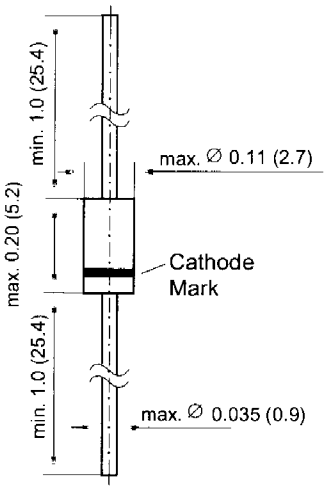
BZY97-C11 THRU BZY97-C68

ZENER DIODES

DO-41 Plastic



Dimensions are in inches and (millimeters)

FEATURES

- Silicon Power Zener Diodes
- For use in stabilizing and clipping circuits with high power rating.
- The Zener voltages are graded according to the international E 24 standard. Smaller voltage tolerances are available upon request.

MECHANICAL DATA

Case: DO-41 Plastic Case
Weight: approx. 0.34 g

MAXIMUM RATINGS

Ratings at 25°C ambient temperature unless otherwise specified.

	SYMBOL	VALUE	UNIT
Zener Current (see Table "Characteristics")			
Power Dissipation at T_{amb} =60°C	P_{tot}	1.5[1)]	Watts
Junction Temperature	T_j	150	°C
Storage Temperature Range	T_S	– 55 to +150	°C

Characteristics at Tamb = 25 °C

	SYMBOL	MIN.	TYP.	MAX.	UNIT
Thermal Resistance Junction to Ambient Air	R_{thJA}	–	–	60[1)]	°C/W

NOTES:
(1) Valid provided that leads at a distance of 10 mm from case are kept at ambient temperature.

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ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

Type	Zener voltage[1] at I_{ZT} min. max. V_Z (V)	Dynamic resistance at $-I_{ZT}$ f = 1 kHz max r_{zj} (Ω)	Temp. coeff. of Zener volt. at I_{ZT} α_{VZ} (10^{-4}/K)	Test current I_{ZT} (mA)	Leakage current I_R (μA)	Reverse voltage V_R (V)	Admissible Zener current at T_{amb} = 60°C I_Z (mA)	I_{ZSM} t_p = 10 ms (A)
BZY97 – C11	10.4 … 11.6	7	+5 … +10	50	0.5	5	129	1.3
BZY97 – C12	11.4 … 12.7	7	+5 … +10	50	0.5	7	118	1.2
BZY97 – C13	12.4 … 14.1	10	+5 … +10	50	0.5	7	106	1.1
BZY97 – C15	13.8 … 15.6	10	+5 … +10	50	0.5	10	96	1.0
BZY97 – C16	15.3 … 17.1	15	+6 … +11	25	0.5	10	88	0.90
BZY97 – C18	16.8 … 19.1	15	+6 … +11	25	0.5	10	79	0.81
BZY97 – C20	18.8 … 21.2	15	+6 … +11	25	0.5	10	71	0.73
BZY97 – C22	20.8 … 23.3	15	+6 … +11	25	0.5	12	64	0.66
BZY97 – C24	22.8 … 25.6	15	+6 … +11	25	0.5	12	59	0.60
BZY97 – C27	25.1 … 28.9	15	+6 … +11	25	0.5	14	52	0.53
BZY97 – C30	28 … 32	15	+6 … +11	25	0.5	14	47	0.48
BZY97 – C33	31 … 35	15	+6 … +11	25	0.5	17	43	0.44
BZY97 – C36	34 … 38	40	+6 … +11	10	0.5	17	40	0.40
BZY97 – C39	37 … 41	40	+6 … +11	10	0.5	20	37	0.38
BZY97 – C43	40 … 46	45	+7 … +12	10	0.5	20	33	0.33
BZY97 – C47	44 … 50	45	+7 … +12	10	0.5	24	30	0.31
BZY97 – C51	48 … 54	60	+7 … +12	10	0.5	24	28	0.28
BZY97 – C56	52 … 60	60	+7 … +12	10	0.5	28	25	0.26
BZY97 – C62	58 … 66	80	+7 … +12	10	0.5	28	23	0.23
BZY97 – C68	64 … 72	80	+7 … +12	10	0.5	34	21	0.21

NOTES:

(1) Tested with pulses t_p = 5 ms

(2) Consult factory for voltages above 68V