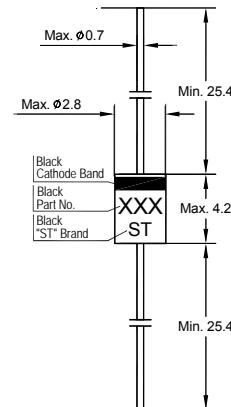


# BZV85C

## SILICON PLANAR POWER ZENER DIODES

for use in stabilizing and clipping circuits with high power rating. The Zener voltages are graded according to the international E24 standard. Smaller voltage tolerances and higher Zener voltages are upon request.



Glass Case DO-41  
Dimensions in mm

### Absolute Maximum Ratings ( $T_a = 25^\circ\text{C}$ )

Parameter	Symbol	Value	Unit
Power Dissipation	$P_{\text{tot}}$	1 <sup>1)</sup>	W
Junction Temperature	$T_j$	200	$^\circ\text{C}$
Storage Temperature Range	$T_s$	- 65 to + 200	$^\circ\text{C}$

<sup>1)</sup> Valid provided that leads at a distance of 8 mm from case are kept at ambient temperature.

### Characteristics at $T_a = 25^\circ\text{C}$

Parameter	Symbol	Max.	Unit
Thermal Resistance Junction to Ambient Air	$R_{\text{thA}}$	170 <sup>1)</sup>	K/W
Forward Voltage at $I_F = 200 \text{ mA}$	$V_F$	1.2	V

<sup>1)</sup> Valid provided that leads at a distance of 8 mm from case are kept at ambient temperature.

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Type	Zener Voltage Range <sup>1)</sup>			Maximum Dynamic Resistance			Maximum Leakage Current	
	$V_{Znom}$ V	$I_{ZT}$ mA	for $V_{ZT}$ V	$r_{ZJT}$ Ω	$r_{ZJK}$ Ω	at $I_{ZK}$ mA	$I_R$ μA	at $V_R$ V
BZV85C2V7	2.7	80	2.5...2.9	20	400	1	150	1
BZV85C3V0	3	80	2.8...3.2	20	400	1	100	1
BZV85C3V3	3.3	70	3.1...3.5	20	400	1	40	1
BZV85C3V6	3.6	60	3.4...3.8	15	500	1	20	1
BZV85C3V9	3.9	60	3.7...4.1	15	500	1	10	1
BZV85C4V3	4.3	50	4...4.6	13	500	1	3	1
BZV85C4V7	4.7	45	4.4...5	13	600	1	3	1
BZV85C5V1	5.1	45	4.8...5.4	10	500	1	1	1.5
BZV85C5V6	5.6	45	5.2...6	7	400	1	1	2
BZV85C6V2	6.2	35	5.8...6.6	4	300	1	1	3
BZV85C6V8	6.8	35	6.4...7.2	3.5	300	1	1	4
BZV85C7V5	7.5	35	7...7.9	3	200	0.5	1	4.5
BZV85C8V2	8.2	25	7.7...8.7	5	200	0.5	1	6.2
BZV85C9V1	9.1	25	8.5...9.6	5	200	0.5	1	6.8
BZV85C10	10	25	9.4...10.6	7	200	0.5	0.5	7
BZV85C11	11	20	10.4...11.6	8	300	0.5	0.5	8.2
BZV85C12	12	20	11.4...12.7	9	350	0.5	0.5	9.1
BZV85C13	13	20	12.4...14.1	10	400	0.5	0.5	10
BZV85C15	15	15	13.8...15.6	15	500	0.5	0.5	11
BZV85C16	16	15	15.3...17.1	15	500	0.5	0.5	12
BZV85C18	18	15	16.8...19.1	20	500	0.5	0.5	13
BZV85C20	20	10	18.8...21.2	24	600	0.5	0.5	15
BZV85C22	22	10	20.8...23.3	25	600	0.5	0.5	16
BZV85C24	24	10	22.8...25.6	25	600	0.5	0.5	18
BZV85C27	27	8	25.1...28.9	30	750	0.25	0.5	20
BZV85C30	30	8	28...32	30	1000	0.25	0.5	22
BZV85C33	33	8	31...35	35	1000	0.25	0.5	24
BZV85C36	36	8	34...38	40	1000	0.25	0.5	27
BZV85C39	39	6	37...41	50	1000	0.25	0.5	30
BZV85C43	43	6	40...46	50	1000	0.25	0.5	33
BZV85C47	47	4	44...50	90	1500	0.25	0.5	36
BZV85C51	51	4	48...54	115	1500	0.25	0.5	39
BZV85C56	56	4	52...60	120	2000	0.25	0.5	43
BZV85C62	62	4	58...66	125	2000	0.25	0.5	47
BZV85C68	68	4	64...72	130	2000	0.25	0.5	51
BZV85C75	75	4	70...79	135	2000	0.25	0.5	56
BZV85C82	82	2.7	77...87	200	3000	0.25	0.5	62
BZV85C91	91	2.7	85...96	250	3000	0.25	0.5	68
BZV85C100	100	2.7	94...106	350	3000	0.25	0.5	75
BZV85C110	110	2.7	104...116	450	4000	0.25	0.5	82
BZV85C120	120	2	114...127	550	4500	0.25	0.5	91
BZV85C130	130	2	124...141	700	5000	0.25	0.5	100
BZV85C150	150	2	138...156	1000	6000	0.25	0.5	110
BZV85C160	160	1.5	153...171	1100	6500	0.25	0.5	120
BZV85C180	180	1.5	168...191	1200	7000	0.25	0.5	130
BZV85C200	200	1.5	188...212	1500	8000	0.25	0.5	150

<sup>1)</sup> Tested with pulses  $t_p = 20$  ms.

<sup>2)</sup> Valid provided that leads are kept at ambient temperature at a distance of 8 mm from case.

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