

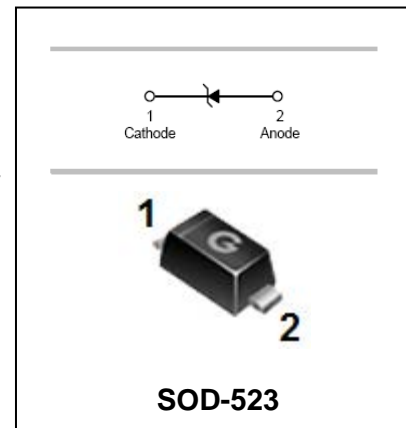
## SMT-Type Zener Diode

## BZX584C2V0 - BZX584C75

### FEATURES

- Large selection of zener voltages: 2.0V ~ 75V
- Tight voltage tolerance:  $\pm 5\%$  for C-series
- Ultra low-profile package well suited for automated assembly
- MSL Class 1 compatible

HF



### APPLICATIONS

- General voltage regulation
- Mobile & handheld systems

### ORDERING INFORMATION

Part Number	Marking	Package
BZX584C2V0 - BZX584C75	See Electrical Characteristics	SOD-523

### MAXIMUM RATING (@ $T_A = 25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Value	Unit
Forward Voltage @ $I_F=10\text{mA}$	$V_F$	0.9	V
Power Dissipation	$P_D$	150	mW
Thermal Resistance (Junction-to-Ambient)	$R_{\theta JA}$	834	$^\circ\text{C}/\text{W}$
Junction Temperature Range	$T_J$	-55 ~ +150	$^\circ\text{C}$
Storage Temperature Range	$T_{STG}$	-65 ~ +150	$^\circ\text{C}$

Note: These ratings are limiting values above which the serviceability of the diodes may be impaired.

## SMT-Type Zener Diode

## BZX584C2V0 - BZX584C75

### ELECTRICAL CHARACTERISTICS (@ T<sub>A</sub> = 25°C unless otherwise specified)

Part Number	Marking Code	Zener Voltage V <sub>Z</sub> (V)			@ I <sub>ZT</sub> (mA)	Maximum Zener Impedance			Temperature Coefficient @ I <sub>ZT</sub> T <sub>C</sub> (mV/°C)		Maximum Reverse Current I <sub>R</sub> (μA)	@ V <sub>R</sub> (V)
		Min.	Typ.	Max.		Z <sub>ZT</sub> (Ω) @ I <sub>ZT</sub>	Z <sub>ZK</sub> (Ω)	@ I <sub>ZK</sub> (mA)	Min.	Max.		
BZX584C2V0	Z10	1.90	2.00	2.10	5	100	600	1.0	-3.5	0.0	150.000	1.0
BZX584C2V2	Z19	2.09	2.20	2.31	5	100	600	1.0	-3.5	0.0	150.000	1.0
BZX584C2V4	Z11	2.28	2.40	2.52	5	100	600	1.0	-3.5	0.0	50.000	1.0
BZX584C2V7	Z12	2.57	2.70	2.84	5	100	600	1.0	-3.5	0.0	20.000	1.0
BZX584C3V0	Z13	2.85	3.00	3.15	5	95	600	1.0	-3.5	0.0	10.000	1.0
BZX584C3V3	Z14	3.14	3.30	3.47	5	95	600	1.0	-3.5	0.0	5.000	1.0
BZX584C3V6	Z15	3.42	3.60	3.78	5	90	600	1.0	-3.5	0.0	5.000	1.0
BZX584C3V9	Z16	3.71	3.90	4.10	5	90	600	1.0	-3.5	0.0	3.000	1.0
BZX584C4V3	Z17	4.09	4.30	4.52	5	90	600	1.0	-3.5	0.0	3.000	1.0
BZX584C4V7	Z1	4.47	4.70	4.94	5	80	500	1.0	-3.5	0.2	3.000	2.0
BZX584C5V1	Z2	4.85	5.10	5.36	5	60	480	1.0	-2.7	1.2	2.000	2.0
BZX584C5V6	Z3	5.32	5.60	5.88	5	40	400	1.0	-2.0	2.5	1.000	2.0
BZX584C6V2	Z4	5.89	6.20	6.51	5	10	150	1.0	0.4	3.7	3.000	4.0
BZX584C6V8	Z5	6.46	6.80	7.14	5	15	80	1.0	1.2	4.5	2.000	4.0
BZX584C7V5	Z6	7.13	7.50	7.88	5	15	80	1.0	2.5	5.3	1.000	5.0
BZX584C8V2	Z7	7.79	8.20	8.61	5	15	80	1.0	3.2	6.2	0.700	5.0
BZX584C9V1	Z8	8.65	9.10	9.56	5	15	100	1.0	3.8	7.0	0.500	6.0
BZX584C10	Z9	9.50	10.00	10.50	5	20	150	1.0	4.5	8.0	0.200	7.0
BZX584C11	Y1	10.45	11.00	11.55	5	20	150	1.0	5.4	9.0	0.100	8.0
BZX584C12	Y2	11.40	12.00	12.60	5	25	150	1.0	6.0	10.0	0.100	8.0
BZX584C13	Y3	12.35	13.00	13.65	5	30	170	1.0	7.0	11.0	0.100	8.0
BZX584C15	Y4	14.25	15.00	15.75	5	30	200	1.0	9.2	13.0	0.100	10.5
BZX584C16	Y5	15.20	16.00	16.80	5	40	200	1.0	10.4	14.0	0.100	11.2
BZX584C18	Y6	17.10	18.00	18.90	5	45	225	1.0	12.4	16.0	0.100	12.6
BZX584C20	Y7	19.00	20.00	21.00	5	55	225	1.0	14.4	18.0	0.100	14.0
BZX584C22	Y8	20.90	22.00	23.10	5	55	250	1.0	16.4	20.0	0.100	15.4
BZX584C24	Y9	22.80	24.00	25.20	5	70	250	1.0	18.4	22.0	0.100	16.8
BZX584C27	Y10	25.65	27.00	28.35	2	80	300	0.5	21.4	25.3	0.100	18.9
BZX584C30	Y11	28.50	30.00	31.50	2	80	300	0.5	24.4	29.4	0.100	21.0
BZX584C33	Y12	31.35	33.00	34.65	2	80	325	0.5	27.4	33.4	0.100	23.1
BZX584C36	Y13	34.20	36.00	37.80	2	90	350	0.5	30.4	37.4	0.100	25.2
BZX584C39	Y14	37.05	39.00	40.95	2	130	350	0.5	33.4	41.2	0.100	27.3
BZX584C43	Y15	40.85	43.00	45.15	2	150	375	0.5	37.6	46.6	0.100	30.1
BZX584C47	Y16	44.65	47.00	49.35	2	170	375	0.5	42.0	51.8	0.100	32.9
BZX584C51	Y17	48.45	51.00	53.55	2	180	400	0.5	46.6	57.2	0.100	35.7
BZX584C56	Y18	53.20	56.00	58.80	2	200	400	0.5	52.2	63.8	0.045	39.2
BZX584C62	Y19	58.90	62.00	65.10	2	215	423	0.5	58.8	71.6	0.045	43.4
BZX584C68	Y20	64.60	68.00	71.40	2	240	447	0.5	65.6	79.8	0.045	47.6
BZX584C75	Y21	71.25	75.00	78.75	2	255	470	0.5	73.4	88.6	0.045	52.5

**SMT-Type Zener Diode**

**BZX584C2V0 - BZX584C75**

**TYPICAL CHARACTERISTICS** (@  $T_A = 25^\circ\text{C}$  unless otherwise specified)

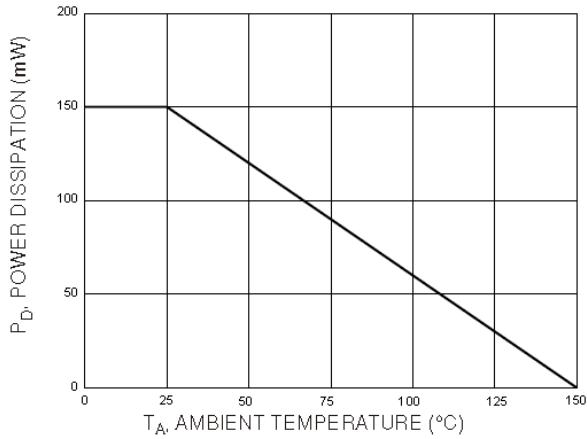


Fig. 1 Power Derating Curve

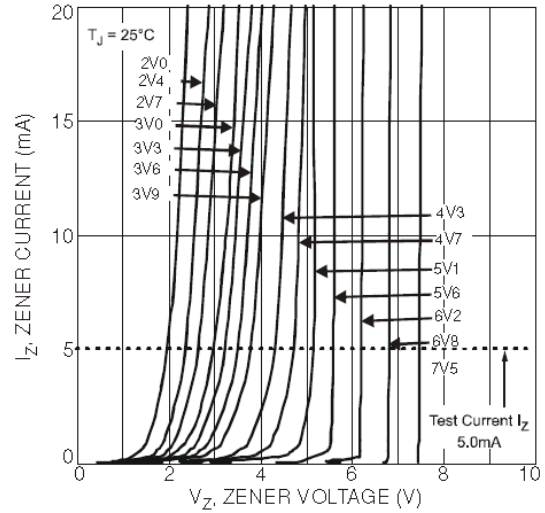


Fig. 2 Typical Zener Breakdown Characteristics

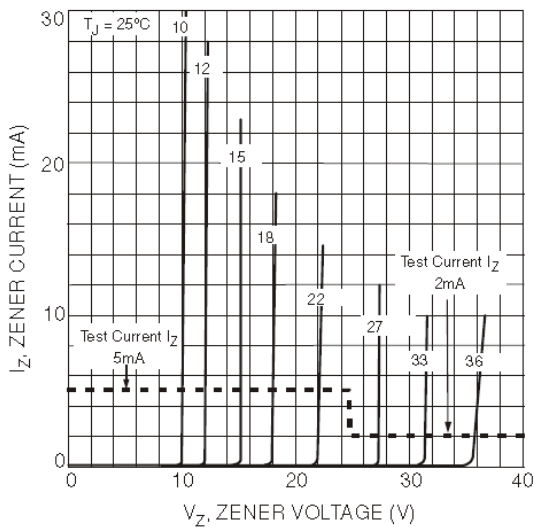


Fig. 3 Typical Zener Breakdown Characteristics

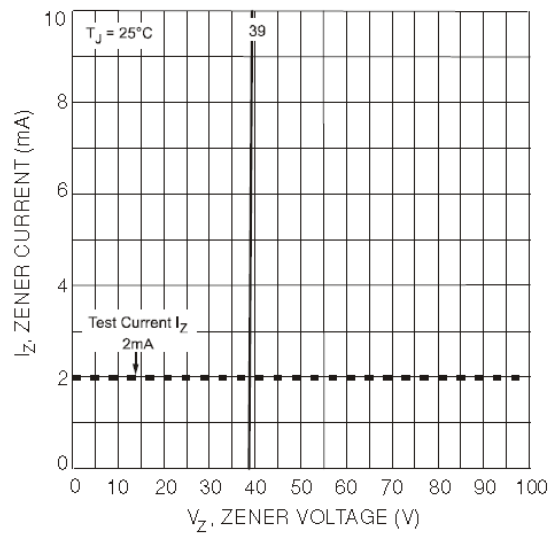


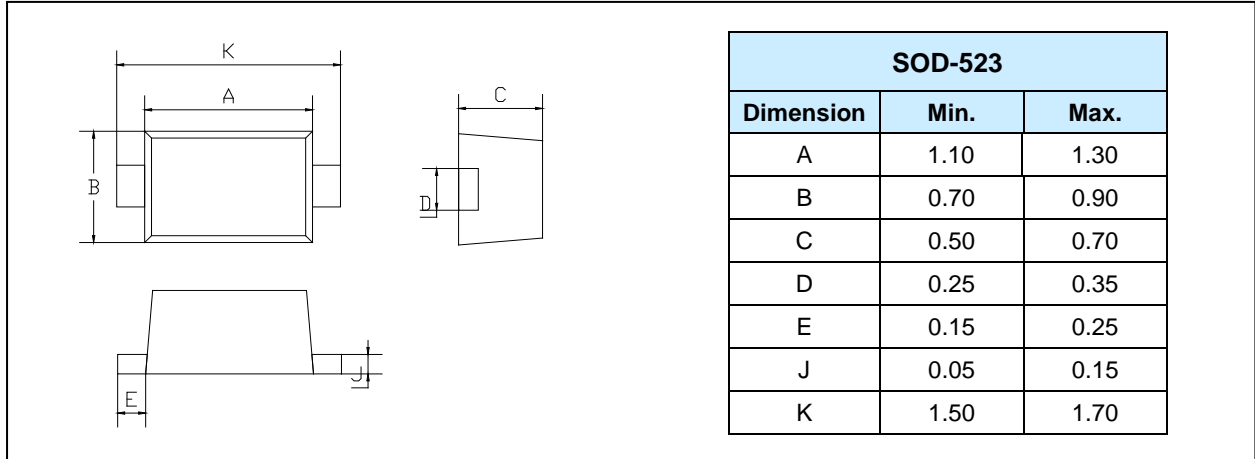
Fig. 4 Typical Zener Breakdown Characteristics

## SMT-Type Zener Diode

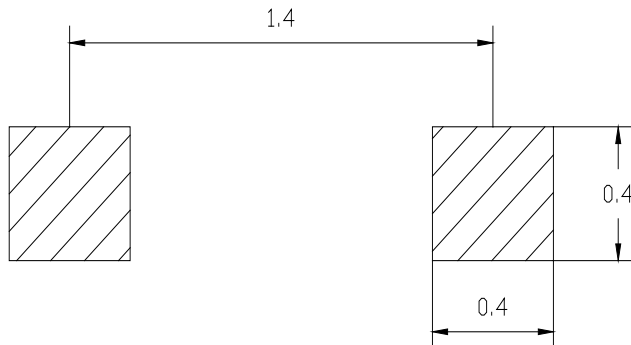
## BZX584C2V0 - BZX584C75

### PACKAGE OUTLINE (Unit: mm)

Plastic surface mounted package



### MOUNTING PAD LAYOUT (Unit: mm)



### PACKAGE INFORMATION

Part Number	Package	Shipping Quantity
BZX584C2V0 - BZX584C75	SOD-523	3000pcs / Tape & Reel

---

## SMT-Type Zener Diode

## BZX584C2V0 - BZX584C75

---

### IMPORTANT NOTICE

Changzhou Galaxy Century Microelectronics (GME) reserves the right to make changes without further notice to any product information (copyrighted) herein to make corrections, modifications, improvements, or other changes. GME does not assume any liability arising out of the application or use of any product described herein; neither does it convey any license under its patent rights, nor the rights of others.