



Continental Device India Limited

An ISO/TS16949 and ISO 9001 Certified Company

**SILICON PLANAR ZENER DIODES****BZX55C**
2.4V to 120V
500mW**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.

ABSOLUTE MAXIMUM RATINGS (Ta=25°C)

DESCRIPTION	SYMBOL	VALUE	UNIT
Power Dissipation (1)	P_{TA}	500	mW
Surge Power Dissipation Pulse Width=10 ms	P_S	5.0	W
Junction Temperature	T_j	175	°C
Storage Temperature	T_{stg}	- 65 to +175	°C
Thermal Resistance Junction to Ambient (1)	$R_{th(j-a)}$	0.3	°C/mW

(1) On infinite heatsink with 4mm lead length.

Forward Voltage @ $I_F=200mA$ (BZX55C 2.4V - 27V)	V_F	1.2	V
Forward Voltage @ $I_F=200mA$ (BZX55C 30V - 120V)	V_F	1.5	V

ELECTRICAL CHARACTERISTICS (Ta=25°C unless specified otherwise)

Device	V_{ZT} @ I_{ZT}^*		r_{ZT} @ I_{ZT}^*	I_{ZT}	r_{ZK} @ I_{ZK}	I_{ZK}	Temp. Coeff of Zener Voltage typ (%/°C)	I_R @ T_{amb}		V_R	I_{ZM} T_{amb} 50°C max (mA)
	min (V)	max (V)	max (Ω)	(mA)	max (Ω)	(mA)		25°C max (μA)	150°C max (μA)		
BZX55C 2V4	2.28	2.56	85	5.0	600	1.0	-0.07	50	100	1.0	155
BZX55C 2V7	2.50	2.90	85	5.0	600	1.0	-0.07	10	50	1.0	135
BZX55C 3V0	2.80	3.20	85	5.0	600	1.0	-0.07	4.0	40	1.0	125
BZX55C 3V3	3.10	3.50	85	5.0	600	1.0	-0.06	2.0	40	1.0	115
BZX55C 3V6	3.40	3.80	85	5.0	600	1.0	-0.06	2.0	40	1.0	105
BZX55C 3V9	3.70	4.10	85	5.0	600	1.0	-0.05	2.0	40	1.0	95
BZX55C 4V3	4.00	4.60	75	5.0	600	1.0	-0.03	1.0	20	1.0	90
BZX55C 4V7	4.40	5.00	60	5.0	600	1.0	-0.01	0.5	10	1.0	85
BZX55C 5V1	4.80	5.40	35	5.0	550	1.0	+0.01	0.1	2.0	1.0	80
BZX55C 5V6	5.20	6.00	25	5.0	450	1.0	+0.03	0.1	2.0	1.0	70
BZX55C 6V2	5.80	6.60	10	5.0	200	1.0	+0.04	0.1	2.0	2.0	64
BZX55C 6V8	6.40	7.20	8	5.0	150	1.0	+0.05	0.1	2.0	3.0	58
BZX55C 7V5	7.00	7.90	7	5.0	50	1.0	+0.05	0.1	2.0	5.0	53
BZX55C 8V2	7.70	8.70	7	5.0	50	1.0	+0.06	0.1	2.0	6.2	47
BZX55C 9V1	8.50	9.60	10	5.0	50	1.0	+0.06	0.1	2.0	6.8	43
BZX55C 10	9.40	10.60	15	5.0	70	1.0	+0.07	0.1	2.0	7.5	40
BZX55C 11	10.40	11.60	20	5.0	70	1.0	+0.07	0.1	2.0	8.2	36
BZX55C 12	11.40	12.70	20	5.0	90	1.0	+0.07	0.1	2.0	9.1	32
BZX55C 13	12.40	14.10	26	5.0	110	1.0	+0.07	0.1	2.0	10	29

BZX55C2V4_120V Rev_3 050604E

*Pulse Condition : 20ms ≤ tp ≤ 50ms . Duty Cycle <2%