

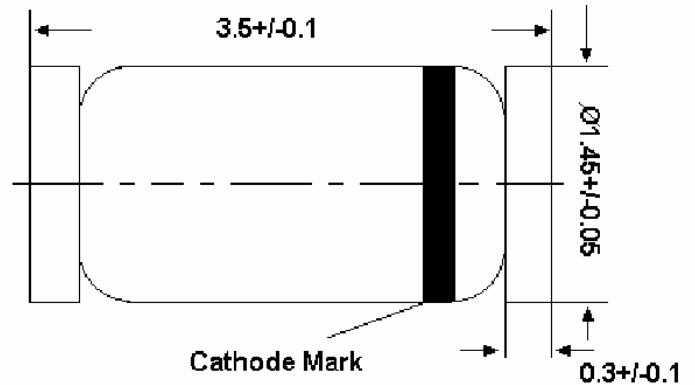
# BZV55C-SERIES

## SILICON PLANAR ZENER DIODES

### LL-34

#### FEATURES

- ◆ Total power dissipation: max. 500 mW
  - ◆ Two tolerance series:  $\pm 2\%$  and approx.  $\pm 5\%$
- Standard tolerance: approx.  $\pm 5\%$  (refer to below "zener voltage range") ;  $\pm 2\%$  tolerance available on request.



Glass Case MiniMELF  
Dimensions in mm

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

### Absolute Maximum Ratings $T_a=25^\circ\text{C}$

PARAMETER	SYMBOL	VALUE	UNIT
Power Dissipation	P <sub>tot</sub>	500 <sup>1)</sup>	mW
Junction and Storage Temperature Range	T <sub>j</sub> , T <sub>stg</sub>	-65 to + 200	°C

1)Valid provided that electrodes are kept at ambient temperature.

### Characteristics at $T_a=25^\circ\text{C}$

PARAMETER	SYMBOL	MAX	UNIT
Thermal Resistance Junction to Ambient Air	R <sub>thA</sub>	0.3 <sup>1)</sup>	K/mW
Forward Voltage at I <sub>F</sub> = 100 mA	V <sub>F</sub>	0.9	V

1) Valid provided that electrodes are kept at ambient temperature.

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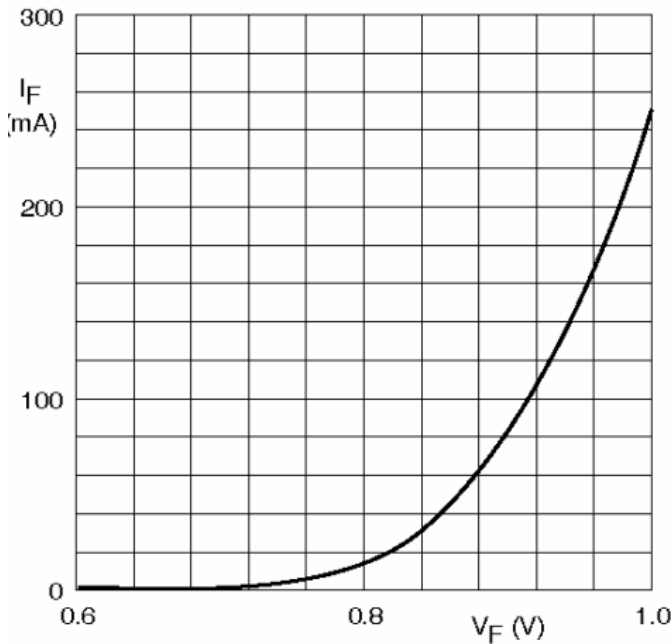
### Characteristics at $T_j=25^\circ\text{C}$

BZV55C...	Zener Voltage Range <sup>1)</sup>		Dynamic Resistance			Reverse Current	
	V <sub>ZT</sub> (V)	I <sub>ZT</sub> (mA)	Z <sub>ZT</sub> at I <sub>ZT</sub> Max. (Ω)	Z <sub>Zk</sub> Max. (Ω)	at I <sub>ZK</sub> (mA)	I <sub>R</sub> Max. (μA)	at V <sub>R</sub> (V)
2V4	2.2...2.6	5	100	600	1	50	1
2V7	2.5...2.9	5	100	600	1	20	1
3V0	2.8...3.2	5	95	600	1	10	1
3V3	3.1...3.5	5	95	600	1	5	1
3V6	3.4...3.8	5	90	600	1	5	1
3V9	3.7...4.1	5	90	600	1	3	1
4V3	4...4.6	5	90	600	1	3	1
4V7	4.4...5	5	80	500	1	3	2
5V1	4.8...5.5	5	60	480	1	2	2
5V6	5.2...6	5	40	400	1	1	2
6V2	5.8...6.6	5	10	150	1	3	4
6V8	6.4...7.2	5	15	80	1	2	4
7V5	7...7.9	5	15	80	1	1	5
8V2	7.7...8.7	5	15	80	1	0.7	5
9V1	8.5...9.6	5	15	100	1	0.5	6
10	9.4...10.6	5	20	150	1	0.2	7
11	10.4...11.6	5	20	150	1	0.1	8
12	11.4...12.7	5	25	150	1	0.1	8
13	12.4...14.1	5	30	170	1	0.1	8
15	13.8...15.6	5	30	200	1	0.05	10
16	15.3...17.1	5	40	200	1	0.05	11
18	16.8...19.1	5	45	225	1	0.05	13
20	18.8...21.2	5	55	225	1	0.05	14
22	20.8...23.3	5	55	250	1	0.05	15
24	22.8...25.6	5	70	250	1	0.05	17
27	25.1...28.9	2	80	300	0.5	0.05	19
30	28...32	2	80	300	0.5	0.05	21
33	31...35	2	80	325	0.5	0.05	23
36	34...38	2	90	350	0.5	0.05	25
39	37...41	2	130	350	0.5	0.05	27
43	40...46	2	150	375	0.5	0.05	30
47	44...50	2	170	375	0.5	0.05	33
51	48...54	2	180	400	0.5	0.05	36
56	52...60	2	200	425	0.5	0.05	39
62	58...66	2	215	450	0.5	0.05	43
68	64...72	2	240	475	0.5	0.05	48
75	70...79	2	255	500	0.5	0.05	53

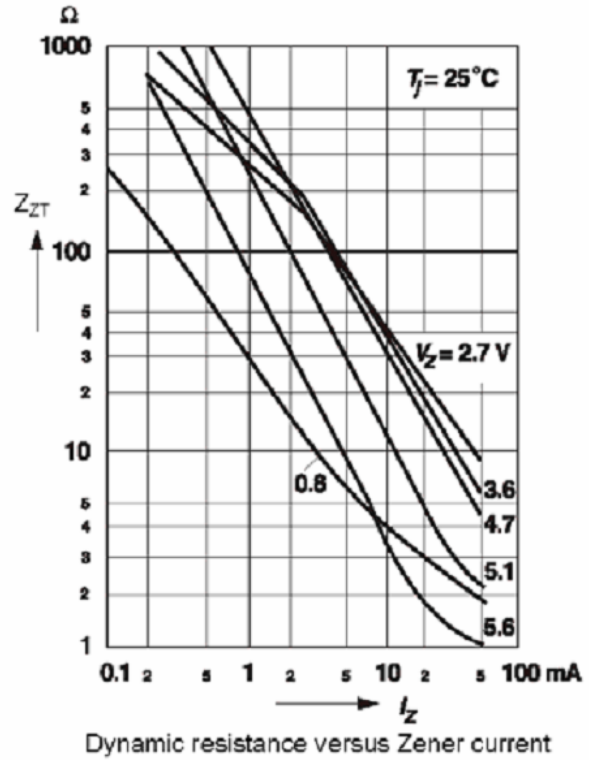
1) Tested with pulses  $t_p = 20$  ms.

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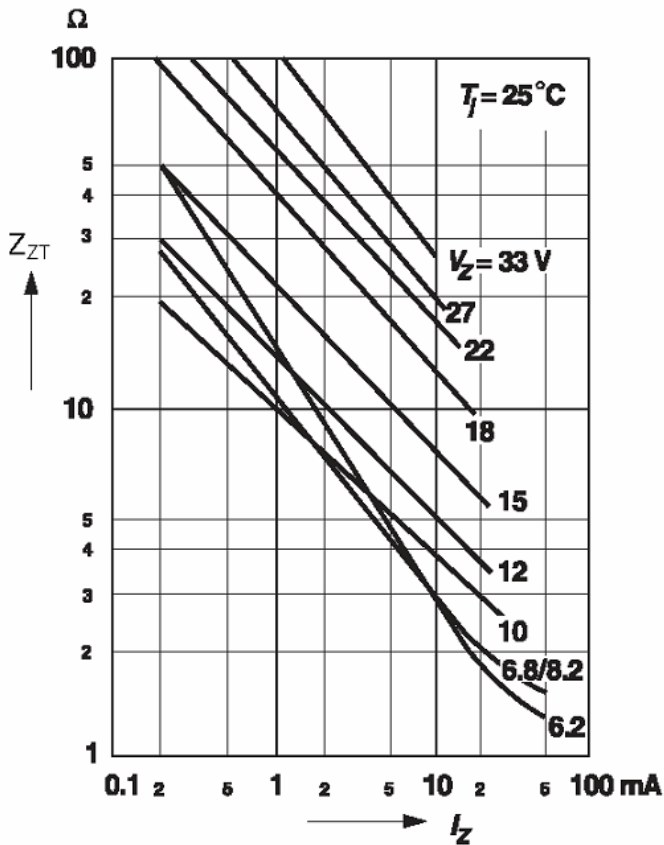
## RATINGS AND CHARACTERISTIC CURVES BZV55



Typical forward current as a function of forward voltage



Dynamic resistance versus Zener current



Dynamic resistance versus Zener current

Note: Specifications are subject to change without notice.