

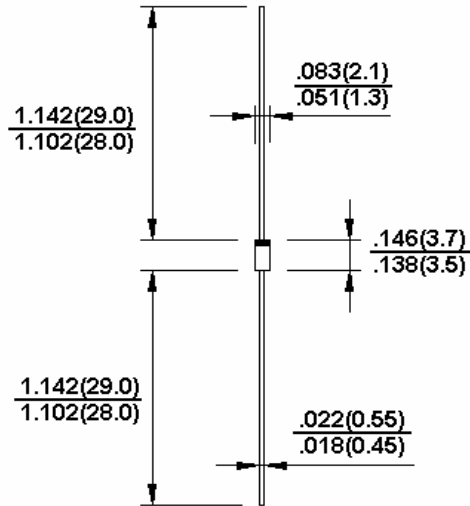
# BZX55C SERIES

## 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	P <sub>d</sub>	500	mW
Maximum Forward Voltage @ I <sub>F</sub> = 100mA	V <sub>F</sub>	1.0	V
Storage Temperature Range	T <sub>STG</sub>	-65 to + 200	°C
Operating Junction Temperature	T <sub>J</sub>	+ 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 <sub>Z</sub> at I <sub>ZT</sub> (Volts)		I <sub>ZT</sub> mA	Z <sub>ZT</sub> @ I <sub>ZT</sub>	I <sub>ZK</sub> mA	Z <sub>ZK</sub> @ I <sub>ZK</sub>	I <sub>R</sub> @ V <sub>R</sub> µA	V <sub>R</sub> V
	Min	Max		Ohms Max		Ohms Max		
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
BZX55C5V6	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<sub>Z</sub>) measurement: the zener voltage is measured under pulse conditions such that T<sub>J</sub> is more than 2°C above T<sub>A</sub>.  
4. Zener impedance (Z<sub>Z</sub>) 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<sub>ZT</sub>) is superimposed to I<sub>ZT</sub>.