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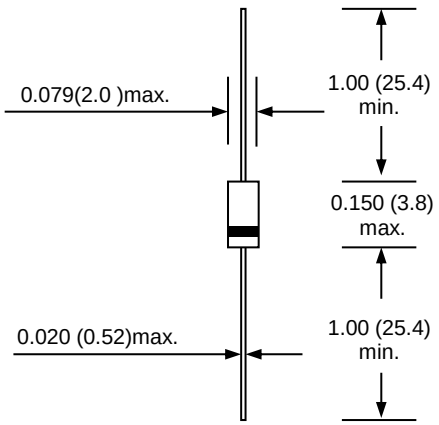
BZX55C2V0 ~ BZX55C82

ZENER DIODES

V_Z : 2.0 - 82 Volts

P_D : 500 mW

DO - 35



Dimensions in inches and (millimeters)

FEATURES :

* Complete 2.0 to 100 Volts
* High surge current capability
* High peak reverse power dissipation
* High reliability
* Low leakage current
* Pb / RoHS Free

MECHANICAL DATA

* Case : Molded glass
* Lead : Axial lead solderable per MIL-STD-202, method 208 guaranteed
* Polarity : Color band denotes cathode end. When operated in zener mode, cathode will be positive with respect to anode
* Mounting position : Any
* Weight : 0.13 gram (approx.)

MAXIMUM RATINGS

Rating at 25 °C ambient temperature unless otherwise specified

Rating	Symbol	Value	Unit
Power Dissipation (Note1)	P_D	500	mW
Maximum Forward Voltage at I_F =100 mA	V_F	1.0	V
Maximum Thermal Resistance Junction to Ambient Air (Note1)	ReJA	300	°C/W
Junction Temperature Range	T_j	- 65 to + 200	°C
Storage Temperature Range	T_s	- 65 to + 200	°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	Marking Code	Zener Voltage V_Z @ I_{ZT}				Maximum Zener Impedance			Maximum Reverse Leakage Current, I_R			Temp. coefficient of Zener Voltage	Admissible Zener Current[2]
		Nom[1]	Min[2]	Max[2]	I_{ZT}	Z_{ZT} @ I_{ZT}	Z_{Zk} @ I_{ZK}	I_{ZK}	Ta = 25 °C	Ta = 150 °C	at V_R	TK_{VZ}	
		(V)	(V)	(V)	(mA)	(Ω)	(Ω)	(mA)	(µA)	(µA)	(V)	(% / K)	I_{ZM} (mA)
BZX55C2V0	**C2V0**	2.0	1.90	2.10	5.0	85	600	1.0	100	200	1.0	-0.09...-0.06	175
BZX55C2V2	**C2V2**	2.2	2.09	2.31	5.0	85	600	1.0	50	100	1.0	-0.09...-0.06	160
BZX55C2V4	**C2V4**	2.4	2.28	2.56	5.0	85	600	1.0	50	100	1.0	-0.09...-0.06	145
BZX55C2V7	**C2V7**	2.7	2.5	2.9	5.0	85	600	1.0	10	50	1.0	-0.09...-0.06	135
BZX55C3V0	**C3V0**	3.0	2.8	3.2	5.0	85	600	1.0	4.0	40	1.0	-0.08...-0.05	125
BZX55C3V3	**C3V3**	3.3	3.1	3.5	5.0	85	600	1.0	2.0	40	1.0	-0.08...-0.05	115
BZX55C3V6	**C3V6**	3.6	3.4	3.8	5.0	85	600	1.0	2.0	40	1.0	-0.08...-0.05	105
BZX55C3V9	**C3V9**	3.9	3.7	4.1	5.0	85	600	1.0	2.0	40	1.0	-0.08...-0.05	95
BZX55C4V3	**C4V3**	4.3	4.0	4.6	5.0	75	600	1.0	1.0	20	1.0	-0.06...-0.03	90
BZX55C4V7	**C4V7**	4.7	4.4	5.0	5.0	60	600	1.0	0.5	10	1.0	-0.05...+0.02	85
BZX55C5V1	**C5V1**	5.1	4.8	5.4	5.0	35	550	1.0	0.1	2.0	1.0	-0.02...+0.02	80
BZX55C5V6	**C5V6**	5.6	5.2	6.0	5.0	25	450	1.0	0.1	2.0	1.0	-0.05...+0.05	70
BZX55C6V2	**C6V2**	6.2	5.8	6.6	5.0	10	200	1.0	0.1	2.0	2.0	0.03...0.06	64
BZX55C6V8	**C6V8**	6.8	6.4	7.2	5.0	8	150	1.0	0.1	2.0	3.0	0.03...0.07	58
BZX55C7V5	**C7V5**	7.5	7.0	7.9	5.0	7	50	1.0	0.1	2.0	5.0	0.03...0.07	53
BZX55C8V2	**C8V2**	8.2	7.7	8.7	5.0	7	50	1.0	0.1	2.0	6.2	0.03...0.08	47
BZX55C9V1	**C9V1**	9.1	8.5	9.6	5.0	10	50	1.0	0.1	2.0	6.8	0.03...0.09	43
BZX55C10	**C10**	10	9.4	10.6	5.0	15	70	1.0	0.1	2.0	7.5	0.03...0.10	40
BZX55C11	**C11**	11	10.4	11.6	5.0	20	70	1.0	0.1	2.0	8.2	0.03...0.11	36
BZX55C12	**C12**	12	11.4	12.7	5.0	20	90	1.0	0.1	2.0	9.1	0.03...0.11	32
BZX55C13	**C13**	13	12.4	14.1	5.0	26	110	1.0	0.1	2.0	10.0	0.03...0.11	29
BZX55C15	**C15**	15	13.8	15.6	5.0	30	110	1.0	0.1	2.0	11	0.03...0.11	27
BZX55C16	**C16**	16	15.3	17.1	5.0	40	170	1.0	0.1	2.0	12	0.03...0.11	24
BZX55C18	**C18**	18	16.8	19.1	5.0	50	170	1.0	0.1	2.0	13	0.03...0.11	21
BZX55C20	**C20**	20	18.8	21.2	5.0	55	220	1.0	0.1	2.0	15	0.03...0.11	20
BZX55C22	**C22**	22	20.8	23.3	5.0	55	220	1.0	0.1	2.0	16	0.04...0.12	18
BZX55C24	**C24**	24	22.8	25.6	5.0	80	220	1.0	0.1	2.0	18	0.04...0.12	16
BZX55C27	**C27**	27	25.1	28.9	5.0	80	220	1.0	0.1	2.0	20	0.04...0.12	14
BZX55C30	**C30**	30	28	32	5.0	80	220	1.0	0.1	2.0	22	0.04...0.12	13
BZX55C33	**C33**	33	31	35	5.0	80	220	1.0	0.1	2.0	24	0.04...0.12	12
BZX55C36	**C36**	36	34	38	5.0	80	220	1.0	0.1	2.0	27	0.04...0.12	11
BZX55C39	**C39**	39	37	41	2.5	90	500	0.5	0.1	5.0	30	0.04...0.12	10
BZX55C43	**C43**	43	40	46	2.5	90	500	0.5	0.1	5.0	33	0.04...0.12	9.2
BZX55C47	**C47**	47	44	50	2.5	110	600	0.5	0.1	5.0	36	0.04...0.12	8.5
BZX55C51	**C51**	51	48	54	2.5	125	700	0.5	0.1	10	39	0.04...0.12	7.8
BZX55C56	**C56**	56	52	60	2.5	135	700	0.5	0.1	10	43	typ. 0.1[4]	7.0
BZX55C62	**C62**	62	58	66	2.5	150	1000	0.5	0.1	10	47	typ. 0.1[4]	6.4
BZX55C68	**C68**	68	64	72	2.5	200	1000	0.5	0.1	10	51	typ. 0.1[4]	5.9
BZX55C75	**C75**	75	70	79	2.5	250	1000	0.5	0.1	10	56	typ. 0.1[4]	5.3
BZX55C82	**C82**	82	77	87	2.5	300	1500	0.5	0.1	10	62	typ. 0.1[4]	4.8

Notes:

(1) Tested with pulses tp = 20 ms

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

(3) For ± 2% tolerance altered the sixth letter of type from "C" to be "B"

(4) at Iz = 2.5 mA

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