

# BZX55C2V4 THRU BZX55C75

## ZENER DIODES

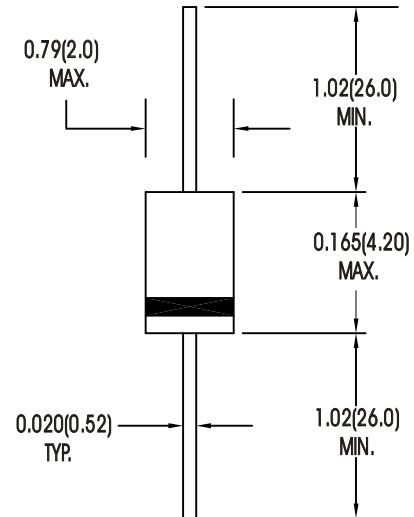
### FEATURES:

- Standard Zener voltage tolerance is  $\pm 5\%$

### MECHANICAL DATA

Case: AIXAL Molded Glass

DO-35



Dimensions in inches and (millimeters)

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25° C ambient temp. unless otherwise specified.

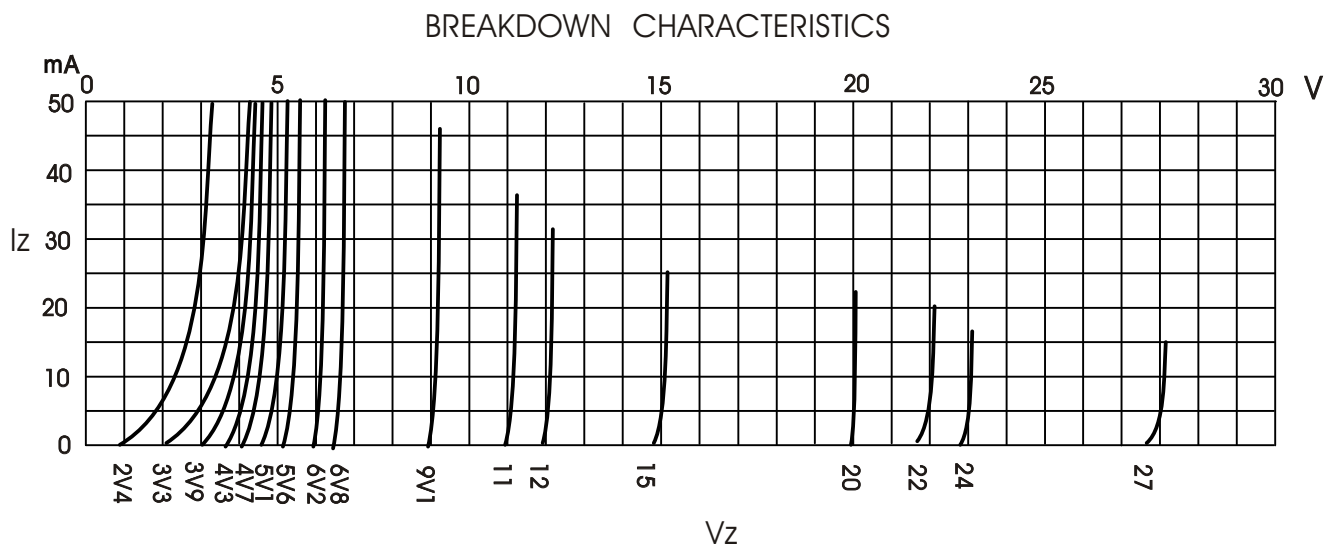
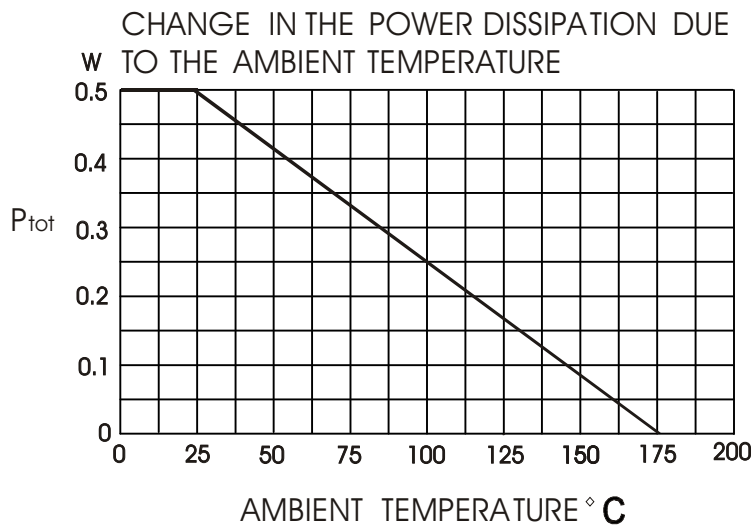
Single phase, half sine wave, 60 Hz, resistive or inductive load.

For capacitive load, derate current by 20 %.

Characteristic	Symbol	Value	Units
Power Dissipation at Tamb= 25 °C	P <sub>tot</sub>	0.5 <sup>1)</sup>	W
Z-current	I <sub>Z</sub>	P <sub>V</sub> /V <sub>Z</sub>	mA
Thermal Resistance Junction to Ambient Air	R <sub>thJ-A</sub>	300 <sup>2)</sup>	K/W
Maximum instantaneous forward voltage drop at I <sub>F</sub> =200 mADC	V <sub>F</sub>	1.5	Volts
Junction temperature	T <sub>J</sub>	175	°C
Storage temperature range	T <sub>stg</sub>	-65 to+ 175	°C

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

2) Valid provided that leads at distance of 10mm from case are kept at ambient temperature



ZENER DIODES BZX55C2V4 THRU BZX55C75

Device Type	Nominal Zener Voltage Vz at IzT	Test Current IzT	Maximum Zener Impedance			Maximum Reverse Leakage Current		Typical Temperature coefficient
			ZzT at IzT	ZzK at IzK	IzK	IR	Test Voltage Suffix B	
	Volts	mA	$\Omega$	$\Omega$	mA	$\mu$ A	Volts	%/K
BZX55C2V4	2.28-2.56	5	< 85	< 600	1.0	< 50	1.0	-0.090~-0.06
BZX55C2V7	2.5-2.9	5	< 85	< 600	1.0	< 10	1.0	-0.090~-0.06
BZX55C3V0	2.8-3.2	5	< 85	< 600	1.0	< 4	1.0	-0.080~-0.05
BZX55C3V3	3.1-3.5	5	< 85	< 600	1.0	< 2	1.0	-0.080~-0.05
BZX55C3V6	3.4-3.8	5	< 85	< 600	1.0	< 2	1.0	-0.080~-0.05
BZX55C3V9	3.7-4.1	5	< 85	< 600	1.0	< 2	1.0	-0.080~-0.05
BZX55C4V3	4.0-4.6	5	< 75	< 600	1.0	< 1	1.0	-0.060~-0.03
BZX55C4V7	4.4-5.0	5	< 60	< 600	1.0	< 0.5	1.0	-0.050~+0.02
BZX55C5V1	4.8-5.4	5	< 35	< 550	1.0	< 0.1	1.0	-0.020~+0.02
BZX55C5V6	5.2-6.0	5	< 25	< 450	1.0	< 0.1	1.0	-0.050~+0.05
BZX55C6V2	5.8-6.6	5	< 10	< 200	1.0	< 0.1	2.0	+0.030~+0.06
BZX55C6V8	6.4-7.2	5	< 8	< 150	1.0	< 0.1	3.0	+0.030~+0.07
BZX55C7V5	7.0-7.9	5	< 7	< 50	1.0	< 0.1	5.0	+0.030~+0.07
BZX55C8V2	7.7-8.7	5	< 7	< 50	1.0	< 0.1	6.2	+0.030~+0.08
BZX55C9V1	8.5-9.6	5	< 10	< 50	1.0	< 0.1	6.8	+0.030~+0.09
BZX55C10	9.4-10.6	5	< 15	< 70	1.0	< 0.1	7.5	+0.030~+0.10
BZX55C11	10.4-11.6	5	< 20	< 70	1.0	< 0.1	8.2	+0.030~+0.11
BZX55C12	11.4-12.7	5	< 20	< 90	1.0	< 0.1	9.0	+0.030~+0.11
BZX55C13	12.4-14.1	5	< 26	< 110	1.0	< 0.1	10	+0.030~+0.11
BZX55C15	13.8-15.6	5	< 30	< 110	1.0	< 0.1	11	+0.030~+0.11
BZX55C16	15.3-17.1	5	< 40	< 170	1.0	< 0.1	12	+0.030~+0.11
BZX55C18	16.8-19.1	5	< 50	< 170	1.0	< 0.1	13	+0.030~+0.11
BZX55C20	18.8-21.2	5	< 55	< 220	1.0	< 0.1	15	+0.030~+0.11
BZX55C22	20.8-23.3	5	< 55	< 220	1.0	< 0.1	16	+0.040~+0.12
BZX55C24	22.8-25.6	5	< 80	< 220	1.0	< 0.1	18	+0.040~+0.12
BZX55C27	25.1-28.9	5	< 80	< 220	1.0	< 0.1	20	+0.040~+0.12
BZX55C30	28-32	5	< 80	< 220	1.0	< 0.1	22	+0.040~+0.12
BZX55C33	31-35	5	< 80	< 220	1.0	< 0.1	24	+0.040~+0.12
BZX55C36	34-38	5	< 80	< 220	1.0	< 0.1	27	+0.040~+0.12
BZX55C39	37-41	2.5	< 90	< 500	0.5	< 0.1	30	+0.040~+0.12
BZX55C43	40-46	2.5	< 90	< 600	0.5	< 0.1	33	+0.040~+0.12
BZX55C47	44-50	2.5	< 110	< 700	0.5	< 0.1	36	+0.040~+0.12
BZX55C51	48-54	2.5	< 125	< 700	0.5	< 0.1	39	+0.040~+0.12
BZX55C56	52-60	2.5	< 135	< 1000	0.5	< 0.1	43	+0.040~+0.12
BZX55C62	58-66	2.5	< 150	< 1000	0.5	< 0.1	47	+0.040~+0.12
BZX55C68	64-72	2.5	< 200	< 1000	0.5	< 0.1	51	+0.040~+0.12
BZX55C75	70-79	2.5	< 250	< 1500	0.5	< 0.1	56	+0.040~+0.12

1) STANDARD VOLTAGE TOLERANCE IS  $\pm 5\%$  AND decimal point. E.g., 3V6=3.6V