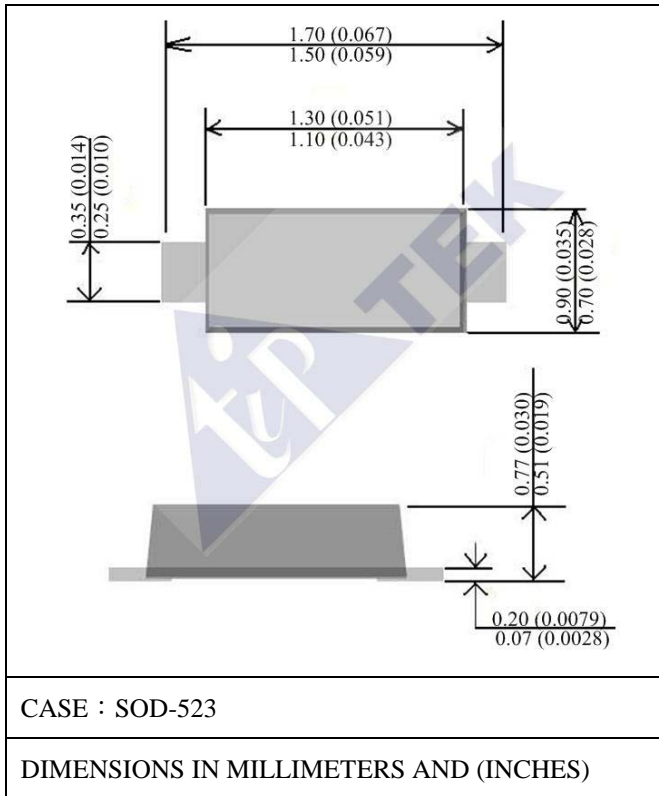


150mW SURFACE MOUNT ZENER DIODES



FEATURES

- Wide Zener Reverse Voltage Range – 2.4 V to 75 V
- 150 mW Rating on FR-4 or FR-5 Board
- Package Designed for Optimal Automated Board Assembly
- Small Package Size for High Density Applications
- ESD Rating of Class 3 (>16 kV) per Human Body Model
- Pb-Free Packages are Available

MECHANICAL DATA

- CASE: Void-free, transfer-molded, thermosetting plastic case
- MAXIMUM CASE TEMPERATURE FOR SOLDERING PURPOSES: 260°C for 10 Seconds
- POLARITY: Cathode indicated by polarity band
- FINISH: Corrosion resistant finish, easily Solderable
- FLAMMABILITY RATING: UL 94 V-0
- Pb Free: BZX584-C2V4 ~ BZX584-C75
Halogen Free: BZX584-C2V4-H ~ BZX584-C75-H

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
POWER DISSIPATION	P_D	150	mW
JUNCTION TEMPERATURE STORAGE TEMPERATURE RANGE	$T_J; T_{STG}$	-65to+150	°C

Part Number	Nominal Zener Voltage			Max. Zener Impedance				Max Reverse Leakage Current		Capacitance
	V _Z @ I _{ZT}			Z _{ZT} @ I _{ZT}		Z _{ZK} @ I _{ZK}		I _R @ V _R		C @ V _R
	Nom. V	Min. V	Max. V	Ω	mA	Ω	mA	μA	V	pF
BZX584-C2V4	2.4	2.20	2.60	100	5.0	1000	1.00	50.000	1.0	450.0
BZX584-C2V7	2.7	2.50	2.90	100	5.0	1000	1.00	20.000	1.0	450.0
BZX584-C3V0	3.0	2.80	3.20	100	5.0	1000	1.00	10.000	1.0	450.0
BZX584-C3V3	3.3	3.10	3.50	95	5.0	1000	1.00	5.000	1.0	450.0
BZX584-C3V6	3.6	3.40	3.80	90	5.0	1000	1.00	5.000	1.0	450.0
BZX584-C3V9	3.9	3.70	4.10	90	5.0	1000	1.00	3.000	1.0	450.0
BZX584-C4V3	4.3	4.00	4.60	90	5.0	1000	1.00	3.000	1.0	450.0
BZX584-C4V7	4.7	4.40	5.00	80	5.0	800	1.00	3.000	2.0	260.0
BZX584-C5V1	5.1	4.80	5.40	60	5.0	500	1.00	2.000	2.0	225.0
BZX584-C5V6	5.6	5.20	6.00	40	5.0	400	1.00	1.000	2.0	200.0
BZX584-C6V2	6.2	5.80	6.60	10	5.0	100	1.00	3.000	4.0	185.0
BZX584-C6V8	6.8	6.40	7.20	15	5.0	160	1.00	2.000	4.0	155.0
BZX584-C7V5	7.5	7.00	7.90	15	5.0	160	1.00	1.000	5.0	140.0
BZX584-C8V2	8.2	7.70	8.70	15	5.0	160	1.00	0.700	5.0	135.0
BZX584-C9V1	9.1	8.50	9.60	15	5.0	160	1.00	0.200	7.0	130.0
BZX584-C10	10.0	9.40	10.60	20	5.0	160	1.00	0.100	8.0	130.0
BZX584-C11	11.0	10.40	11.60	20	5.0	160	1.00	0.100	8.0	130.0
BZX584-C12	12.0	11.40	12.70	25	5.0	80	1.00	0.100	8.0	130.0
BZX584-C13	13.3	12.40	14.10	30	5.0	80	1.00	0.100	8.0	120.0
BZX584-C15	15.0	14.30	15.80	30	5.0	200	1.00	0.050	10.5	110.0
BZX584-C16	16.2	15.30	17.10	40	2.0	200	1.00	0.050	11.2	105.0
BZX584-C18	18.0	16.80	19.10	45	2.0	225	1.00	0.050	12.6	100.0
BZX584-C20	20.0	18.80	21.20	55	2.0	225	1.00	0.050	14.0	85.0
BZX584-C22	22.0	20.80	23.30	55	2.0	250	1.00	0.050	15.4	85.0
BZX584-C24	24.2	22.80	25.60	70	2.0	120	1.00	0.050	16.8	80.0
BZX584-C27	27.0	25.10	28.90	80	2.0	300	1.00	0.050	18.9	70.0
BZX584-C30	30.0	28.00	32.00	80	2.0	300	1.00	0.050	21.0	70.0
BZX584-C33	33.0	31.00	35.00	80	2.0	300	1.00	0.050	23.2	70.0
BZX584-C36	36.0	34.00	38.00	90	2.0	500	1.00	0.050	25.2	70.0
BZX584-C39	39.0	37.00	41.00	130	2.0	500	1.00	0.050	27.3	45.0
BZX584-C43	43.0	40.00	46.00	150	1.0	500	1.00	0.050	30.1	40.0
BZX584-C47	47.0	44.00	50.00	170	1.0	500	1.00	0.050	32.9	40.0
BZX584-C51	51.0	48.00	54.00	180	1.0	500	1.00	0.050	35.7	40.0
BZX584-C56	56.0	52.00	60.00	200	1.0	500	1.00	0.050	39.2	40.0
BZX584-C62	62.0	58.00	66.00	215	1.0	500	1.00	0.050	43.4	35.0
BZX584-C68	68.0	64.00	72.00	240	1.0	500	1.00	0.050	47.6	35.0
BZX584-C75	75.0	70.00	79.00	255	1.0	500	1.00	0.050	52.5	35.0

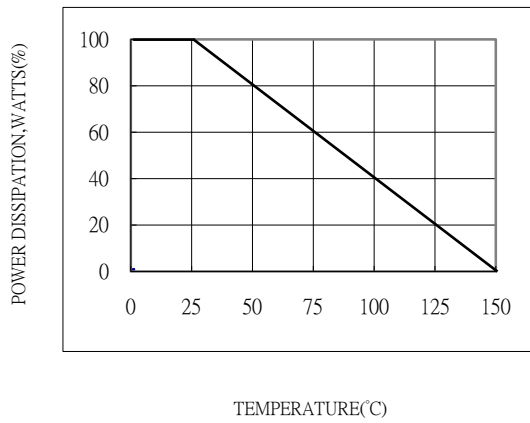


Fig.1-STEADY STATE POWER DERATING

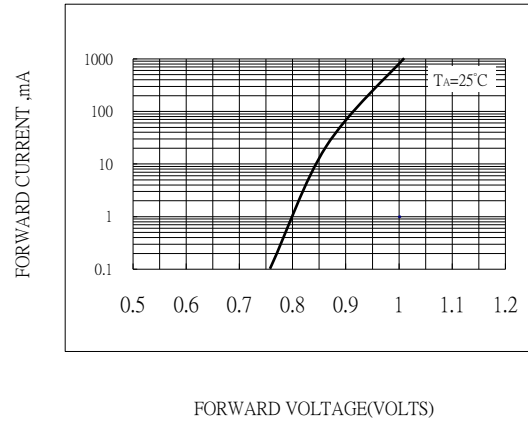


Fig.2-TYPICAL FORWARD VOLTAGE

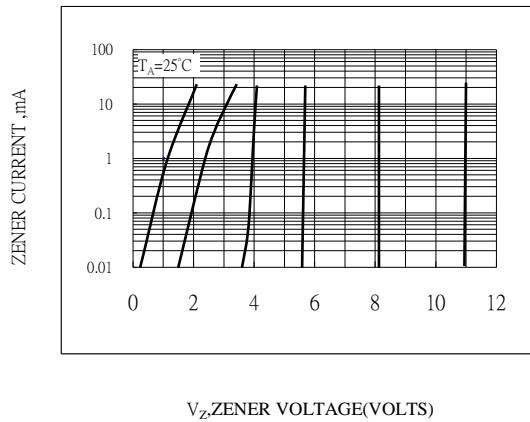


Fig.3A-V_Z=2.4 THRU 12.0 VOLTS

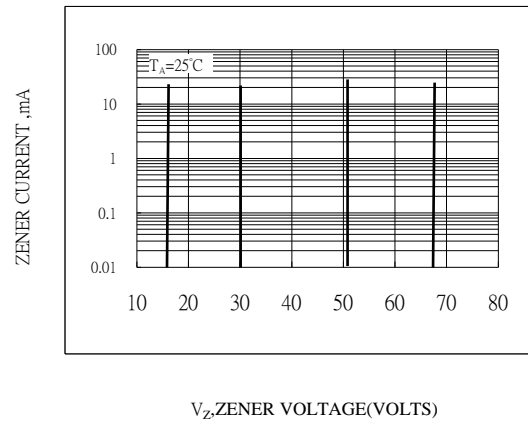


Fig.3B-V_Z=13 THRU 75 VOLTS

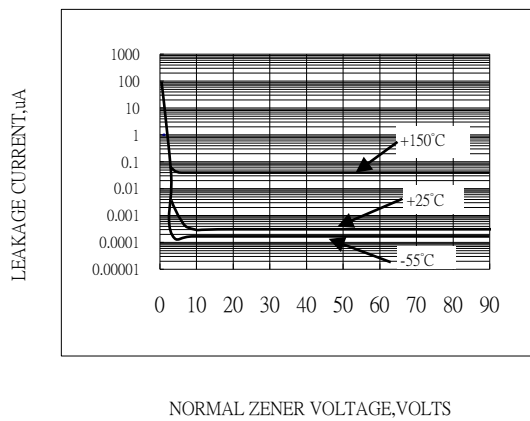


Fig.4-TYPICAL LEAKAGE CURRENT