

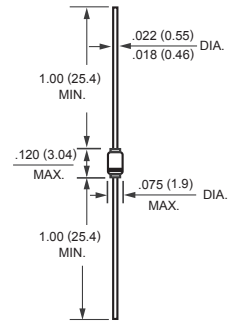
**SILICON PLANAR ZENER DIODE**

**FEATURES**

- \* Zener Voltage Range 2.0 to 75 Volts
- \* DO-34 Package (JEDEC)
- \* Through-Hole Device Type Mounting
- \* Hermetically Sealed Glass
- \* Compression Bonded Construction
- \* All external surfaces are corrosion resistant and leads are readily solderable

**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

Ratings at 25 °C ambient temperature unless otherwise specified.



**MAXIMUM RATINGS** ( @ TA = 25°C unless otherwise noted )

RATINGS	SYMBOL	VALUE	UNITS
Power Dissipation	P <sub>D</sub>	500	mW
Junction Temperature	T <sub>J</sub>	200	°C
Storage Temperature Range	T <sub>stg</sub>	-65to+200	°C

## ELECTRICAL CHARACTERISTICS (@TA=25°C unless otherwise specified)

TYPE	V <sub>ZT@I<sub>ZT</sub></sub> (Volts)		I <sub>ZT</sub> (mA)	Z <sub>ZT@I<sub>ZT</sub></sub> (Ω)	I <sub>ZT</sub> (mA)	Z <sub>ZT@I<sub>ZT</sub></sub> (Ω)	I <sub>R@V<sub>R</sub></sub> (uA)	V <sub>R</sub> (Volts)
	MIN	MAX		MAX		MAX		
BZX55C2V0	1.88	2.11	5	100	1	600	100	1
BZX55C2V2	2.08	2.33	5	100	1	600	100	1
BZX55C2V4	2.28	2.56	5	85	1	600	50	1
BZX55C2V7	2.51	2.89	5	85	1	600	10	1
BZX55C3V0	2.8	3.2	5	85	1	600	4	1
BZX55C3V3	3.1	3.5	5	85	1	600	2	1
BZX55C3V6	3.4	3.8	5	85	1	600	2	1
BZX55C3V9	3.7	4.1	5	85	1	600	2	1
BZX55C4V3	4.0	4.6	5	75	1	600	1	1
BZX55C4V7	4.4	5.0	5	60	1	600	0.5	1
BZX55C5V1	4.8	5.4	5	35	1	550	0.1	1
BZX55C5V6	5.2	6.0	5	25	1	450	0.1	1
BZX55C6V2	5.8	6.6	5	10	1	200	0.1	2
BZX55C6V8	6.4	7.2	5	8	1	150	0.1	3
BZX55C7V5	7.0	7.9	5	7	1	50	0.1	5
BZX55C8V2	7.7	8.7	5	7	1	50	0.1	6.2
BZX55C9V1	8.5	9.6	5	10	1	50	0.1	6.8
BZX55C10	9.4	10.6	5	15	1	70	0.1	7.5
BZX55C11	10.4	11.6	5	20	1	70	0.1	8.2
BZX55C12	11.4	12.7	5	20	1	90	0.1	9.1
BZX55C13	12.4	14.1	5	26	1	110	0.1	10
BZX55C15	13.8	15.6	5	30	1	110	0.1	11
BZX55C16	15.3	17.1	5	40	1	170	0.1	12
BZX55C18	16.8	19.1	5	50	1	170	0.1	13
BZX55C20	18.8	21.1	5	55	1	220	0.1	15
BZX55C22	20.8	23.3	5	55	1	220	0.1	16
BZX55C24	22.8	25.6	5	80	1	220	0.1	18
BZX55C27	25.1	28.9	5	80	1	220	0.1	20
BZX55C30	28	32	5	80	1	220	0.1	22
BZX55C33	31	35	5	80	1	220	0.1	24
BZX55C36	34	38	5	80	1	220	0.1	27
BZX55C39	37	41	5	90	0.5	500	0.1	28

**ELECTRICAL CHARACTERISTICS** (@TA=25°C unless otherwise specified)

TYPE	V <sub>ZT@I<sub>ZT</sub></sub> (Volts)		I <sub>ZT</sub> (mA)	Z <sub>ZT@I<sub>ZT</sub></sub> (Ω)	I <sub>ZT</sub> (mA)	Z <sub>ZT@I<sub>ZT</sub></sub> (Ω)	I <sub>R@V<sub>R</sub></sub> (uA)	V <sub>R</sub> (Volts)
	MIN	MAX		MAX		MAX		
BZX55C43	40	46	2.5	90	0.5	600	0.1	32
BZX55C47	44	50	2.5	110	0.5	700	0.1	35
BZX55C51	48	54	2.5	125	0.5	700	0.1	38
BZX55C56	52	60	2.5	135	0.5	1000	0.1	42
BZX55C62	58	66	2.5	150	0.5	1000	0.1	47
BZX55C68	64	72	2.5	160	0.5	1000	0.1	51
BZX55C75	70	80	2.5	170	0.5	1000	0.1	56

## RATING AND CHARACTERISTICS CURVES ( BZX55C2V0-BZX55C75)

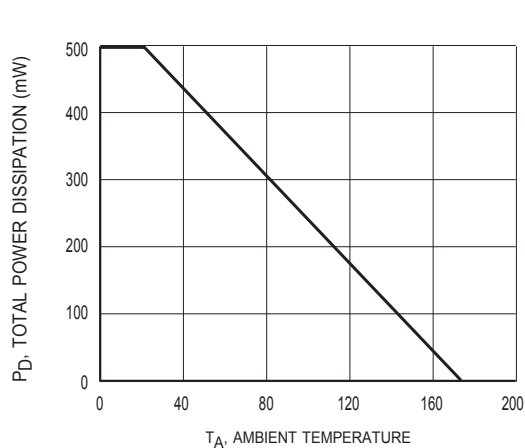


Figure1 Power Dissipation vs Ambient Temperature

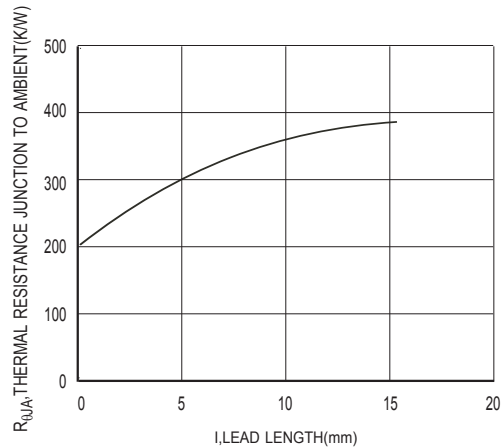


Figure2 Thermal Resistance vs Lead Length

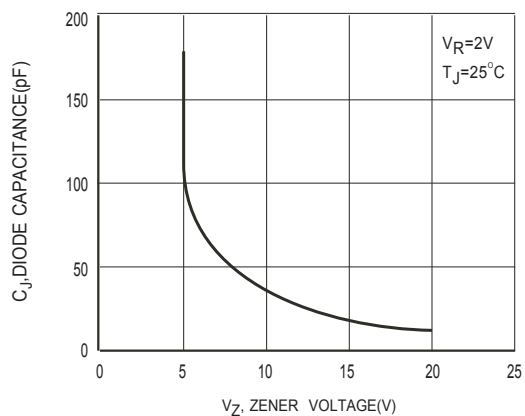


Figure3 Diode Capacitance vs Zener Voltage

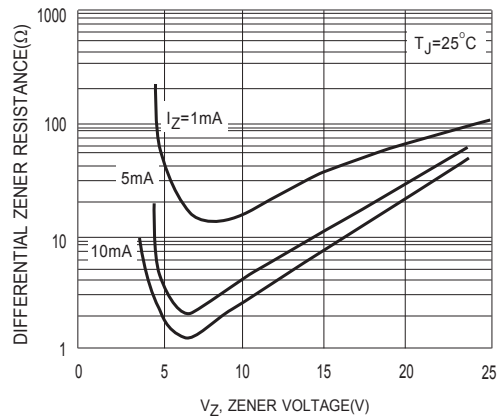


Figure4 Differential Zener Impedance

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