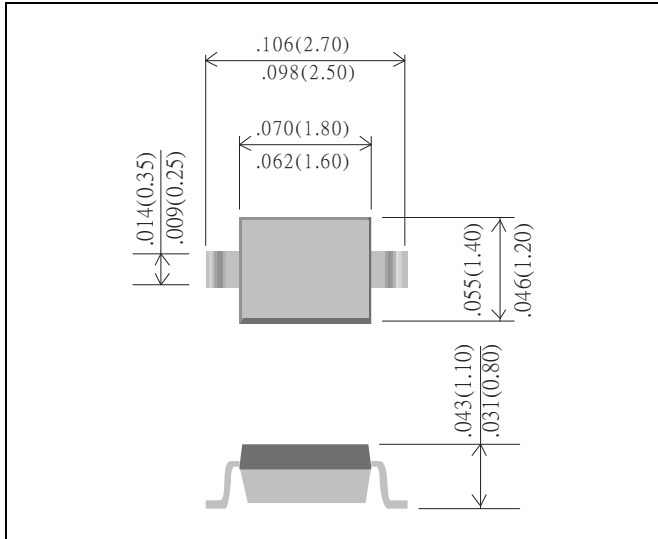


300mW SURFACE MOUNT ZENER DIODES



CASE : SOD-323

DIMENSIONS IN INCHES AND (MILLIMETERS)

FEATURES

- PLANAR DIE CONSTRUCTION
- 300mW 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)
- HALOGEN FREE ARE AVAILABLE

MECHANICAL DATA

- CASE:SOD-323 , MOLDED PLASTIC
- TERMINALS:SOLDERABLE PER MIL-STD-202, METHOD 208
- POLARITY:SEE DIAGRAM BELOW
- APPROX. WEIGHT: 0.0041 GRAMS
- MOUNTING POSITION:ANY

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	300	mW
JUN-CTION TEMPERATURE	T_J	150	°C
CASE TEMPERATURE	T_C	80	°C
STORAGE TEMPERATURE RANGE	T_{STG}	-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
300mWatts Zener Diodes									
BZX384B2V4SG	2.4	2.35	2.45	94	5.0	564	1.00	45	1.0
BZX384B2V7SG	2.7	2.65	2.75	94	5.0	564	1.00	18	1.0
BZX384B3V0SG	3.0	2.94	3.06	89	5.0	564	1.00	9	1.0
BZX384B3V3SG	3.3	3.23	3.37	89	5.0	564	1.00	4.5	1.0
BZX384B3V6SG	3.6	3.53	3.67	84	5.0	564	1.00	4.5	1.0
BZX384B3V9SG	3.9	3.82	3.98	84	5.0	564	1.00	2.7	1.0
BZX384B4V3SG	4.3	4.21	4.39	84	5.0	564	1.00	2.7	1.0
BZX384B4V7SG	4.7	4.61	4.79	75	5.0	470	1.00	2.7	2.0
BZX384B5V1SG	5.1	5.00	5.20	66	5.0	451	1.00	1.8	2.0
BZX384B5V6SG	5.6	5.49	5.71	37	5.0	376	1.00	0.9	2.0
BZX384B6V2SG	6.2	6.08	6.32	9	5.0	141	1.00	2.7	4.0
BZX384B6V8SG	6.8	6.66	6.94	14	5.0	75	1.00	1.8	4.0
BZX384B7V5SG	7.5	7.35	7.65	14	5.0	75	1.00	0.9	5.0
BZX384B8V2SG	8.2	8.04	8.36	14	5.0	75	1.00	0.63	5.0
BZX384B9V1SG	9.1	8.92	9.28	14	5.0	94	1.00	0.45	6.0
BZX384B10SG	10	9.80	10.20	18	5.0	141	1.00	0.18	7.0
BZX384B11SG	11	10.78	11.22	18	5.0	141	1.00	0.09	8.0
BZX384B12SG	12	11.76	12.24	23	5.0	141	1.00	0.09	8.0
BZX384B13SG	13	12.74	13.26	28	5.0	160	1.00	0.09	8.0
BZX384B15SG	15	14.70	15.30	28	5.0	188	1.00	0.045	10.5
BZX384B16SG	16	15.68	16.32	37	5.0	188	1.00	0.045	11.2
BZX384B18SG	18	17.64	18.36	42	5.0	212	1.00	0.045	12.6
BZX384B20SG	20	19.60	20.40	51	5.0	212	1.00	0.045	14.0
BZX384B22SG	22	21.56	22.44	51	5.0	235	1.00	0.045	15.4
BZX384B24SG	24	23.52	24.48	65	5.0	235	1.00	0.045	16.8
BZX384B27SG	27	26.46	27.54	75	2.0	282	0.50	0.045	18.9
BZX384B30SG	30	29.40	30.60	75	2.0	282	0.50	0.045	21.0
BZX384B33SG	33	32.34	33.66	75	2.0	306	0.50	0.045	23.0
BZX384B36SG	36	35.28	36.72	84	2.0	329	0.50	0.045	25.2
BZX384B39SG	39	38.22	39.78	122	2.0	329	0.50	0.045	27.3
BZX384B43SG	43	42.14	43.86	141	2.0	353	0.50	0.045	30.1
BZX384B47SG	47	46.06	47.94	160	2.0	353	0.50	0.045	33.0
BZX384B51SG	51	49.98	52.02	169	2.0	376	0.50	0.045	35.7
BZX384B56SG	56	54.88	57.12	188	2.0	400	0.50	0.045	39.2
BZX384B62SG	62	60.76	63.24	202	2.0	423	0.50	0.045	43.4
BZX384B68SG	68	66.64	69.36	226	2.0	447	0.50	0.045	47.6
BZX384B75SG	75	73.50	76.50	240	2.0	470	0.50	0.045	52.5

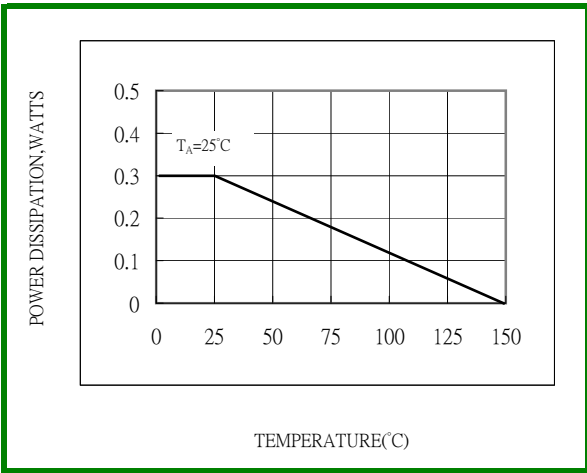


Fig.1-STEADY STATE POWER DERATING

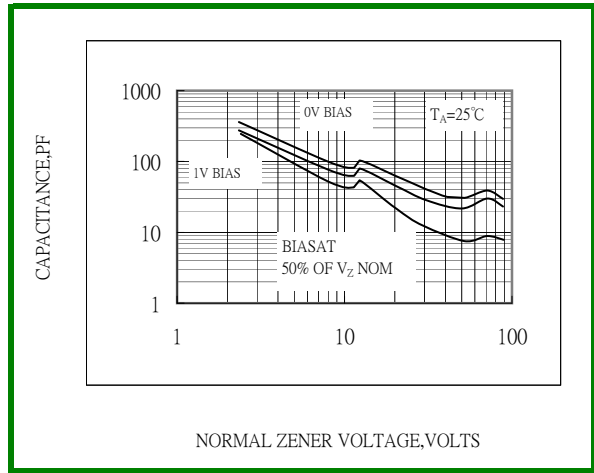


Fig.2-TYPICAL CAPACITANCE

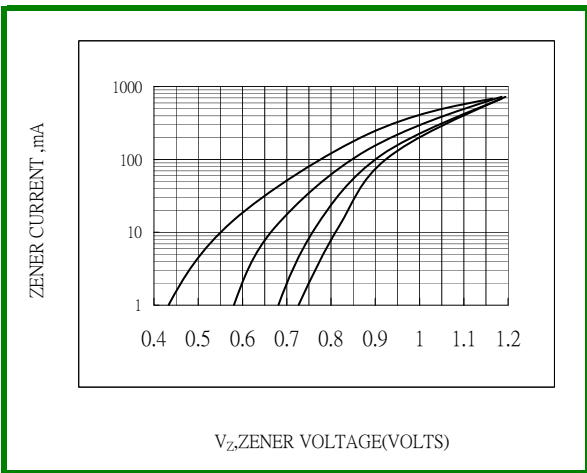


Fig.3 TYPICAL FORWARD VOLTAGE

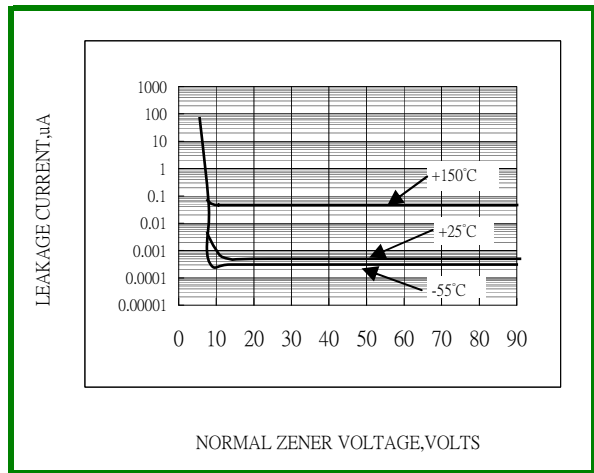


Fig.4-TYPICAL LEAKAGE CURRENT