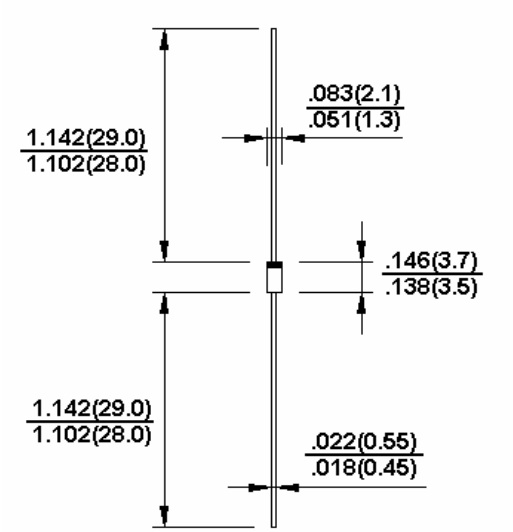
BZX55C SERIES

500mW Hermetically Sealed
Glass Zener Voltage Regulators

DO-35

Features

- ✧ Zener Voltage range 2.0 to 75 volts
- ✧ DO-35 package (JEDEC)
- ✧ Through-hole device type mounting
- ✧ Hermetically sealed glass
- ✧ Compression bonded construction
- ✧ All external surfaces are corrosion resistant and leads are readily solderable
- ✧ RoHS compliant
- ✧ Solder hot dip Tin(Sn) lead finish
- ✧ Cathode indicated by polarity band



Dimensions in inches and (millimeters)

Maximum Ratings and Electrical Characteristics

Rating at 25 °C ambient temperature unless otherwise specified.

Maximum Ratings

Type Number	Symbol	Value	Units
Power Dissipation	Pd	500	mW
Maximum Forward Voltage @ IF = 100mA	V_F	1.0	V
Storage Temperature Range	T_{STG}	-65 to + 200	°C
Operating Junction Temperature	T_J	+ 200	°C

These ratings are limiting values above which the serviceability of the diode may be impaired.

ELECTRICAL CHARACTERISTICS (TA=25°C unless otherwise noted)

Device Type	V_Z at I_{ZT} (Volts)		I_{ZT}	Z_{ZT} @ I_{ZT} Ohms	I_{ZK}	Z_{ZK} @ I_{ZK} Ohms	I_R @ V_R uA	V_R
	Min	Max	mA	Max	mA	Max	Max	V
BZX55C2V0	1.88	2.11	5.0	100	1.0	600	100	1.0
BZX55C2V2	2.08	2.33	5.0	100	1.0	600	100	1.0
BZX55C2V4	2.28	2.56	5.0	85	1.0	600	50	1.0
BZX55C2V7	2.51	2.89	5.0	85	1.0	600	10	1.0
BZX55C3V0	2.8	3.2	5.0	85	1.0	600	4.0	1.0
BZX55C3V3	3.1	3.5	5.0	85	1.0	600	2.0	1.0
BZX55C3V6	3.4	3.8	5.0	85	1.0	600	2.0	1.0
BZX55C3V9	3.7	4.1	5.0	85	1.0	600	2.0	1.0
BZX55C4V3	4.0	4.6	5.0	75	1.0	600	1.0	1.0
BZX55C4V7	4.4	5.0	5.0	60	1.0	600	0.5	1.0
BZX55C5V1	4.8	5.4	5.0	35	1.0	550	0.1	1.0
BXZ55C5V6	5.2	6.0	5.0	25	1.0	450	0.1	1.0
BZX55C6V2	5.8	6.6	5.0	10	1.0	200	0.1	2.0
BZX55C6V8	6.4	7.2	5.0	8	1.0	150	0.1	3.0
BZX55C7V5	7.0	7.9	5.0	7	1.0	50	0.1	5.0
BZX55C8V2	7.7	8.7	5.0	7	1.0	50	0.1	6.2
BZX55C9V1	8.5	9.6	5.0	10	1.0	50	0.1	6.8
BZX55C10	9.4	10.6	5.0	15	1.0	70	0.1	7.5
BZX55C11	10.4	11.6	5.0	20	1.0	70	0.1	8.2
BZX55C12	11.4	12.7	5.0	20	1.0	90	0.1	9.1
BZX55C13	12.4	14.1	5.0	26	1.0	110	0.1	10
BZX55C15	13.8	15.6	5.0	30	1.0	110	0.1	11
BZX55C16	15.3	17.1	5.0	40	1.0	170	0.1	12
BZX55C18	16.8	19.1	5.0	50	1.0	170	0.1	14
BZX55C20	18.8	21.2	5.0	55	1.0	220	0.1	15
BZX55C22	20.8	23.3	5.0	55	1.0	220	0.1	17
BZX55C24	22.8	25.6	5.0	80	1.0	220	0.1	18
BZX55C27	25.1	28.9	5.0	80	1.0	220	0.1	20
BZX55C30	28	32	5.0	80	1.0	220	0.1	22
BZX55C33	31	35	5.0	80	1.0	220	0.1	24
BZX55C36	34	38	5.0	80	1.0	220	0.1	27
BZX55C39	37	41	2.5	90	0.5	500	0.1	28
BZX55C43	40	46	2.5	90	0.5	600	0.1	32
BZX55C47	44	50	2.5	110	0.5	700	0.1	35
BZX55C51	48	54	2.5	125	0.5	700	0.1	38
BZX55C56	52	60	2.5	135	0.5	1000	0.1	42
BZX55C62	58	66	2.5	150	0.5	1000	0.1	47
BZX55C68	64	72	2.5	160	0.5	1000	0.1	51
BZX55C75	70	80	2.5	170	0.5	1000	0.1	56

Notes:
1. **Tolerance and voltage designation: the type numbers listed have zener voltage as shown.**
2. **Specials available include: nominal zener voltages between the voltages shown and tighter voltage, for detailed information on price, availability and delivery.**
3. **Zener voltage (V_Z) measurement: the zener voltage is measured under pulse conditions such that T_J is more than 2°C above T_A.**
4. **Zener impedance (Z_Z) derivation: zener impedance is derived from the 60-cycle ac voltage, which results when an ac current having an RMS value equal to 10% of the dc zener current (I_{ZT}) is superimposed to IZT.**

Version: A07

Mouser Electronics

Authorized Distributor

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Taiwan Semiconductor:

BZX55C11 BZX55C12 BZX55C13 BZX55C15 BZX55C16 BZX55C18 BZX55C22 BZX55C24 BZX55C27 BZX55C2V4 BZX55C2V7 BZX55C30 BZX55C33 BZX55C36 BZX55C39 BZX55C3V0 BZX55C3V3 BZX55C3V6 BZX55C3V9 BZX55C47 BZX55C4V3 BZX55C4V7 BZX55C51 BZX55C56 BZX55C5V6 BZX55C62 BZX55C68 BZX55C6V2 BZX55C6V8 BZX55C75 BZX55C7V5 BZX55C8V2 BZX55C9V1 BZX55C91 R0