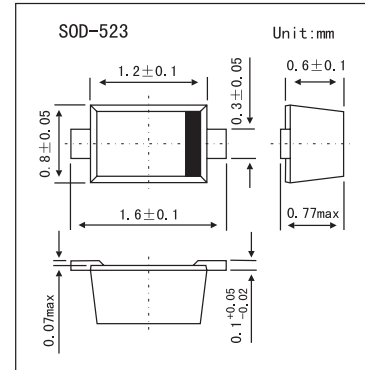


## Zener Diodes

## BZX585 Series

## ■ Features

- Total Power Dissipation: Max. 300mW
- Two Tolerance Series:  $\pm 2\%$  and  $\pm 5\%$
- Working Voltage Range: Nom. 2.4 to 75V



## ■ Absolute Maximum Ratings (Ta = 25°C)

Parameter	Symbol	Rating	Unit
Total Power Dissipation	P <sub>tot</sub>	300	mW
Continuous Forward Current	I <sub>F</sub>	200	mA
Forward Voltage @ I <sub>F</sub> = 10mA	V <sub>F</sub>	0.9	V
Junction temperature	T <sub>j</sub>	150	°C
Storage temperature	T <sub>stg</sub>	-65 to +150	°C

## ■ Electrical Characteristics (Ta = 25°C)

BZX585 B or C XXX	Working voltage V <sub>Z</sub> (V) @ I <sub>Z</sub> = 5mA				Differential resistance R <sub>diff</sub> (Ω)				Temp. Coeff. S <sub>Z</sub> (mV/K) @ I <sub>Z</sub> = 5mA	Diode Cap. C <sub>d</sub> (pF) @ f = 1MHz; V <sub>R</sub> = 0V	Non-repetitive peak reverse current I <sub>ZSM</sub> (A) @ t <sub>p</sub> = 100 μs	Marking				
	±2% (B)		±5% (C)		@ I <sub>Z</sub> = 1mA		@ I <sub>Z</sub> = 5mA					Typ.	Max.	Max.	±2%	±5%
	Min.	Max.	Min.	Max.	Typ.	Max.	Typ.	Max.								
2V4	2.35	2.45	2.28	2.52	275	400	70	100	-1.3	450	6.0	C1	F1			
2V7	2.65	2.75	2.57	2.84	300	450	75	100	-1.4	440	6.0	C2	F2			
3V0	2.94	3.06	2.85	3.15	325	500	80	95	-1.6	425	6.0	C3	F3			
3V3	3.23	3.37	3.14	3.47	350	500	85	95	-1.8	410	6.0	C4	F4			
3V6	3.53	3.67	3.42	3.78	375	500	85	90	-1.9	390	6.0	C5	F5			
3V9	3.82	3.98	3.71	4.10	400	500	85	90	-1.9	370	6.0	C6	F6			
4V3	4.21	4.39	4.09	4.52	410	600	80	90	-1.7	350	6.0	C7	F7			
4V7	4.61	4.79	4.47	4.94	425	500	50	80	-1.2	325	6.0	C8	F8			
5V1	5.00	5.20	4.85	5.36	400	480	40	60	-0.5	300	6.0	C9	F9			
5V6	5.49	5.71	5.32	5.88	80	400	15	40	1.0	275	6.0	C0	F0			

## BZX585 Series

BZX585 B or C XXX	Working voltage $V_z$ (V) @ $I_z = 5\text{mA}$				Differential resistance $R_{dif}$ ( $\Omega$ )				Temp. Coeff. $S_z$ (mV/K) @ $I_z = 5\text{mA}$	Diode Cap. $C_d$ (pF) @ $f = 1\text{MHz};$ $V_R = 0\text{V}$	Non-repetitive peak reverse current $I_{zSM}$ (A) @ $t_p = 100\ \mu\text{s}$	Marking	
	$\pm 2\%$ (B)		$\pm 5\%$ (C)		@ $I_z = 1\text{mA}$		@ $I_z = 5\text{mA}$						
	Min.	Max.	Min.	Max.	Typ.	Max.	Typ.	Max.					
6V2	6.08	6.32	5.89	6.51	40	150	6	10	2.2	250	6.0	E1	H1
6V8	6.66	6.94	6.46	7.14	30	80	6	15	3.0	215	6.0	E2	H2
7V5	7.35	7.65	7.13	7.88	15	80	2	10	3.6	170	4.0	E3	H3
8V2	8.04	8.36	7.79	8.61	20	80	2	10	4.3	150	4.0	E4	H4
9V1	8.92	9.28	8.65	9.56	20	100	2	10	5.2	120	3.0	E5	H5
10	9.80	10.20	9.50	10.50	20	150	2	10	6.0	110	3.0	E6	H6
11	10.78	11.22	10.45	11.55	25	150	2	10	6.9	110	2.5	E7	H7
12	11.76	12.24	11.40	12.60	25	150	2	10	7.9	105	2.5	E8	H8
13	12.74	13.26	12.35	13.65	25	170	2	10	8.8	105	2.5	E9	H9
15	14.70	15.30	14.25	15.76	25	200	3	15	10.7	100	2.0	E0	H0
16	15.68	16.32	15.20	16.80	50	200	10	40	12.4	90	1.5	EA	HA
18	17.64	18.36	17.10	18.90	50	225	10	45	14.4	80	1.5	EB	HB
20	19.60	20.40	19.00	21.00	60	225	15	55	16.4	70	1.5	EC	HC
22	21.56	22.44	20.90	23.10	60	250	20	55	18.4	60	1.25	ED	HD
24	23.52	24.48	22.80	25.20	60	250	25	70	20.4	55	1.25	EE	HE
27	26.46	27.54	25.65	28.35	65	300	25	80	23.4	50	1.0	EF	HF
30	29.40	30.60	28.50	31.50	70	300	30	80	26.6	50	1.0	EG	HG
33	32.34	33.66	31.35	34.65	75	325	35	80	29.7	45	0.9	EH	HH
36	35.28	36.72	34.20	37.80	80	350	35	90	33.0	45	0.8	EK	HK
39	38.22	39.78	37.05	40.95	80	350	40	130	36.4	45	0.7	EL	HL
43	42.14	43.86	40.85	45.15	85	375	45	150	41.2	40	0.6	EM	HM
47	46.06	47.94	44.65	49.35	85	375	50	170	46.1	40	0.5	EN	HN
51	49.98	52.02	48.45	53.55	90	400	60	180	51.0	40	0.4	EP	HP
56	54.88	57.12	53.20	58.80	100	425	70	200	57.0	40	0.3	ER	HR
62	60.76	63.24	58.90	65.10	120	450	80	215	64.4	35	0.3	ES	HS
68	66.64	69.36	64.60	71.40	150	475	90	240	71.7	35	0.25	ET	HT
75	73.50	76.50	71.25	78.75	170	500	95	255	80.2	35	0.2	EU	HU