



**DC COMPONENTS CO., LTD.**

RECTIFIER SPECIALISTS

**BZX55C2V4**

**THRU**

**BZX55C39**

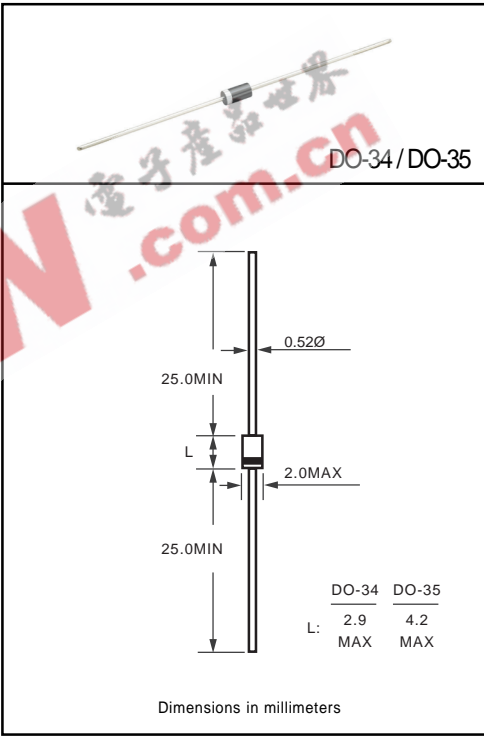
**TECHNICAL SPECIFICATIONS OF GLASS SILICON ZENER DIODES**

**FEATURES**

- \* Voltage Range: 2.4V to 39V
- \* Double slug type construction

**MECHANICAL DATA**

- \* Case: Glass sealed case
- \* Lead: MIL-STD-202E, Method 208 guaranteed
- \* Polarity: Color band denotes cathode end
- \* Mounting position: Any
- \* Weight: 0.13 gram



**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

Ratings at 25 °C ambient temperature unless otherwise specified.  
 Single phase, half wave, 60 Hz, resistive or inductive load.  
 For capacitive load, derate current by 20%.

	SYMBOL	VALUE	UNITS
Zener Current see Table "Characteristics"			
Power Dissipation at Tamb=25°C	Ptot	500 <sup>(1)</sup>	mW
Junction Temperature	Tj	175	°C
Storage Temperature Range	Tstg	-55 to + 175	°C
Thermal Resistance Junction to Ambient Air	RthA	- - 0.3 <sup>(1)</sup>	K/mW Typ. Min. Max.
Forward Voltage at IF=100mA	VF	- - 1	Volts Typ. Min. Max.

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

NOTE: 1. Standard Zener Voltage Tolerance ± 5%

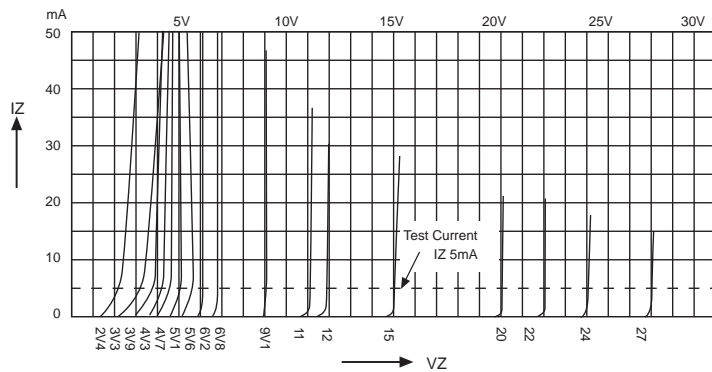
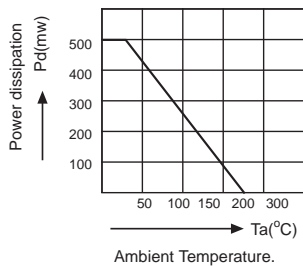
2. Suffix "M" stands for "DO-34" package. (e.g.: BZX55C2V4M, BZX55C39M)

RATING AND CHARACTERISTIC CURVES (BZX55C SERIES)

TYPE	Nominal Zener Voltage VZ@IZT		Zener Test Current IZT	Maximum Zener Impedance		IZK	Maximum Reverse Leakage Current		Typical Temperature Coefficient	Maximum Regulator Current IZM
	Min	Max		ZZT@IZT	ZZT@IZK		IR	@VR		
			mA	Ohms	Ohms	mA	uA	Volts	% / °C	mA
BZX55C2V4	2.28	2.56	5	85	600	1	50	1	-0.085	155
BZX55C2V7	2.5	2.9	5	85	600	1	10	1	-0.080	135
BZX55C3V0	2.8	3.2	5	85	600	1	4	1	-0.075	125
BZX55C3V3	3.1	3.5	5	85	600	1	2	1	-0.070	115
BZX55C3V6	3.4	3.8	5	85	600	1	2	1	-0.065	105
BZX55C3V9	3.7	4.1	5	85	600	1	2	1	-0.060	95
BZX55C4V3	4.0	4.6	5	75	600	1	1	1	±0.055	90
BZX55C4V7	4.4	5.0	5	60	600	1	0.5	1	±0.030	85
BZX55C5V1	4.8	5.4	5	35	550	1	0.1	1	±0.030	80
BZX55C5V6	5.2	6.0	5	25	450	1	0.1	1	+0.038	70
BZX55C6V2	5.8	6.6	5	10	200	1	0.1	2	+0.045	64
BZX55C6V8	6.4	7.2	5	8	150	1	0.1	3	+0.050	58
BZX55C7V5	7.0	7.9	5	7	50	1	0.1	5	+0.058	53
BZX55C8V2	7.7	8.7	5	7	50	1	0.1	6.2	+0.062	74
BZX55C9V1	8.5	9.6	5	10	50	1	0.1	6.8	+0.068	43
BZX55C10	9.4	10.6	5	15	70	1	0.1	7.5	+0.075	40
BZX55C11	10.4	11.6	5	20	70	1	0.1	8.2	+0.076	36
BZX55C12	11.4	12.7	5	20	90	1	0.1	9.1	+0.077	32
BZX55C13	12.4	14.1	5	26	110	1	0.1	10	+0.079	29
BZX55C15	13.8	15.6	5	30	110	1	0.1	11	+0.082	27
BZX55C16	15.3	17.1	5	40	170	1	0.1	12	+0.083	24
BZX55C18	16.8	19.1	5	50	170	1	0.1	12	+0.085	21
BZX55C20	18.8	21.2	5	55	220	1	0.1	15	+0.086	20
BZX55C22	20.8	23.3	5	55	220	1	0.1	16	+0.087	18
BZX55C24	22.8	25.6	5	80	220	1	0.1	18	+0.088	16
BZX55C27	25.1	28.9	5	80	220	1	0.1	20	+0.090	14
BZX55C30	28	32	5	80	220	1	0.1	22	+0.091	13
BZX55C33	31	35	5	80	220	1	0.1	24	+0.092	12
BZX55C36	34	38	5	80	220	1	0.1	27	+0.093	11
BZX55C39	37	41	2.5	90	500	0.5	0.1	30	+0.094	10

Breakdown characteristic BZX55-SERIES

changes in the power dissipation due to the ambient temperature.



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