

**SILICON PLANAR ZENER DIODE**

**FEATURES**

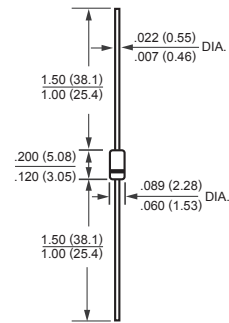
- \* Zener Voltage Range 4.7 to 36 Volts
- \* DO-35 Glass Axial Package
- \* Best Suited For Industrial, Military and Space Applications.
- \* The Glass Passivated Diode Chip in The Hermetically Sealed Glass Package with Double Studs Provides Excellent Stability and Reliability.

**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

Ratings at 25 °C ambient temperature unless otherwise specified.



**DO-35**



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

RATINGS	SYMBOL	VALUE	UNITS
Power Dissipation (Note 1)	PTA	500	mW
Surge Power Dissipation Pulse Width =10 mS	Ps	5.0	W
Junction Temperature	TJ	175	°C
Storage Temperature	TSTG	-65 to +175	°C

**THERMAL RESISTANCE ( @ TA = 25°C unless otherwise noted )**

DESCRIPTION	SYMBOL	TYP.	UNITS
Thermal Resistance Junction to Ambient (Note 1)	R θJA	300	°C/W

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

CHARACTERISTICS	SYMBOL	TYP.	UNITS
Forward Voltage at IF= 100mA	VF	1.0	Volts

Notes: 1. On infinite heatsink with 4mm lead length.  
2. "Fully RoHS Compliant", "100% Sn plating (Pb-free)".

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

TYPE	V <sub>ZT</sub> @I <sub>ZT</sub> (V) (NOTE)		R <sub>ZT</sub> @I <sub>ZT</sub> (Ω) MAX (NOTE)	I <sub>ZT</sub> (mA)	I <sub>R</sub> @T <sub>A</sub> =25°C (μA) MAX	V <sub>R</sub> (V)	MARKING
	MIN	MAX					
BZX55C 4.7BS	4.47	4.91	100	5.0	5.0	1.0	4V7
BZX55C 4.7BSA	4.47	4.65					4V7A
BZX55C 4.7BSB	4.59	4.77					4V7B
BZX55C 4.7BSC	4.71	4.91					4V7C
BZX55C 5.1BS	4.85	5.35	70	5.0	5.0	1.5	5V1
BZX55C 5.1BSA	4.85	5.03					5V1A
BZX55C 5.1BSB	4.97	5.18					5V1B
BZX55C 5.1BSC	5.12	5.35					5V1C
BZX55C 5.6BS	5.29	5.88	40	5.0	5.0	2.5	5V6
BZX55C 5.6BSA	5.29	5.52					5V6A
BZX55C 5.6BSB	5.46	5.70					5V6B
BZX55C 5.6BSC	5.64	5.88					5V6C
BZX55C 6.2BS	5.81	6.40	30	5.0	5.0	3.0	6V2
BZX55C 6.2BSA	5.81	6.06					6V2A
BZX55C 6.2BSB	5.99	6.24					6V2B
BZX55C 6.2BSC	6.16	6.40					6V2C
BZX55C 6.8BS	6.32	6.97	25	5.0	2.0	3.5	6V8
BZX55C 6.8BSA	6.32	6.59					6V8A
BZX55C 6.8BSB	6.52	6.79					6V8B
BZX55C 6.8BSC	6.70	6.97					6V8C
BZX55C 7.5BS	6.88	7.64	25	5.0	0.5	4.0	7V5
BZX55C 7.5BSA	6.88	7.19					7V5A
BZX55C 7.5BSB	7.11	7.41					7V5B
BZX55C 7.5BSC	7.33	7.64					7V5C
BZX55C 8.2BS	7.56	8.41	20	5.0	0.5	5.0	8V2
BZX55C 8.2BSA	7.56	7.90					8V2A
BZX55C 8.2BSB	7.82	8.15					8V2B
BZX55C 8.2BSC	8.07	8.41					8V2C
BZX55C 9.1BS	8.33	9.29	20	5.0	0.5	6.0	9V1
BZX55C 9.1BSA	8.33	8.70					9V1A
BZX55C 9.1BSB	8.61	8.99					9V1B
BZX55C 9.1BSC	8.89	9.29					9V1C
BZX55C 10BS	9.19	10.30	20	5.0	0.2	7.0	10V
BZX55C 10BSA	9.19	9.59					10VA
BZX55C 10BSB	9.48	9.90					10VB
BZX55C 10BSC	9.82	10.30					10CV
BZX55C 11BS	10.18	11.26	20	5.0	0.2	8.0	11V
BZX55C 11BSA	10.18	10.36					11VA
BZX55C 11BSB	10.50	10.95					11VB
BZX55C 11BSC	10.82	11.26					11VC

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

TYPE	V <sub>ZT</sub> @I <sub>ZT</sub> (V) (NOTE)		R <sub>ZT</sub> @I <sub>ZT</sub> (Ω) MAX (NOTE)	I <sub>ZT</sub> (mA)	I <sub>R</sub> @T <sub>A</sub> =25°C (μA) MAX	V <sub>R</sub> (V)	MARKING
	MIN	MAX					
BZX55C 12BS	11.13	12.30	25	5.0	0.2	9.0	12V
BZX55C 12BSA	11.13	11.63					12VA
BZX55C 12BSB	11.50	11.92					12VB
BZX55C 12BSC	11.80	12.30					12VC
BZX55C 13BS	12.18	13.62	26	5.0	0.2	10	13V
BZX55C 13BSA	12.18	12.71					13VA
BZX55C 13BSB	12.59	13.16					13VB
BZX55C 13BSC	13.03	13.62					13VC
BZX55C 15BS	13.48	15.02	30	5.0	0.2	11	15V
BZX55C 15BSA	13.48	14.09					15VA
BZX55C 15BSB	13.95	14.56					15VB
BZX55C 15BSC	14.42	15.02					15VC
BZX55C 16BS	14.87	16.50	40	5.0	0.2	12	16V
BZX55C 16BSA	14.87	15.50					16VA
BZX55C 16BSB	15.33	15.96					16VB
BZX55C 16BSC	15.79	16.50					16VC
BZX55C 18BS	16.34	18.30	50	5.0	0.2	13	18V
BZX55C 18BSA	16.34	17.06					18VA
BZX55C 18BSB	16.90	17.67					18VB
BZX55C 18BSC	17.51	18.30					18VC
BZX55C 20BS	18.14	20.45	55	5.0	0.2	15	20V
BZX55C 20BSA	18.14	18.96					20VA
BZX55C 20BSB	18.80	19.68					20VB
BZX55C 20BSC	19.52	20.45					20VC
BZX55C 22BS	20.23	22.61	55	5.0	0.2	17	22V
BZX55C 22BSA	20.23	21.08					22VA
BZX55C 22BSB	20.76	21.65					22VB
BZX55C 22BSC	21.22	22.09					22VC
BZX55C 22BSD	21.68	22.61					22VD
BZX55C 24BS	22.26	24.81	80	5.0	0.2	19	24V
BZX55C 24BSA	22.26	23.12					24VA
BZX55C 24BSB	22.75	23.73					24VB
BZX55C 24BSC	23.29	24.72					24VC
BZX55C 24BSD	23.81	24.81					24VD
BZX55C 27BS	24.26	27.64	80	5.0	0.2	21	27V
BZX55C 27BSA	24.26	25.52					27VA
BZX55C 27BSB	24.97	26.26					27VB
BZX55C 27BSC	25.63	26.95					27VC
BZX55C 27BSD	26.29	27.64					27VD

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

TYPE	V <sub>ZT</sub> @I <sub>ZT</sub> (V) (NOTE)		R <sub>ZT</sub> @I <sub>ZT</sub> (Ω) MAX (NOTE)	I <sub>ZT</sub> (mA)	I <sub>R</sub> @T <sub>A</sub> =25°C (μA) MAX	V <sub>R</sub> (V)	MARKING
	MIN	MAX					
BZX55C 30BS	26.99	30.51	80	5.0	0.2	23	30V
BZX55C 30BSA	26.99	28.39					30VA
BZX55C 30BSB	27.70	29.13					30VB
BZX55C 30BSC	28.36	29.82					30VC
BZX55C 30BSD	29.02	30.51					30VD
BZX55C 33BS	29.68	33.11	80	5.0	0.2	25	33V
BZX55C 33BSA	29.68	31.22					33VA
BZX55C 33BSB	30.32	31.88					33VB
BZX55C 33BSC	30.90	32.50					33VC
BZX55C 33BSD	31.49	33.11					33VD
BZX55C 36BS	32.14	35.77	80	5.0	0.2	27	36V
BZX55C 36BSA	32.14	33.79					36VA
BZX55C 36BSB	32.79	34.49					36VB
BZX55C 36BSC	33.40	35.13					36VC
BZX55C 36BSD	34.01	35.77					36VD

NOTE: Pulse Condition : 20mS < t<sub>p</sub> < 50mS, Duty Cycle < 2%.

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