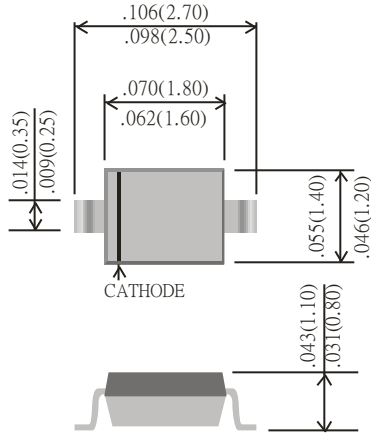


### 200mW SURFACE MOUNT ZENER DIODES



CASE : SOD-323

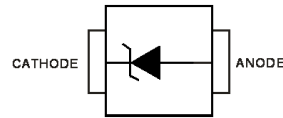
DIMENSIONS IN INCHES AND (MILLIMETERS)

#### FEATURES

- PLANAR DIE CONSTRUCTION
- 200mW POWER DISSIPATION
- ZENER VOLTAGES FROM 2.0~36V
- IDEALLY SUITED FOR AUTOMATED ASSEMBLY PROCESSES
- TEST METHOD: IEC61000-4-2 (C=150pF, R=330Ω, CONTACT DISCHARGE:10 TIMES)
- BOTH PB FREE AND HALOGEN FREE ARE AVAILABLE

#### MECHANICAL DATA

- CASE:SOD-323 , MOLDED PLASTIC
- TERMINALS:SOLDERABLE PER MIL-STD-202, METHOD 208
- POLARITY:SEE DIAGRAM BELOW



#### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

RATINGS AT 25°C AMBIENT TEMPERATURE UNLESS OTHERWISE SPE-CIFIED			
PARAMETER	SYMBOL	VALUE	UNITS
MAXIMUM FORWARD VOLTAGE DROP AT $I_F=10\text{mA}$	$V_F$	1.0	V
THERMAL RESISTANCE	$R_{\theta JA}$	625	°C/W
	$R_{\theta JC}$	200	
MAXIMUM POWER DISSIPATION AT 25°C	$P_D$	200	mW
CASE TEMPERATURE	$T_C$	80	°C
STORAGE TEMPERATURE RANGE	$T_{STG}$	-65 TO +150	°C
OPERATING JUNCTION TEMPERATURE RANGE	$T_J$	-65 TO +150	°C

Part Number	Nominal Zener Voltage			Max. Zener Impedance				Max Reverse Leakage Current	
	Vz @ IzT			ZzT @ IzT		ZzK @ IzK		IR @ VR	
	Nom. V	Min. V	Max. V	Ω	mA	Ω	mA	μA	V
<b>200mWatts Zener Diodes</b>									
BZT52-B2V4SG	2.4	2.35	2.45	94	5.0	564	1.00	45	1.0
BZT52-B2V7SG	2.7	2.65	2.75	94	5.0	564	1.00	18	1.0
BZT52-B3V0SG	3.0	2.94	3.06	89	5.0	564	1.00	9	1.0
BZT52-B3V3SG	3.3	3.23	3.37	89	5.0	564	1.00	4.5	1.0
BZT52-B3V6SG	3.6	3.53	3.67	84	5.0	564	1.00	4.5	1.0
BZT52-B3V9SG	3.9	3.82	3.98	84	5.0	564	1.00	2.7	1.0
BZT52-B4V3SG	4.3	4.21	4.39	84	5.0	564	1.00	2.7	1.0
BZT52-B4V7SG	4.7	4.61	4.79	75	5.0	470	1.00	2.7	2.0
BZT52-B5V1SG	5.1	5.00	5.20	66	5.0	451	1.00	1.8	2.0
BZT52-B5V6SG	5.6	5.49	5.71	37	5.0	376	1.00	0.9	2.0
BZT52-B6V2SG	6.2	6.08	6.32	9	5.0	141	1.00	2.7	4.0
BZT52-B6V8SG	6.8	6.66	6.94	14	5.0	75	1.00	1.8	4.0
BZT52-B7V5SG	7.5	7.35	7.65	14	5.0	75	1.00	0.9	5.0
BZT52-B8V2SG	8.2	8.04	8.36	14	5.0	75	1.00	0.63	5.0
BZT52-B9V1SG	9.1	8.92	9.28	14	5.0	94	1.00	0.45	6.0
BZT52-B10SG	10	9.80	10.20	18	5.0	141	1.00	0.18	7.0
BZT52-B11SG	11	10.78	11.22	18	5.0	141	1.00	0.09	8.0
BZT52-B12SG	12	11.76	12.24	23	5.0	141	1.00	0.09	8.0
BZT52-B13SG	13	12.74	13.26	28	5.0	160	1.00	0.09	8.0
BZT52-B15SG	15	14.70	15.30	28	5.0	188	1.00	0.045	10.5
BZT52-B16SG	16	15.68	16.32	37	5.0	188	1.00	0.045	11.2
BZT52-B18SG	18	17.64	18.36	42	5.0	212	1.00	0.045	12.6
BZT52-B20SG	20	19.60	20.40	51	5.0	212	1.00	0.045	14.0
BZT52-B22SG	22	21.56	22.44	51	5.0	235	1.00	0.045	15.4
BZT52-B24SG	24	23.52	24.48	65	5.0	235	1.00	0.045	16.8
BZT52-B27SG	27	26.46	27.54	75	2.0	282	0.50	0.045	18.9
BZT52-B30SG	30	29.40	30.60	75	2.0	282	0.50	0.045	21.0
BZT52-B33SG	33	32.34	33.66	75	2.0	306	0.50	0.045	23.0
BZT52-B36SG	36	35.28	36.72	84	2.0	329	0.50	0.045	25.2
BZT52-B39SG	39	38.22	39.78	122	2.0	329	0.50	0.045	27.3
BZT52-B43SG	43	42.14	43.86	141	2.0	353	0.50	0.045	30.1
BZT52-B47SG	47	46.06	47.94	160	2.0	353	0.50	0.045	33.0
BZT52-B51SG	51	49.98	52.02	169	2.0	376	0.50	0.045	35.7
BZT52-B56SG	56	54.88	57.12	188	2.0	400	0.50	0.045	39.2
BZT52-B62SG	62	60.76	63.24	202	2.0	423	0.50	0.045	43.4
BZT52-B68SG	68	66.64	69.36	226	2.0	447	0.50	0.045	47.6
BZT52-B75SG	75	73.50	76.50	240	2.0	470	0.50	0.045	52.5

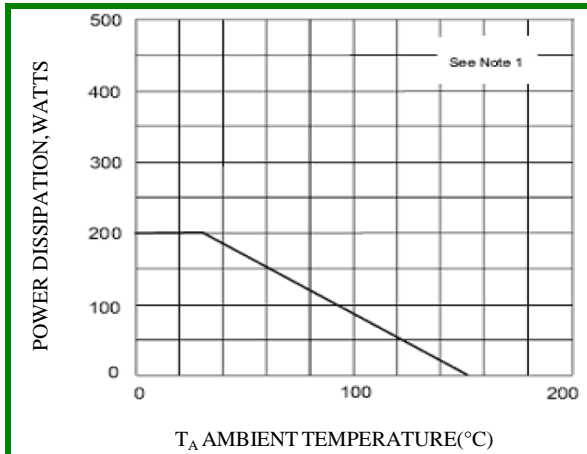


Fig.1-Power Dissipation vs Ambient Temperature

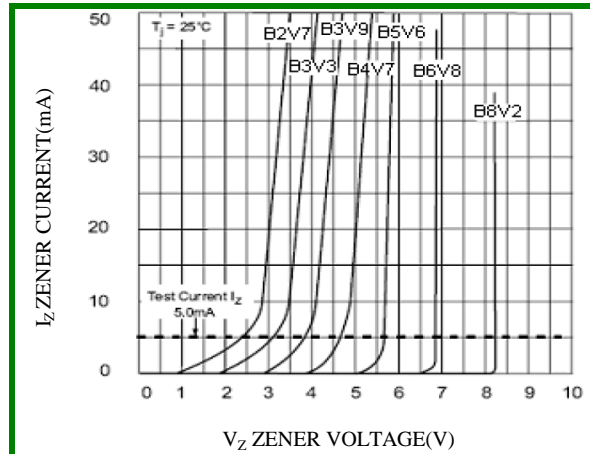


Fig.2-Zener Breakdown Characteristics

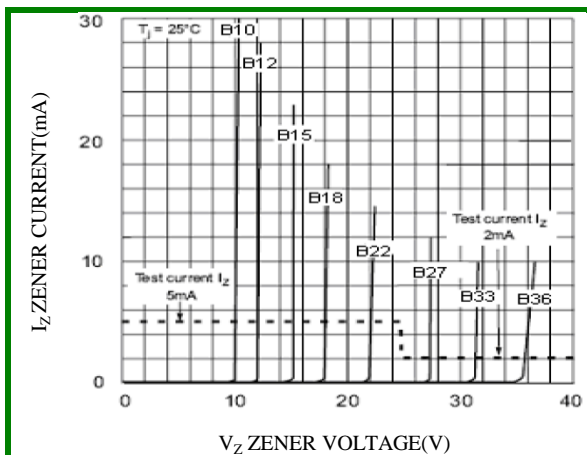


Fig.3-Zener Breakdown Characteristics

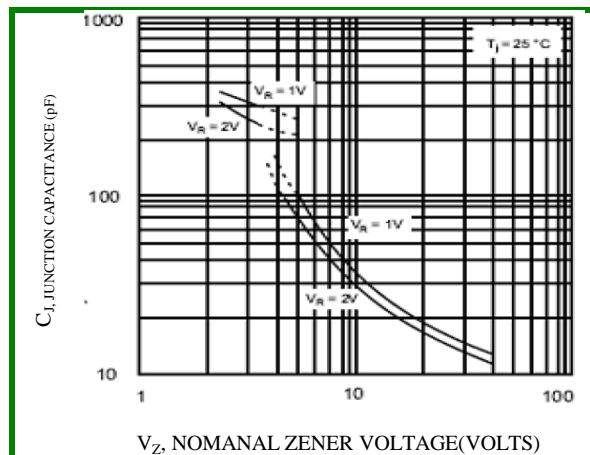


Fig.4 Junction Capacitance vs Nominal Zener Voltage

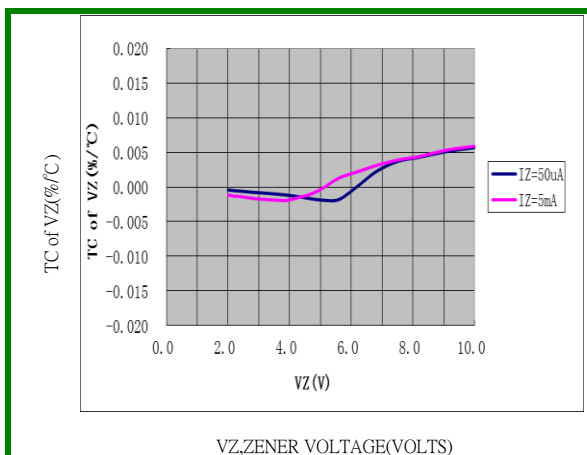


Fig.5 Typical Temperature Coefficient of Zener Voltage

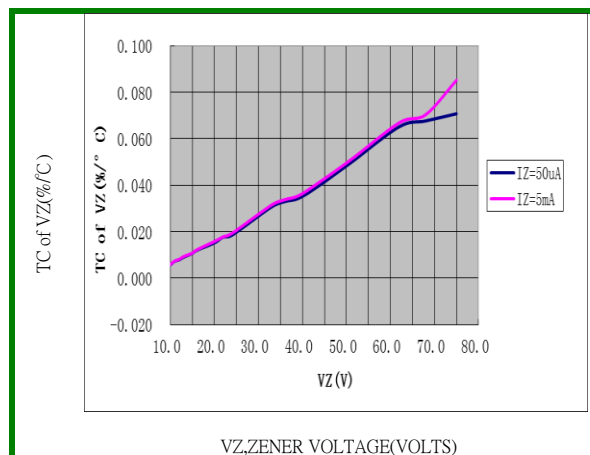


Fig.6 Typical Temperature Coefficient of Zener Voltage