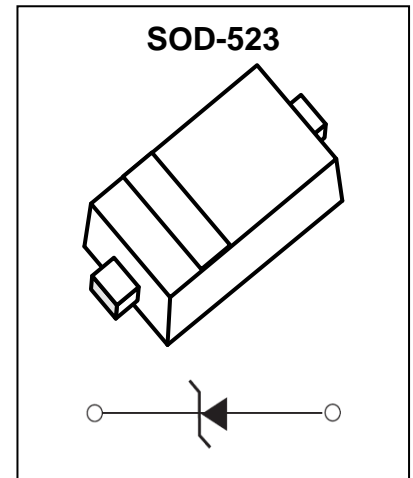


**BZX584B2V4-BZX584B75 ZENER DIODE**

**Feature**

- Planar Die Construction
- General Purpose, Medium Current
- Ideally Suited for Automated Assembly Processes
- Available in Lead Free Version



**ABSOLUTE MAXIMUM RATINGS ( $T_a=25^{\circ}\text{C}$  unless otherwise noted)**

Parameter	Symbol	Value	Unit
Forward Voltage @ $I_F=10\text{mA}$	$V_F$	0.9	V
Power Dissipation (Note1)	$P_D$	0.2	W
Junction Temperature	$T_J$	125	$^{\circ}\text{C}$
Storage Temperature	$T_{STG}$	-55 ~ +125	$^{\circ}\text{C}$

**ELECTRICAL CHARACTERISTICS ( $T_a=25^{\circ}\text{C}$  unless otherwise noted)**

Type Number	Device Marking	$V_Z$ (V) <sup>*1</sup>			$I_{ZT}$ mA	$Z_{ZT}@I_{ZT}$ $\Omega$	$Z_{ZK}@I_{ZK}$ $\Omega$	$I_{ZK}$ (mA)	$I_R$ ( $\mu\text{A}$ )	$V_R$ (V)
		Nom(V)	Min(V)	Max(V)						
BZX584B2V4	Z1.	2.4	2.35	2.45	5	100	600	1.0	50	1.0
BZX584B2V7	Z2.	2.7	2.65	2.75	5	100	600	1.0	20	1.0
BZX584B3V0	Z3.	3.0	2.94	3.06	5	95	600	1.0	10	1.0
BZX584B3V3	Z4.	3.3	3.23	3.37	5	95	600	1.0	5	1.0
BZX584B3V6	Z5.	3.6	3.53	3.67	5	90	600	1.0	5	1.0
BZX584B3V9	Z6.	3.9	3.82	3.98	5	90	600	1.0	3	1.0
BZX584B4V3	Z7.	4.3	4.21	4.39	5	90	600	1.0	3	1.0
BZX584B4V7	X1.	4.7	4.61	4.79	5	80	500	1.0	3	2.0
BZX584B5V1	Z22	5.1	5.00	5.20	5	60	480	1.0	2	2.0
BZX584B5V6	Z23	5.6	5.49	5.71	5	40	400	1.0	1	2.0
BZX584B6V2	Z24	6.2	6.08	6.32	5	10	150	1.0	3	4.0

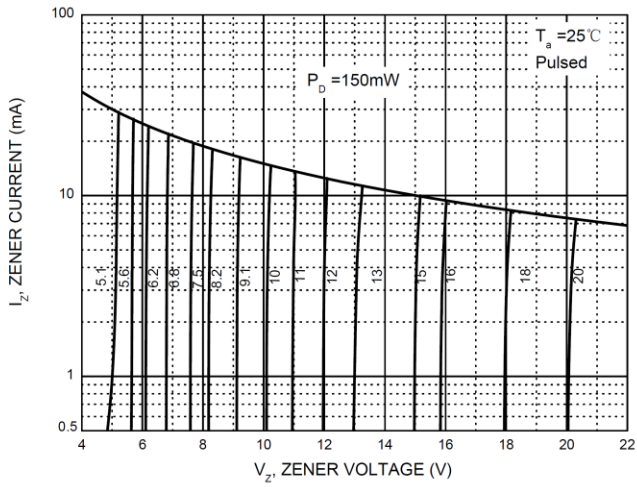
## ELECTRICAL CHARACTERISTICS (T<sub>a</sub>=25°C unless otherwise noted)

Type Number	Device Marking	V <sub>z</sub> (V) <sup>*1</sup>			I <sub>ZT</sub>	Z <sub>zT</sub> @I <sub>ZT</sub>	Z <sub>zK</sub> @I <sub>ZK</sub>	I <sub>zk</sub> (mA)	I <sub>R</sub> (uA)	V <sub>R</sub> (V)
		Nom(V)	Min(V)	Max(V)	mA	Ω				
BZX584B6V8	2Z5	6.8	6.66	6.94	5	15	80	1.0	2	4.0
BZX584B7V5	2Z6	7.5	7.35	7.65	5	15	80	1.0	1	5.0
BZX584B8V2	2Z7	8.2	8.04	8.36	5	15	80	1.0	0.7	5.0
BZX584B9V1	2Z8	9.1	8.92	9.28	5	15	100	1.0	0.5	6.0
BZX584B10	2Z9	10	9.80	10.20	5	20	150	1.0	0.2	7.0
BZX584B11	2Y1	11	10.78	11.22	5	20	150	1.0	0.1	8.0
BZX584B12	2Y2	12	11.76	12.24	5	25	150	1.0	0.1	8.0
BZX584B13	2Y3	13	12.74	13.26	5	30	170	1.0	0.1	8.0
BZX584B15	2Y4	15	14.70	15.30	5	30	200	1.0	0.1	10.5
BZX584B16	2Y5	16	15.68	16.32	5	40	200	1.0	0.1	11.2
BZX584B18	2Y6	18	17.64	18.36	5	45	225	1.0	0.1	12.6
BZX584B20	2Y7	20	19.60	20.40	5	55	225	1.0	0.1	14.0
BZX584B22	W8.	22	21.56	22.44	5	55	250	1.0	0.1	15.4
BZX584B24	W9.	24	23.52	24.48	5	70	250	1.0	0.1	16.8
BZX584B27	Y1.	27	26.46	27.54	2	80	300	0.5	0.1	18.9
BZX584B30	Y2.	30	29.40	30.60	2	80	300	0.5	0.1	21.0
BZX584B33	Y3.	33	32.34	33.66	2	80	325	0.5	0.1	23.1
BZX584B36	Y4.	36	35.28	36.72	2	90	350	0.5	0.1	25.2
BZX584B39	Y5.	39	38.22	39.78	2	130	350	0.5	0.1	27.3
BZX584B43	Y6.	43	41.16	42.84	2	130	350	0.5	0.1	29.4
BZX584B47	V1.	47	45.83	48.17	2	170	1000	0.25	0.1	36
BZX584B51	V2.	51	49.73	52.27	2	180	1300	0.25	0.1	39
BZX584B56	V3.	56	54.60	57.40	2	200	1400	0.25	0.1	43
BZX584B62	V4.	62	60.45	63.55	2	225	1400	0.25	0.1	47
BZX584B68	V5.	68	66.30	69.70	2	240	1600	0.25	0.1	52
BZX584B75	V6.	75	73.13	76.87	2	265	1700	0.25	0.1	56

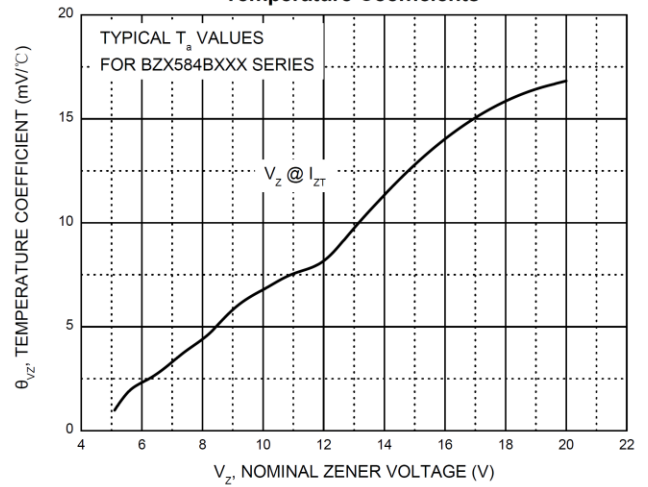
\*1 Pulse width = 10 ns

**Typical Characteristics**

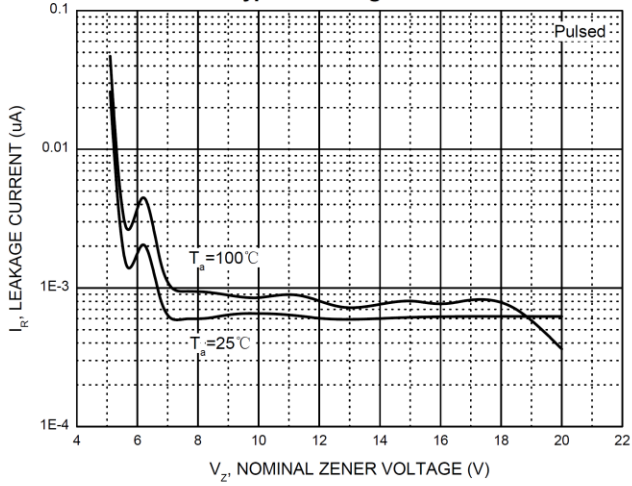
**Zener Characteristics ( $V_z$  5.1V to 20 V)**



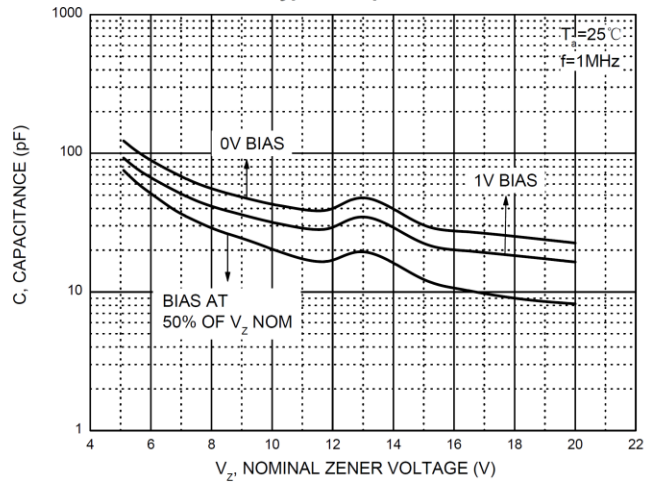
**Temperature Coefficients**

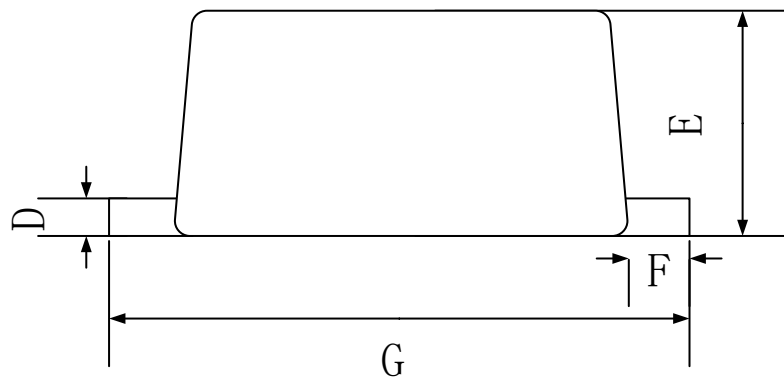
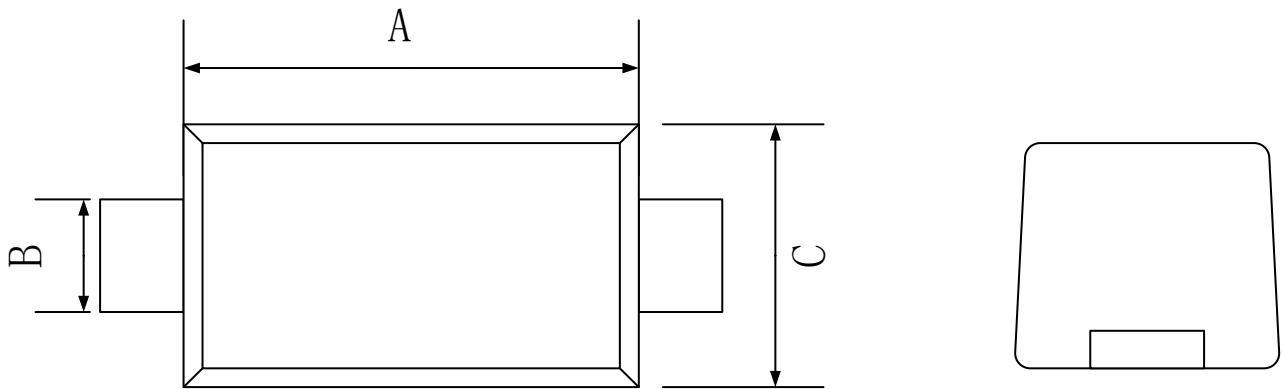


**Typical Leakage Current**



**Typical Capacitance**



**SOD-523 Package Outline Dimensions**


Symbol	Dimensions In Millimeters		
	Min.	Typ.	Max.
A	1.10	1.20	1.30
B	0.25	0.30	0.35
C	0.75	0.80	0.85
D	0.08	0.10	0.15
E	0.45	0.65	0.70
F	0.20 REF		
G	1.50	1.60	1.70