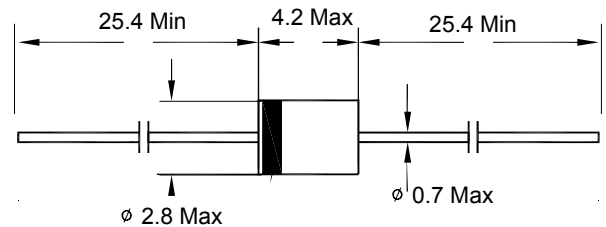


Silicon Planar Power Zener Diodes

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.

BZV85C3V0-75V



DO-41 Dimensions in millimeters

Absolute Maximum Ratings (T_a = 25 °C)

Parameter	Symbol	Value	Unit
Power Dissipation	P _{tot}	1 ¹⁾	W
Junction Temperature	T _j	200	°C
Storage Temperature Range	T _{stg}	- 65 to + 200	°C

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

Characteristics at T_a = 25 °C

Parameter	Symbol	Max.	Unit
Thermal Resistance Junction to Ambient Air	R _{thA}	170 ¹⁾	K/W
Forward Voltage at I _F = 200 mA	V _F	1.2	V

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

BZV85C3V0-75V

Characteristics at $T_a = 25\text{ °C}$

Type	Zener Voltage Range ¹⁾			Dynamic Resistance				Reverse Current	
	V_{Znom}	V_{ZT}	at I_{ZT}	Z_{ZT}	at I_{ZT}	Z_{ZT}	at I_{ZK}	I_R	at V_R
	(V)	(V)	(mA)	Max. (Ω)	(mA)	Max. (Ω)	(mA)	Max. (μ A)	(V)
BZV85C3V0	3	2.8...3.2	80	20	80	400	1	100	1
BZV85C3V3	3.3	3.1...3.5	70	20	70	400	1	40	1
BZV85C3V6	3.6	3.4...3.8	60	15	60	500	1	20	1
BZV85C3V9	3.9	3.7...4.1	60	15	60	500	1	10	1
BZV85C4V3	4.3	4...4.6	50	13	50	500	1	3	1
BZV85C4V7	4.7	4.4...5	45	13	45	600	1	3	1
BZV85C5V1	5.1	4.8...5.4	45	10	45	500	1	1	1.5
BZV85C5V6	5.6	5.2...6	45	7	45	400	1	1	2
BZV85C6V2	6.2	5.8...6.6	35	4	35	300	1	1	3
BZV85C6V8	6.8	6.4...7.2	35	3.5	35	300	1	1	4
BZV85C7V5	7.5	7...7.9	35	3	35	200	0.5	1	4.5
BZV85C8V2	8.2	7.7...8.7	25	5	25	200	0.5	1	6.2
BZV85C9V1	9.1	8.5...9.6	25	5	25	200	0.5	1	6.8
BZV85C10	10	9.4...10.6	25	7	25	200	0.5	0.5	7
BZV85C11	11	10.4...11.6	20	8	20	300	0.5	0.5	8.2
BZV85C12	12	11.4...12.7	20	9	20	350	0.5	0.5	9.1
BZV85C13	13	12.4...14.1	20	10	20	400	0.5	0.5	10
BZV85C15	15	13.8...15.6	15	15	15	500	0.5	0.5	11
BZV85C16	16	15.3...17.1	15	15	15	500	0.5	0.5	12
BZV85C18	18	16.8...19.1	15	20	15	500	0.5	0.5	13
BZV85C20	20	18.8...21.2	10	24	10	600	0.5	0.5	15
BZV85C22	22	20.8...23.3	10	25	10	600	0.5	0.5	16
BZV85C24	24	22.8...25.6	10	25	10	600	0.5	0.5	18
BZV85C27	27	25.1...28.9	8	30	8	750	0.25	0.5	20
BZV85C30	30	28...32	8	30	8	1000	0.25	0.5	22
BZV85C33	33	31...35	8	35	8	1000	0.25	0.5	24
BZV85C36	36	34...38	8	40	8	1000	0.25	0.5	27
BZV85C39	39	37...41	6	50	6	1000	0.25	0.5	30
BZV85C43	43	40...46	6	50	6	1000	0.25	0.5	33
BZV85C47	47	44...50	4	90	4	1500	0.25	0.5	36
BZV85C51	51	48...54	4	115	4	1500	0.25	0.5	39
BZV85C56	56	52...60	4	120	4	2000	0.25	0.5	43
BZV85C62	62	58...66	4	125	4	2000	0.25	0.5	47
BZV85C68	68	64...72	4	130	4	2000	0.25	0.5	51
BZV85C75	75	70...79	4	135	4	2000	0.25	0.5	56

¹⁾ Tested with pulses $t_p = 20\text{ ms}$.

BZV85C3V0-75V Typical Characteristics

