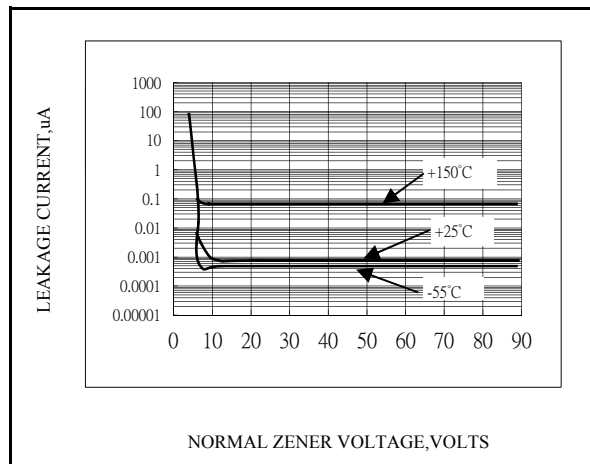
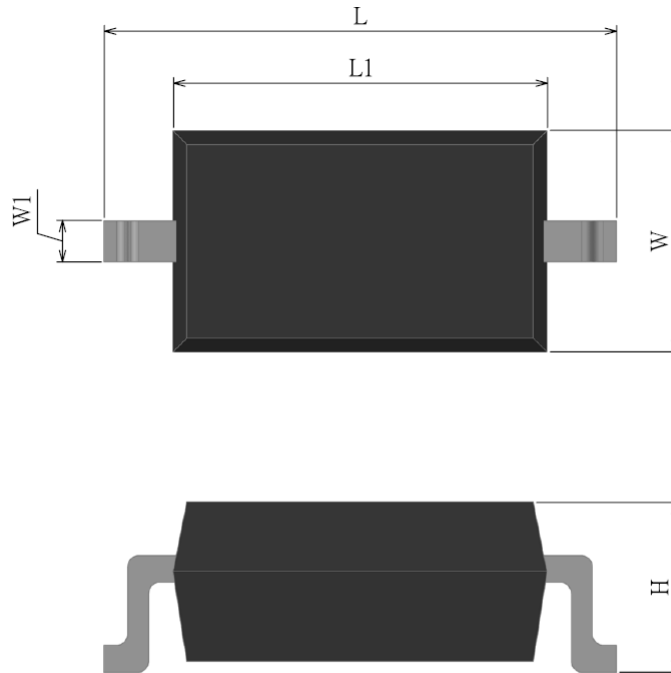


Fig.4-TYPICAL LEAKAGE CURRENT

SOD-323 DIMENSION



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
L	2.50	2.70	0.098	0.106
L1	1.60	1.80	0.063	0.071
W	1.20	1.40	0.047	0.055
W1	0.25	0.35	0.010	0.014
H	0.80	1.00	0.031	0.039