

## BZX55C-SERIES

### ZENER DIODES

Zener Voltage: 2.4-75V

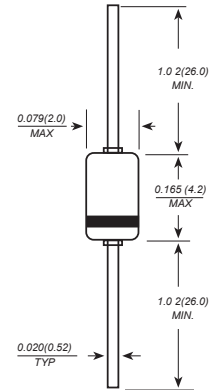
Peak Pulse Power: 500mW

#### FEATURES

- ◆ Low zener impedance
- ◆ Low regulation factor
- ◆ Glass passivated junction
- ◆ High temperature soldering guaranteed:  
260 °C/10S/9.5mm lead length at 5 lbs tension



#### DO-35(GLASS)



#### MECHANICAL DATA

**Case:** JEDEC DO-35(GLASS) molded glass body

**Terminals:** Plated axial leads, solderable per MIL-STD 750, method 2026

**Polarity:** Color band denotes cathode end

**Mounting Position:** Any

**Weight:** 0.005 ounce, 0.14 grams

#### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified.

	SYMBOLS	VALUE	UNITS
Zener Current see Table Characteristics			
Power Dissipation at Tamb=25°C(Note 1)	P <sub>tot</sub>	500	mW
Junction Temperature	T <sub>J</sub>	200	°C
Storage Temperature Range	T <sub>STG</sub>	-65 to + 200	°C
Thermal resistance junction ambient(Note 1)	R <sub>θJA</sub>	0.3	K/mW
Forward voltage at I <sub>F</sub> =100mA	V <sub>F</sub>	1.0	V

Note 1: Valid provided that leads at a distance of 10mm from case are kept at ambient temperature

**ELECTRICAL CHARACTERISTICS (at TA=25 C unless otherwise noted)**

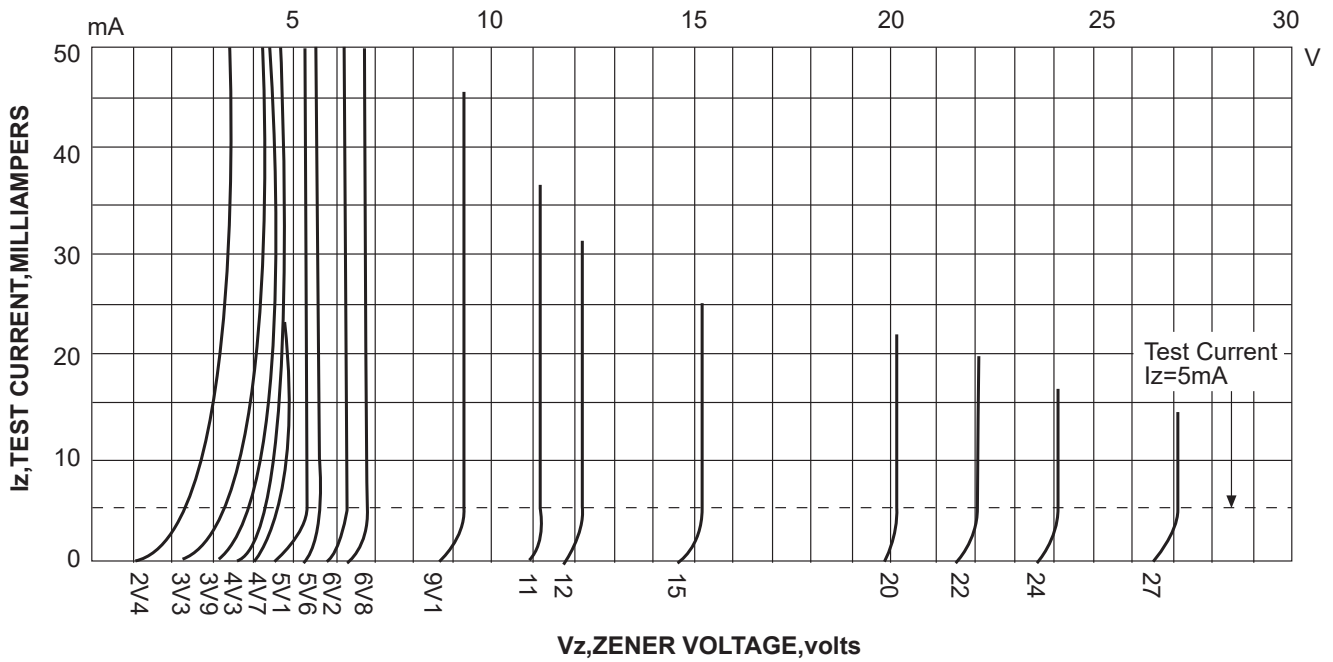
Device Type	Nominal Zener Voltage Vz@IzT		Test Current IzT mA	Maximum Zener Impedance			Maximum Reverse Leakage Current		Typical Temperature Coefficient (%/°C)	Maximum Regulator Current IzM mA
	Min	Max		ZzT@IzT	ZzK@IzK	IzK	IR	@VR		
				Ohms	Ohms	mA	µA	Volts		
BZX55C2V4	2.28	2.56	5.0	85	600	1.0	50	1.0	-0.085	155
BZX55C2V7	2.5	2.9	5.0	85	600	1.0	10	1.0	-0.080	135
BZX55C3V0	2.8	3.2	5.0	85	600	1.0	4.0	1.0	-0.075	125
BZX55C3V3	3.1	3.5	5.0	85	600	1.0	2.0	1.0	-0.070	115
BZX55C3V6	3.4	3.8	5.0	85	600	1.0	2.0	1.0	-0.065	105
BZX55C3V9	3.7	4.1	5.0	85	600	1.0	2.0	1.0	-0.060	95
BZX55C4C3	4.0	4.6	5.0	75	600	1.0	1.0	1.0	+0.055	90
BZX55C4V7	4.4	5.0	5.0	60	600	1.0	0.5	1.0	+0.030	85
BZX55C5V1	4.8	5.4	5.0	35	550	1.0	0.1	1.0	+0.030	80
BZX55C5V6	5.2	6.0	5.0	25	450	1.0	0.1	1.0	+0.038	70
BZX55C6V2	5.8	6.6	5.0	10	200	1.0	0.1	2.0	+0.045	64
BZX55C6V8	6.4	7.2	5.0	8.0	150	1.0	0.1	3.0	+0.050	58
BZX55C7V5	7.0	7.9	5.0	7.0	50	1.0	0.1	5.0	+0.058	53
BZX55C8V2	7.7	8.7	5.0	7.0	50	1.0	0.1	6.2	+0.062	74
BZX55C9V1	8.5	9.6	5.0	10	50	1.0	0.1	6.8	+0.068	43
BZX55C10	9.4	10.6	5.0	15	70	1.0	0.1	7.5	+0.075	40
BZX55C11	10.4	11.6	5.0	20	70	1.0	0.1	8.2	+0.076	36
BZX55C12	11.4	12.7	5.0	20	90	1.0	0.1	9.1	+0.077	32
BZX55C13	12.4	14.1	5.0	26	110	1.0	0.1	10	+0.079	29
BZX55C15	13.8	15.6	5.0	30	110	1.0	0.1	11	+0.082	27
BZX55C16	15.3	17.1	5.0	40	170	1.0	0.1	12	+0.083	24
BZX55C18	16.8	19.1	5.0	50	170	1.0	0.1	13	+0.085	21
BZX55C20	18.8	21.2	5.0	55	220	1.0	0.1	15	+0.086	20
BZX55C22	20.8	23.3	5.0	55	220	1.0	0.1	16	+0.087	18
BZX55C24	22.8	25.6	5.0	80	220	1.0	0.1	18	+0.088	16
BZX55C27	25.1	28.9	5.0	80	220	1.0	0.1	20	+0.090	14
BZX55C30	28	32	5.0	80	220	1.0	0.1	22	+0.091	13
BZX55C33	31	35	5.0	80	220	1.0	0.1	24	+0.092	12
BZX55C36	34	38	5.0	80	220	1.0	0.1	27	+0.093	11
BZX55C39	37	41	2.5	90	500	0.5	0.1	30	+0.094	10
BZX55C43	40	46	2.5	90	600	0.5	0.1	33	+0.095	9.2
BZX55C47	44	50	2.5	110	700	0.5	0.1	36	+0.095	8.5
BZX55C51	48	54	2.5	125	700	0.5	0.1	39	+0.096	7.8
BZX55C56	52	60	2.5	135	1000	0.5	0.1	43	+0.096	7.0
BZX55C62	58	66	2.5	150	1000	0.5	0.1	47	+0.096	6.4
BZX55C68	64	72	2.5	200	1000	0.5	0.1	51	+0.096	5.9
BZX55C75	70	80	2.5	250	1500	0.5	0.1	56	+0.096	5.3

Note 1: Suffix "B" indicate ±2% tolerance

Note 2: Suffix "A" indicate +1% tolerance

## RATINGS AND CHARACTERISTIC CURVES BZX55-SERIES

### Breakdown characteristics



### Admissible power dissipation versus ambient temperature

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

