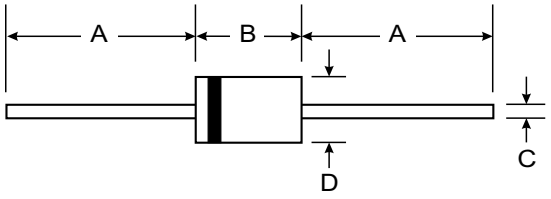
BZX85C2V7-BZX85C200

1.3 Watts Axial Leaded Zener Diodes

Features

- Complete Voltage Range 2.7 to 200 Volts
- Silicon planar power zener diodes.
- For use in stabilizing and clipping circuits with high power rating.
- Standard zener voltage tolerance is ± 5%
- Other tolerances are available upon request.



Mechanical Data

- **Case:** DO-41 Plastic Case
- **Weight:** approx. 0.25g

DO-41		
Dim	**Min**	**Max**
A	25.40	—
B	4.06	5.21
C	0.71	0.864
D	2.00	2.72
All Dimensions in mm		

Maximum Ratings and Electrical Characteristics

@ T_A = 25°C unless otherwise specified

Parameter	Symbol	Value	Unit
Zener Current see Table "Characteristics"			
Maximum Forward Voltage at I_F = 200 mA.	V_F	1.2	V
Power Dissipation at Ta = 25°C	P_D	1.3(1)	W
Thermal Resistance Junction to Ambient Air	$R_{\theta JA}$	130(1)	°C/W
Junction temperature	T_J	175	°C
Storage temperature range	T_S	-55 to + 175	°C

Note:

(1) Valid provided that leads at a distance of 3/8" from case are kept at ambient temperature.

ELECTRICAL CHARACTERISTICS

Rating at 25 °C ambient temperature unless otherwise specified

Type Number	Nominal Zener Voltage (1)		Maximum Zener Impedance, f = 1kHz			Maximum Reverse Leakage Current		Maximum DC Zener Current	Temp. coefficient of Zener Voltage	
	V_Z @ I_{ZT}	I_{ZT}	Z_{ZT} @ I_{ZT}	Z_{ZK} @ I_{ZK}	I_{ZK}	I_R @	V_R	I_{ZM} (2)	a_{mvz}(% / °C)	
	(V)	(mA)	(W)	(W)	(mA)	(mA)	(V)	(mA)	min.	max.
BZX85C2V7	2.7	80	20	400	1.0	150	1.0	370	-0.08	-0.05
BZX85C3V0	3.0	80	20	400	1.0	100	1.0	340	-0.08	-0.05
BZX85C3V3	3.3	80	20	400	1.0	40	1.0	320	-0.08	-0.05
BZX85C3V6	3.6	60	15	500	1.0	20	1.0	290	-0.08	-0.05
BZX85C3V9	3.9	60	15	500	1.0	10	1.0	280	-0.07	-0.02
BZX85C4V3	4.3	50	13	500	1.0	3.0	1.0	250	-0.05	0.010
BZX85C4V7	4.7	45	13	500	1.0	3.0	1.0	215	-0.03	0.040
BZX85C5V1	5.1	45	10	500	1.0	1.0	1.5	200	-0.01	0.040
BZX85C5V6	5.6	45	7.0	400	1.0	1.0	2.0	190	0	0.045
BZX85C6V2	6.2	35	4.0	300	1.0	1.0	3.0	170	0.010	0.055
BZX85C6V8	6.8	35	3.5	300	1.0	1.0	4.0	155	0.015	0.060
BZX85C7V5	7.5	35	3.0	200	0.5	1.0	4.5	140	0.020	0.065
BZX85C8V2	8.2	25	5.0	200	0.5	1.0	6.2	130	0.030	0.070
BZX85C9V1	9.1	25	5.0	200	0.5	1.0	6.8	120	0.040	0.075
BZX85C10	10	25	7.0	200	0.5	0.5	7.5	105	0.450	0.080
BZX85C11	11	20	8.0	300	0.5	0.5	8.2	97	0.045	0.080
BZX85C12	12	20	9.0	350	0.5	0.5	9.1	88	0.045	0.085
BZX85C13	13	20	10	400	0.5	0.5	10	79	0.050	0.085
BZX85C15	15	15	10	500	0.5	0.5	11	71	0.055	0.090
BZX85C16	16	15	15	500	0.5	0.5	12	66	0.055	0.090
BZX85C18	18	15	20	500	0.5	0.5	13	62	0.060	0.090
BZX85C20	20	10	24	600	0.5	0.5	15	56	0.060	0.090
BZX85C22	22	10	25	600	0.5	0.5	16	52	0.060	0.095
BZX85C24	24	10	25	600	0.5	0.5	18	47	0.060	0.095
BZX85C27	27	8.0	30	750	0.25	0.5	20	41	0.060	0.095
BZX85C30	30	8.0	30	1000	0.25	0.5	22	36	0.060	0.095
BZX85C33	33	8.0	35	1000	0.25	0.5	24	33	0.060	0.095
BZX85C36	36	8.0	40	1000	0.25	0.5	27	30	0.060	0.095
BZX85C39	39	6.0	50	1000	0.25	0.5	30	28	0.060	0.095
BZX85C43	43	6.0	50	1000	0.25	0.5	33	26	0.060	0.095
BZX85C47	47	4.0	90	1500	0.25	0.5	36	23	0.060	0.095
BZX85C51	51	4.0	115	1500	0.25	0.5	39	21	0.060	0.095
BZX85C56	56	4.0	120	2000	0.25	0.5	43	19	0.060	0.095
BZX85C62	62	4.0	125	2000	0.25	0.5	47	16	0.060	0.095
BZX85C68	68	4.0	130	2000	0.25	0.5	51	15	0.055	0.095
BZX85C75	75	4.0	135	2000	0.25	0.5	56	14	0.055	0.095
BZX85C82	82	2.7	200	3000	0.25	0.5	62	12	0.055	0.095
BZX85C91	91	2.7	250	3000	0.25	0.5	68	10	0.055	0.095
BZX85C100	100	2.7	350	3000	0.25	0.5	75	9.4	0.055	0.095
BZX85C110	110	2.7	450	4000	0.25	0.5	82	8.6	0.055	0.095
BZX85C120	120	2.0	550	4500	0.25	0.5	91	7.8	0.055	0.095
BZX85C130	130	2.0	700	5000	0.25	0.5	100	7.0	0.055	0.095
BZX85C150	150	2.0	1000	6000	0.25	0.5	110	6.4	0.055	0.095
BZX85C160	160	1.5	1100	6500	0.25	0.5	120	5.8	0.055	0.095
BZX85C180	180	1.5	1200	7000	0.25	0.5	130	5.2	0.055	0.095
BZX85C200	200	1.5	1500	8000	0.25	0.5	150	4.7	0.055	0.095