GOOD-ARK

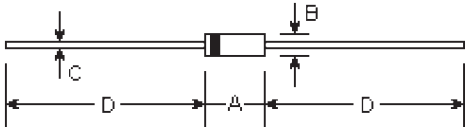
BZV85 ...

SILICON PLANAR POWER ZENER DIODES

Features

Silicon Planar Power Zener Diodes
for use in stabilizing and clipping circuits with high power rating.
The Zener voltage are graded according to the international
E 24 standard. Other voltage tolerances and higher Zener
voltages upon request.

DO-41



DIMENSIONS					
DIM	inches		mm		Note
	Min.	Max.	Min.	Max.	
A	-	0.169	-	4.3	
B	-	0.110	-	2.8	ϕ
C	-	0.031	-	0.8	ϕ
D	1.102	-	28.0	-	

Absolute Maximum Ratings (T_a=25℃)

	Symbols	Values	Units
Zener current see Table "Characteristics"			
Power dissipation at T_{amb}=25℃	P_{tot}	1 [1)]	W
Junction temperature	T_j	200	℃
Storage temperature range	T_S	-65 to +200	℃

Note:

(1) Valid provided that leads at a distance of 8 mm from case are kept at ambient temperature.

Characteristics at T_{amb}=25℃

	Symbols	Min.	Typ.	Max.	Units
Thermal resistance junction to ambient Air	R_{thA}	-	-	170 [1)]	K/W
Forward voltage at I_F=200mA	V_F	-	-	1.2	V

Note:

(1) Valid provided that leads at a distance of 8 mm from case are kept at ambient temperature.

Type	Zener voltage range [1]			Dynamic resistance			Reverse leakage current		Temp. coefficient of Zener voltage
	V_{znom}	I_{ZT} for V_{ZT} [2]		r_{zjT} and r_{zjk} at I_{ZK}			I_R [2] at V_R		TK_{VZ}
	V	mA	V	Ω	Ω	mA	uA	V	%/K
BZV 85/C 2V7	2.7	80	2.5 ... 2.9	<20	<400	1	<150	1	-0.08 ... -0.05
BZV 85/C 3V0	3.0	80	2.8 ... 3.2	<20	<400	1	<100	1	-0.08 ... -0.05
BZV 85/C 3V3	3.3	70	3.1 ... 3.5	<20	<400	1	<40	1	-0.08 ... -0.05
BZV 85/C 3V6	3.6	60	3.4 ... 3.8	<15	<500	1	<20	1	-0.08 ... -0.05
BZV 85/C 3V9	3.9	60	3.7 ... 4.1	<15	<500	1	<10	1	-0.07 ... -0.02
BZV 85/C 4V3	4.3	50	4.0 ... 4.6	<13	<500	1	<3	1	-0.07 ... +0.01
BZV 85/C 4V7	4.7	45	4.4 ... 5.0	<13	<600	1	<3	1	-0.03 ... +0.04
BZV 85/C 5V1	5.1	45	4.8 ... 5.4	<10	<500	1	<1	1.5	-0.01 ... +0.04
BZV 85/C 5V6	5.6	45	5.2 ... 6.0	<7	<400	1	<1	2	0 ... +0.045
BZV 85/C 6V2	6.2	35	5.8 ... 6.6	<4	<300	1	<1	3	+0.01 ... +0.055
BZV 85/C 6V8	6.8	35	6.4 ... 7.2	<3.5	<300	1	<1	4	+0.015 ... +0.06
BZV 85/C 7V5	7.5	35	7.0 ... 7.9	<3	<200	0.5	<1	4.5	+0.02 ... +0.065
BZV 85/C 8V2	8.2	25	7.7 ... 8.7	<5	<200	0.5	<1	6.2	0.03 ... 0.07
BZV 85/C 9V1	9.1	25	8.5 ... 9.6	<5	<200	0.5	<1	6.8	0.035 ... 0.075
BZV 85/C 10	10	25	9.4 ... 10.6	<7	<200	0.5	<0.5	7	0.04 ... 0.08
BZV 85/C 11	11	20	10.4 ... 11.6	<8	<300	0.5	<0.5	8.2	0.045 ... 0.08
BZV 85/C 12	12	20	11.4 ... 12.7	<9	<350	0.5	<0.5	9.1	0.045 ... 0.085
BZV 85/C 13	13	20	12.4 ... 14.1	<10	<400	0.5	<0.5	10	0.05 ... 0.085
BZV 85/C 15	15	15	13.8 ... 15.6	<15	<500	0.5	<0.5	11	0.055 ... 0.09
BZV 85/C 16	16	15	15.3 ... 17.1	<15	<500	0.5	<0.5	12	0.055 ... 0.09
BZV 85/C 18	18	15	16.8 ... 19.1	<20	<500	0.5	<0.5	13	0.06 ... 0.09
BZV 85/C 20	20	10	18.8 ... 21.2	<24	<600	0.5	<0.5	15	0.06 ... 0.09
BZV 85/C 22	22	10	20.8 ... 23.3	<25	<600	0.5	<0.5	16	0.06 ... 0.095
BZV 85/C 24	24	10	22.8 ... 25.6	<25	<600	0.5	<0.5	18	0.06 ... 0.095
BZV 85/C 27	27	8	25.1 ... 28.9	<30	<750	0.25	<0.5	20	0.06 ... 0.095
BZV 85/C 30	30	8	28 ... 32	<30	<1000	0.25	<0.5	22	0.06 ... 0.095
BZV 85/C 33	33	8	31 ... 35	<35	<1000	0.25	<0.5	24	0.06 ... 0.095
BZV 85/C 36	36	8	34 ... 38	<40	<1000	0.25	<0.5	27	0.06 ... 0.095
BZV 85/C 39	39	6	37 ... 41	<50	<1000	0.25	<0.5	30	0.06 ... 0.095
BZV 85/C 43	43	6	40 ... 46	<50	<1000	0.25	<0.5	33	0.06 ... 0.095
BZV 85/C 47	47	4	44 ... 50	<90	<1500	0.25	<0.5	36	0.06 ... 0.095
BZV 85/C 51	51	4	48 ... 54	<115	<1500	0.25	<0.5	39	0.06 ... 0.095
BZV 85/C 56	56	4	52 ... 60	<120	<2000	0.25	<0.5	43	0.06 ... 0.095
BZV 85/C 62	62	4	58 ... 66	<125	<2000	0.25	<0.5	47	0.06 ... 0.095
BZV 85/C 68	68	4	64 ... 72	<130	<2000	0.25	<0.5	51	0.06 ... 0.095
BZV 85/C 75	75	4	70 ... 79	<135	<2000	0.25	<0.5	56	0.06 ... 0.095
BZV 85/C 82	82	2.7	77 ... 87	<200	<3000	0.25	<0.5	62	0.07 ... 0.10
BZV 85/C 91	91	2.7	85 ... 96	<250	<3000	0.25	<0.5	68	0.07 ... 0.10
BZV 85/C 100	100	2.7	94 ... 106	<350	<3000	0.25	<0.5	75	0.07 ... 0.11
BZV 85/C 110	110	2.7	104 ... 116	<450	<4000	0.25	<0.5	82	0.07 ... 0.11
BZV 85/C 120	120	2	114 ... 127	<550	<4500	0.25	<0.5	91	0.07 ... 0.11
BZV 85/C 130	130	2	124 ... 141	<700	<5000	0.25	<0.5	100	0.07 ... 0.11
BZV 85/C 150	150	2	138 ... 156	<1000	<6000	0.25	<0.5	110	0.07 ... 0.11
BZV 85/C 160	160	1.5	153 ... 171	<1100	<6500	0.25	<0.5	120	0.07 ... 0.11
BZV 85/C 180	180	1.5	168 ... 191	<1200	<7000	0.25	<0.5	130	0.07 ... 0.11
BZV 85/C 200	200	1.5	188 ... 212	<1500	<8000	0.25	<0.5	150	0.07 ... 0.11

Notes:

(1) Tested with pulses tp=20ms.

(2) Valid provided that leads are kept at ambient temperature at a distance of 8 mm from case.

RATINGS AND CHARACTERISTIC CURVES

Admissible power dissipation versus ambient temperature

Valid provided that leads are kept at ambient temperature at a distance of 10 mm from case.

