

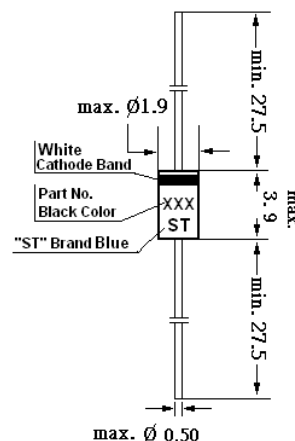
BZX55T Series

SILICON EPITAXIAL PLANAR ZENER DIODES

Voltage stabilization

Features:

- Very sharp reverse characteristic
- Low reverse current level
- Very high stability
- Low noise
- Available with tighter tolerances



Glass case JEDEC DO-35

Dimensions in mm

Absolute Maximum Ratings ($T_j = 25^\circ\text{C}$)

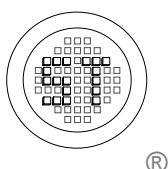
	Symbol	Value	Unit
Power Dissipation at $l = 4\text{ mm}$, $T_L = 25^\circ\text{C}$	P_{tot}	500	mW
Junction Temperature	T_j	175	$^\circ\text{C}$
Storage Temperature Range	T_s	-65 to +175	$^\circ\text{C}$

Maximum Thermal Resistance ($T_j = 25^\circ\text{C}$)

	Symbol	Value	Unit
Junction ambient at $l = 4\text{ mm}$, $T_L = \text{constant}$	R_{thJA}	300	K/W

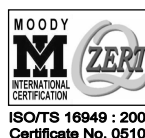
Electrical Characteristics ($T_j = 25^\circ\text{C}$)

	Symbol	Min	Typ	Max	Unit
Forward voltage at $I_F = 200\text{mA}$	V_F	-	-	1.5	V



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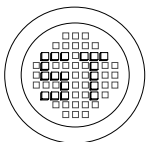
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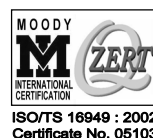
Type	V _{Zmin} V	V _{Zmax} V	Type	V _{Zmin} V	V _{Zmax} V	r _{Zmax} Ω	at I _Z mA	I _{Rmax} μA	at V _R V	I _{Rmax} ¹⁾ μA	at V _R ¹⁾ V
BZX55T2V4	2.3	2.6	BZX55T2V4A	2.3	2.5	100	5	5	0.5	50	1.0
			BZX55T2V4B	2.4	2.6	100	5	5	0.5	50	1.0
BZX55T2V7	2.5	2.9	BZX55T2V7A	2.5	2.7	100	5	5	0.5	10	1.0
			BZX55T2V7B	2.6	2.8	100	5	5	0.5	10	1.0
			BZX55T2V7C	2.7	2.9	100	5	5	0.5	10	1.0
BZX55T3V0	2.8	3.2	BZX55T3V0A	2.8	3.0	100	5	5	0.5	6	1.0
			BZX55T3V0B	2.9	3.1	100	5	5	0.5	6	1.0
			BZX55T3V0C	3.0	3.2	100	5	5	0.5	6	1.0
BZX55T3V3	3.1	3.5	BZX55T3V3A	3.1	3.3	100	5	5	1	2	0.8
			BZX55T3V3B	3.2	3.4	100	5	5	1	2	0.8
			BZX55T3V3C	3.3	3.5	100	5	5	1	2	0.8
BZX55T3V6	3.4	3.8	BZX55T3V6A	3.4	3.6	100	5	5	1	2	0.8
			BZX55T3V6B	3.5	3.7	100	5	5	1	2	0.8
			BZX55T3V6C	3.6	3.8	100	5	5	1	2	0.8
BZX55T3V9	3.7	4.1	BZX55T3V9A	3.7	3.9	100	5	5	1	2	0.8
			BZX55T3V9B	3.8	4.0	100	5	5	1	2	0.8
			BZX55T3V9C	3.9	4.1	100	5	5	1	2	0.8
BZX55T4V3	4.0	4.5	BZX55T4V3A	4.0	4.2	100	5	5	1.5	1.0	1.0
			BZX55T4V3B	4.1	4.3	100	5	5	1.5	1.0	1.0
			BZX55T4V3C	4.2	4.4	100	5	5	1.5	1.0	1.0
			BZX55T4V3D	4.3	4.5	100	5	5	1.5	1.0	1.0
BZX55T4V7	4.4	4.9	BZX55T4V7A	4.4	4.6	100	5	5	2	0.5	1.0
			BZX55T4V7B	4.5	4.7	100	5	5	2	0.5	1.0
			BZX55T4V7C	4.6	4.8	100	5	5	2	0.5	1.0
			BZX55T4V7D	4.7	4.9	100	5	5	2	0.5	1.0
BZX55T5V1	4.8	5.3	BZX55T5V1A	4.8	5.0	100	5	5	2	0.1	1.0
			BZX55T5V1B	4.9	5.1	100	5	5	2	0.1	1.0
			BZX55T5V1C	5.0	5.2	100	5	5	2	0.1	1.0
			BZX55T5V1D	5.1	5.3	100	5	5	2	0.1	1.0
BZX55T5V6	5.2	5.9	BZX55T5V6A	5.2	5.5	40	5	5	2	0.1	1.0
			BZX55T5V6B	5.3	5.6	40	5	5	2	0.1	1.0
			BZX55T5V6C	5.4	5.7	40	5	5	2	0.1	1.0
			BZX55T5V6D	5.5	5.8	40	5	5	2	0.1	1.0
			BZX55T5V6E	5.6	5.9	40	5	5	2	0.1	1.0
BZX55T6V2	5.7	6.6	BZX55T6V2A	5.7	6.0	15	5	1	3	0.1	2.0
			BZX55T6V2B	5.8	6.1	15	5	1	3	0.1	2.0
			BZX55T6V2C	6.0	6.3	15	5	1	3	0.1	2.0
			BZX55T6V2D	6.1	6.4	15	5	1	3	0.1	2.0
			BZX55T6V2E	6.3	6.6	15	5	1	3	0.1	2.0
BZX55T6V8	6.4	7.2	BZX55T6V8A	6.4	6.7	15	5	1	3.5	0.1	3.0
			BZX55T6V8B	6.6	6.9	15	5	1	3.5	0.1	3.0
			BZX55T6V8C	6.7	7.0	15	5	1	3.5	0.1	3.0
			BZX55T6V8D	6.9	7.2	15	5	1	3.5	0.1	3.0
BZX55T7V5	7.0	7.9	BZX55T7V5A	7.0	7.3	15	5	1	5.0	0.1	3.5
			BZX55T7V5B	7.2	7.6	15	5	1	5.0	0.1	3.5
			BZX55T7V5C	7.3	7.7	15	5	1	5.0	0.1	3.5
			BZX55T7V5D	7.5	7.9	15	5	1	5.0	0.1	3.5



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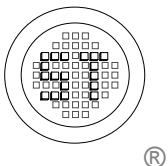
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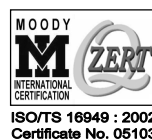
BZX55T Series

Type	V _{Zmin} V	V _{Zmax} V	Type	V _{Zmin} V	V _{Zmax} V	r _{Zmax} Ω	at I _Z mA	I _{Rmax} μA	at V _R V	I _{Rmax} ¹⁾ μA	at V _R ¹⁾ V
BZX55T8V2	7.7	8.7	BZX55T8V2A	7.7	8.1	20	5	1	6.2	0.1	4.0
			BZX55T8V2B	7.9	8.3	20	5	1	6.2	0.1	4.0
			BZX55T8V2C	8.1	8.5	20	5	1	6.2	0.1	4.0
			BZX55T8V2D	8.3	8.7	20	5	1	6.2	0.1	4.0
BZX55T9V1	8.5	9.7	BZX55T9V1A	8.5	8.9	20	5	1	6.8	-	-
			BZX55T9V1B	8.7	9.1	20	5	1	6.8	-	-
			BZX55T9V1C	8.9	9.3	20	5	1	6.8	-	-
			BZX55T9V1D	9.1	9.5	20	5	1	6.8	-	-
			BZX55T9V1E	9.3	9.7	20	5	1	6.8	-	-
BZX55T10	9.5	10.6	BZX55T10A	9.5	9.9	25	5	1	7.5	-	-
			BZX55T10B	9.7	10.1	25	5	1	7.5	-	-
			BZX55T10C	9.9	10.3	25	5	1	7.5	-	-
			BZX55T10D	10.2	10.6	25	5	1	7.5	-	-
BZX55T11	10.4	11.6	BZX55T11A	10.4	10.8	25	5	1	8.2	-	-
			BZX55T11B	10.7	11.1	25	5	1	8.2	-	-
			BZX55T11C	10.9	11.3	25	5	1	8.2	-	-
			BZX55T11D	11.1	11.6	25	5	1	8.2	-	-
BZX55T12	11.4	12.7	BZX55T12A	11.4	11.9	35	5	1	9.5	-	-
			BZX55T12B	11.6	12.1	35	5	1	9.5	-	-
			BZX55T12C	11.9	12.4	35	5	1	9.5	-	-
			BZX55T12D	12.2	12.7	35	5	1	9.5	-	-
			BZX55T12X	11.44	12.03	35	5	1	9.5	-	-
BZX55T13	12.4	13.4	BZX55T13A	12.4	12.9	35	5	1	10	-	-
			BZX55T13B	12.6	13.1	35	5	1	10	-	-
			BZX55T13C	12.9	13.4	35	5	1	10	-	-
BZX55T14	13.2	14.3	BZX55T14A	13.2	13.7	35	5	1	11	-	-
			BZX55T14B	13.5	14.0	35	5	1	11	-	-
			BZX55T14C	13.8	14.3	35	5	1	11	-	-
BZX55T15	14.1	15.5	BZX55T15A	14.1	14.7	40	5	1	11.5	-	-
			BZX55T15B	14.5	15.1	40	5	1	11.5	-	-
			BZX55T15C	14.9	15.5	40	5	1	11.5	-	-
			BZX55T15X	14.35	15.09	40	5	1	11.5	-	-
BZX55T16	15.3	17.1	BZX55T16A	15.3	15.9	45	5	1	12	-	-
			BZX55T16B	15.7	16.5	45	5	1	12	-	-
			BZX55T16C	16.3	17.1	45	5	1	12	-	-
BZX55T18	16.9	19.0	BZX55T18A	16.9	17.7	55	5	1	13	-	-
			BZX55T18B	17.5	18.3	55	5	1	13	-	-
			BZX55T18C	18.1	19.0	55	5	1	13	-	-
BZX55T20	18.8	21.2	BZX55T20A	18.8	19.7	60	2	1	15	-	-
			BZX55T20B	19.5	20.4	60	2	1	15	-	-
			BZX55T20C	20.2	21.2	60	2	1	15	-	-
BZX55T22	20.9	23.3	BZX55T22A	20.9	21.9	65	2	1	17	-	-
			BZX55T22B	21.6	22.6	65	2	1	17	-	-
			BZX55T22C	22.3	23.3	65	2	1	17	-	-



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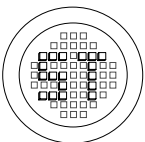
BZX55T Series

Type	V _{Zmin} V	V _{Zmax} V	Type	V _{Zmin} V	V _{Zmax} V	r _{Zmax} Ω	at I _Z mA	I _{Rmax} μA	at V _R V	I _{Rmax} ¹⁾ μA	at V _R ¹⁾ V
BZX55T24	22.9	25.5	BZX55T24A	22.9	24.0	70	2	1	19	-	-
			BZX55T24B	23.6	24.7	70	2	1	19	-	-
			BZX55T24C	24.3	25.5	70	2	1	19	-	-
			BZX55T24X	22.61	23.77	70	2	1	19	-	-
BZX55T27	25.2	28.6	BZX55T27A	25.2	26.6	80	2	1	21	-	-
			BZX55T27B	26.2	27.6	80	2	1	21	-	-
			BZX55T27C	27.2	28.6	80	2	1	21	-	-
			BZX55T27X	26.99	28.39	80	2	1	21	-	-
BZX55T30	28.2	31.6	BZX55T30A	28.2	29.6	100	2	1	23	-	-
			BZX55T30B	29.2	30.6	100	2	1	23	-	-
			BZX55T30C	30.2	31.6	100	2	1	23	-	-
			BZX55T30X	29.02	30.51	100	2	1	23	-	-
BZX55T33	31.2	34.5	BZX55T33A	31.2	32.6	120	2	1	25	-	-
			BZX55T33B	32.2	33.6	120	2	1	25	-	-
			BZX55T33C	33.2	34.5	120	2	1	25	-	-
BZX55T36	34.2	38.0	BZX55T36A	34.2	35.7	140	2	1	27	-	-
			BZX55T36B	35.3	36.8	140	2	1	27	-	-
			BZX55T36C	36.4	38.0	140	2	1	27	-	-
			BZX55T36X	35.36	37.19	140	2	1	27	-	-

1) Additional measurement

Please note: Additional measurement of voltage group 9V1 to 36 I_R at 95% V_{Zmin} = < 35 nA at T_j 25°C

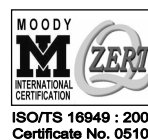
2) Tested with pulses tp = 20 ms.



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