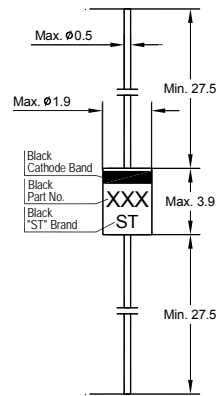


# BZX55BxxxPF Series

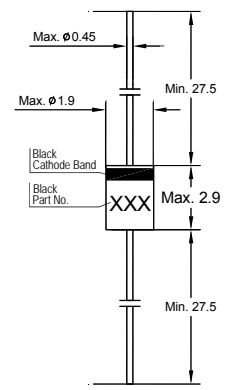
## Silicon Planar Zener Diodes

### Features

- Lead Free



Glass Case DO-35  
Dimensions in mm



Glass Case DO-34  
Dimensions in mm

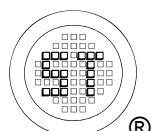
### Absolute Maximum Ratings ( $T_a = 25^\circ\text{C}$ )

Parameter	Symbol	Value	Unit
Power Dissipation	$P_{\text{tot}}$	500	mW
Junction Temperature	$T_j$	175	$^\circ\text{C}$
Storage Temperature Range	$T_{\text{stg}}$	- 55 to + 175	$^\circ\text{C}$

### Thermal Characteristics

Parameter	Symbol	Max.	Unit
Thermal Resistance Junction to Ambient <sup>1)</sup>	$R_{\theta\text{JA}}$	300	$^\circ\text{C/W}$

<sup>1)</sup> Valid provided that leads are kept at ambient temperature at a distance of 8 mm from case.

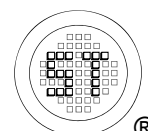


# BZX55BxxxPF Series

Characteristics at  $T_a = 25^\circ\text{C}$  ( $V_F$  max : 1 V at  $I_F = 100$  mA)

Type	Zener Voltage Range <sup>1)</sup>			Dynamic Resistance			Reverse Leakage Current			Temp. Coefficient of Zener Voltage TKvz (%/K)
	$V_{znom}$	$V_{ZT}$	at $I_{ZT}$	$Z_{ZT}$ at $I_{ZT}$	$Z_{ZK}$	at $I_{ZK}$	$T_a = 25^\circ\text{C}$	$T_a = 125^\circ\text{C}$	$I_R$ at $V_R$	
	(V)	(V)	(mA)	Max. ( $\Omega$ )	Max. ( $\Omega$ )	(mA)	Max. ( $\mu\text{A}$ )	Max. ( $\mu\text{A}$ )	(V)	
BZX55B2V0PF	2	1.96...2.04	5	85	600	1	100	200	1	-0.09...-0.06
BZX55B2V2PF	2.2	2.16...2.24	5	85	600	1	75	160	1	-0.09...-0.06
BZX55B2V4PF	2.4	2.35...2.45	5	85	600	1	50	100	1	-0.09...-0.06
BZX55B2V7PF	2.7	2.65...2.75	5	85	600	1	10	50	1	-0.09...-0.06
BZX55B3V0PF	3	2.94...3.06	5	85	600	1	4	40	1	-0.08...-0.05
BZX55B3V3PF	3.3	3.23...3.37	5	85	600	1	2	40	1	-0.08...-0.05
BZX55B3V6PF	3.6	3.53...3.67	5	85	600	1	2	40	1	-0.08...-0.05
BZX55B3V9PF	3.9	3.82...3.98	5	85	600	1	2	40	1	-0.08...-0.05
BZX55B4V3PF	4.3	4.21...4.39	5	75	600	1	1	20	1	-0.06...-0.03
BZX55B4V7PF	4.7	4.61...4.79	5	60	600	1	0.5	10	1	-0.05...+0.02
BZX55B5V1PF	5.1	5...5.2	5	35	550	1	0.1	2	1	-0.02...+0.02
BZX55B5V6PF	5.6	5.49...5.71	5	25	450	1	0.1	2	1	-0.05...+0.05
BZX55B6V2PF	6.2	6.08...6.32	5	10	200	1	0.1	2	2	0.03...0.06
BZX55B6V8PF	6.8	6.66...6.94	5	8	150	1	0.1	2	3	0.03...0.07
BZX55B7V5PF	7.5	7.35...7.65	5	7	50	1	0.1	2	5	0.03...0.07
BZX55B8V2PF	8.2	8.04...8.36	5	7	50	1	0.1	2	6.2	0.03...0.08
BZX55B9V1PF	9.1	8.92...9.28	5	10	50	1	0.1	2	6.8	0.03...0.09
BZX55B10PF	10	9.8...10.2	5	15	70	1	0.1	2	7.5	0.03...0.1
BZX55B11PF	11	10.78...11.22	5	20	70	1	0.1	2	8.2	0.03...0.11
BZX55B12PF	12	11.76...12.24	5	20	90	1	0.1	2	9.1	0.03...0.11
BZX55B13PF	13	12.74...13.26	5	26	110	1	0.1	2	10	0.03...0.11
BZX55B15PF	15	14.7...15.3	5	30	110	1	0.1	2	11	0.03...0.11
BZX55B16PF	16	15.68...16.32	5	40	170	1	0.1	2	12	0.03...0.11
BZX55B18PF	18	17.64...18.36	5	50	170	1	0.1	2	13	0.03...0.11
BZX55B20PF	20	19.6...20.4	5	55	220	1	0.1	2	15	0.03...0.11
BZX55B22PF	22	21.56...22.44	5	55	220	1	0.1	2	16	0.04...0.12
BZX55B24PF	24	23.52...24.48	5	80	220	1	0.1	2	18	0.04...0.12
BZX55B27PF	27	26.46...27.54	5	80	220	1	0.1	2	20	0.04...0.12
BZX55B30PF	30	29.4...30.6	5	80	220	1	0.1	2	22	0.04...0.12
BZX55B33PF	33	32.34...33.66	5	80	220	1	0.1	2	24	0.04...0.12
BZX55B36PF	36	35.28...36.72	5	80	220	1	0.1	2	27	0.04...0.12
BZX55B39PF	39	38.22...39.78	2.5	90	500	0.5	0.1	5	30	0.04...0.12
BZX55B43PF	43	42.14...43.86	2.5	90	500	0.5	0.1	5	33	0.04...0.12
BZX55B47PF	47	46.06...47.94	2.5	110	600	0.5	0.1	5	36	0.04...0.12
BZX55B51PF	51	49.98...52.02	2.5	125	700	0.5	0.1	10	39	0.04...0.12
BZX55B56PF	56	54.88...57.12	2.5	135	700	0.5	0.1	10	43	0.04...0.12
BZX55B62PF	62	60.76...63.24	2.5	150	1000	0.5	0.1	10	47	0.04...0.12
BZX55B68PF	68	66.64...69.36	2.5	200	1000	0.5	0.1	10	51	0.04...0.12
BZX55B75PF	75	73.5...76.5	2.5	250	1000	0.5	0.1	10	56	0.04...0.12

<sup>1)</sup> Tested with pulses  $t_p = 20$  ms.



# BZX55BxxxPF Series

## Electrical Characteristics Curves

Fig 1. Zener Characteristics Curve

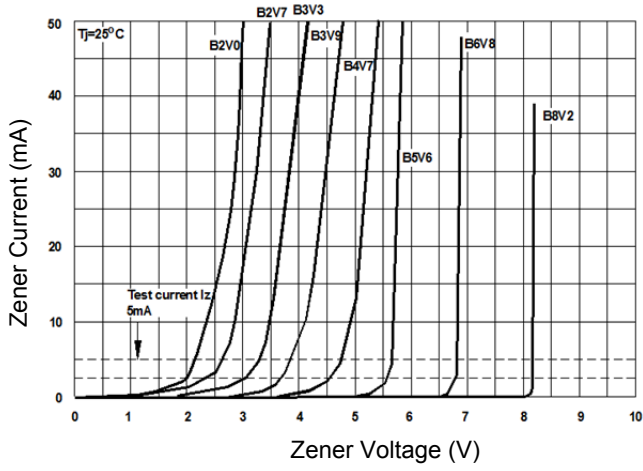


Fig 2. Zener Characteristics Curve

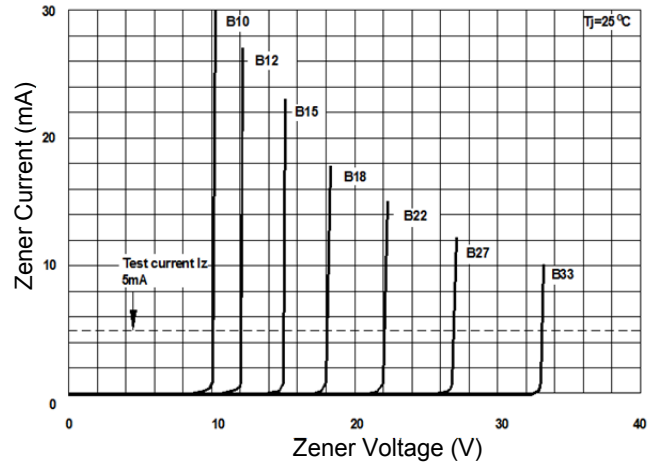


Fig 3. Power Derating Curve

