



Micro Commercial Components  
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# BZX55-C2V4 THRU BZX55-C47

## Features

- Silicon Planar Power Zener Diodes
- Glass Package

**500 mWatt  
 Zener Diode  
 2.42 to 47 Volts**

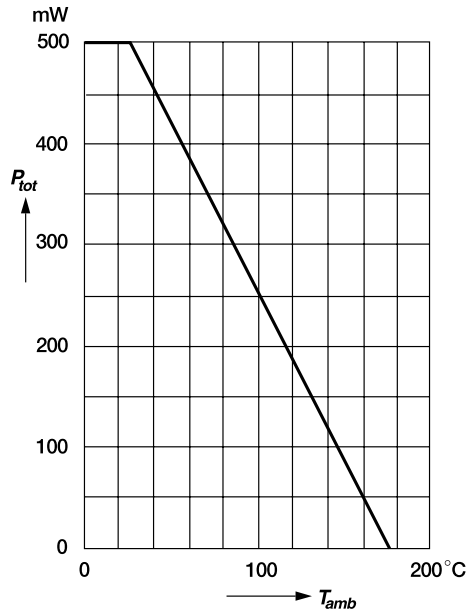
## Maximum Ratings

Symbol	Rating	Rating	Unit
$P_b$	Power dissipation	500 <sup>(1)</sup>	mW
$R_{JA}$	Thermal Resistance Junction to Ambient Air	300 <sup>(1)</sup>	°C/W
$T_J$	Junction Temperature	-55 to +150	°C
$T_{STG}$	Storage Temperature Range	-55 to +150	°C

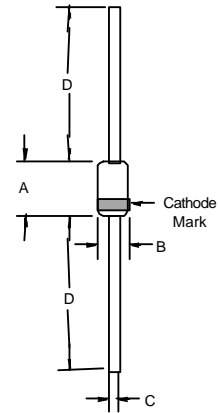
## DO-35 GLASS

### Admissible power dissipation versus ambient temperature

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



Note: (1) Valid provided that leads at a distance of 3/8" from case are kept at ambient temperature.



DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	---	.166	---	4.2	
B	---	.079	---	2.00	
C	---	.020	---	.52	
D	1.000	---	25.40	---	

# BZX55-C2V4 thru BZX55-C47



## ELECTRICAL CHARACTERISTICS @25°C Maximum $V_F=1.0V$ at $I_F=100mA$

MCC PART NUMBER	ZENER VOLTAGE RANGE <sup>(1)</sup> at $I_{ZT}$ $V_Z$ (V)		TEST CURRENT $I_{ZT}$	MAXIMUM DYNAMIC RESISTANCE f=1.0kHz $I_Z=5.0mA$ $I_Z=1.0mA$		TEMP. COEFFICIENT OF ZENER VOLTAGE at $I_Z=5mA$ $V_Z$ (%/°C)		REVERSE LEAKAGE CURRENT $I_R$	TEST CURRENT $V_R$
	MIN.	MAX.	mA	OHMS	OHMS	MIN.	MAX.	nA	V
BZX55-C2V4	2.28	2.56	5.0	85	600	-0.08	-0.06	50000	1.0
BZX55-C2V7	2.50	2.90	5.0	85	600	-0.08	-0.06	10000	1.0
BZX55-C3V0	2.80	3.20	5.0	85	600	-0.08	-0.06	4000	1.0
BZX55-C3V3	3.10	3.50	5.0	85	600	-0.08	-0.05	2000	1.0
BZX55-C3V6	3.40	3.90	5.0	85	600	-0.08	-0.04	2000	1.0
BZX55-C3V9	3.70	4.10	5.0	85	600	-0.07	-0.03	2000	1.0
BZX55-C4V3	4.00	4.60	5.0	75	600	-0.04	-0.01	1000	1.0
BZX55-C4V7	4.40	5.00	5.0	60	600	-0.03	+0.01	500	1.0
BZX55-C5V1	4.80	5.40	5.0	35	550	-0.02	+0.05	100	1.0
BZX55-C5V6	5.20	6.00	5.0	25	450	-0.01	+0.06	100	1.0
BZX55-C6V2	5.80	6.60	5.0	10	200	0	+0.07	100	2.0
BZX55-C6V8	6.40	7.20	5.0	8.0	150	+0.01	+0.08	100	3.0
BZX55-C7V5	7.00	7.90	5.0	7.0	50	+0.01	+0.09	100	5.0
BZX55-C8V2	7.70	8.70	5.0	7.0	50	+0.01	+0.09	100	6.2
BZX55-C9V1	8.50	9.60	5.0	10	50	+0.02	+0.10	100	6.8
BZX55-C10	9.40	10.6	5.0	15	70	+0.03	+0.11	100	7.5
BZX55-C11	10.4	11.6	5.0	20	70	+0.03	+0.11	100	8.2
BZX55-C12	11.4	12.7	5.0	20	90	+0.03	+0.11	100	9.1
BZX55-C13	12.4	14.1	5.0	26	110	+0.03	+0.11	100	10
BZX55-C15	13.8	15.6	5.0	30	110	+0.03	+0.11	100	11
BZX55-C16	15.3	17.1	5.0	40	170	+0.03	+0.11	100	12
BZX55-C18	16.8	19.1	5.0	40	170	+0.03	+0.11	100	13
BZX55-C20	18.8	21.2	5.0	55	220	+0.03	+0.11	100	15
BZX55-C22	20.8	23.3	5.0	55	220	+0.03	+0.11	100	16
BZX55-C24	22.8	25.6	5.0	80	220	+0.04	+0.12	100	18
BZX55-C27	25.1	28.9	5.0	80	220	+0.04	+0.12	100	20
BZX55-C30	28.0	32.0	5.0	80	220	+0.04	+0.12	100	22
BZX55-C33	31.0	35.0	5.0	80	220	+0.04	+0.12	100	24
BZX55-C36	34.0	38.0	5.0	80	220	+0.04	+0.12	100	27
BZX55-C39	37.0	41.0	2.5	90 <sup>(2)</sup>	500 <sup>(3)</sup>	+0.04	+0.12	100	30
BZX55-C43	40.0	46.0	2.5	90 <sup>(2)</sup>	600 <sup>(3)</sup>	+0.04	+0.12	100	33
BZX55-C47	44.0	50.0	2.5	110 <sup>(2)</sup>	700 <sup>(3)</sup>	+0.04	+0.12	100	36

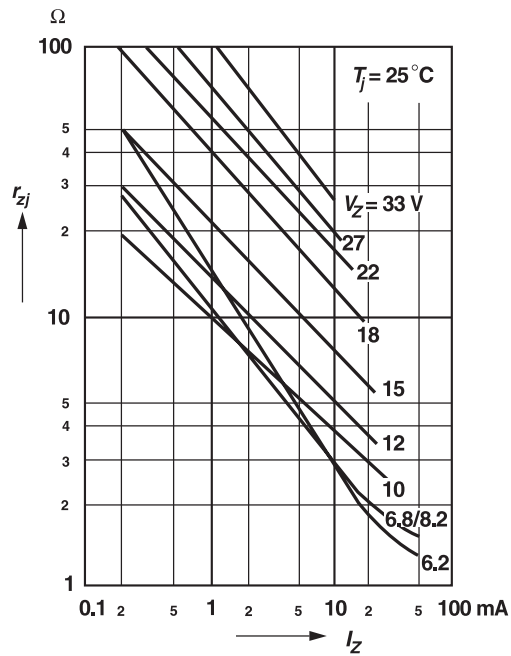
Note: (1) Measured with pulses  $t_p=5.0ms$

(2) at  $I_Z=2.5mA$

(3) at  $I_Z=0.5mA$

# BZX55-C2V4 thru BZX55-C47

Dynamic resistance versus Zener current



Dynamic resistance versus Zener voltage

