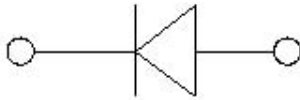
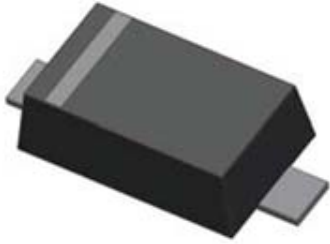


Small Signal Zener Diodes



Features

- Epoxy meets UL-94 V-0 flammability rating and halogen free
- Moisture Sensitivity Level 1
- Zener Voltage 2.4V~47V
- V_z -tolerance $\pm 5\%$ approximately
- Part no. with suffix "Q" means AEC-Q101 qualified

Applications

- General regulation functions

Mechanical Data

- **Case:** SOD523
- **Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102
- **Polarity:** Cathode line denotes the cathode end

■ Maximum Ratings ($T_a=25^\circ\text{C}$ Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	VALUE
Power Dissipation	P_D	mW	250
Storage Temperature Range	T_{stg}	$^\circ\text{C}$	-55~+150
Junction Temperature	T_J	$^\circ\text{C}$	-55~+150
Maximum Regulator Current	I_{ZM}	mA	P_D / V_z
Maximum Forward Voltage ($I_F=10\text{mA}$)	V_F	V	0.9
Thermal Resistance Junction to Ambient Air*	$R_{\theta JA}$	$^\circ\text{C} / \text{W}$	500

■ Ordering Information (Example)

PREFERRED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
BZX584C2V4Q THRU BZX584C47VQ	F2	Approximate 0.002	8000	80000	320000	7" reel



BZX584C2V4Q THRU BZX584C47VQ

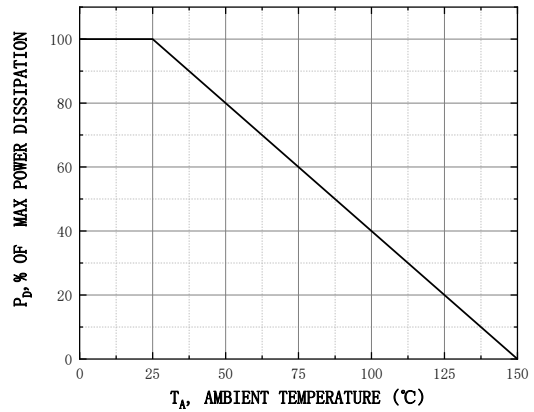
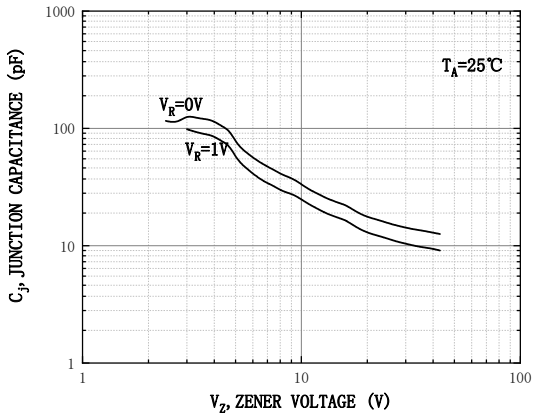
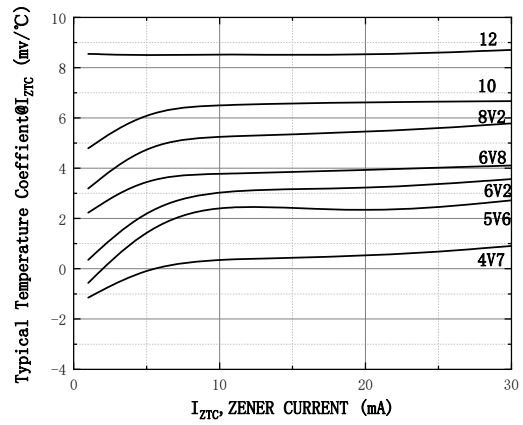
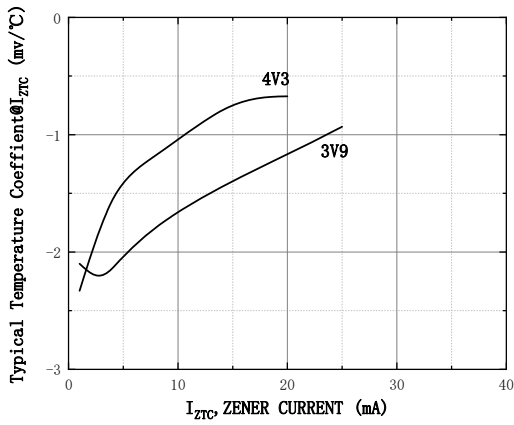
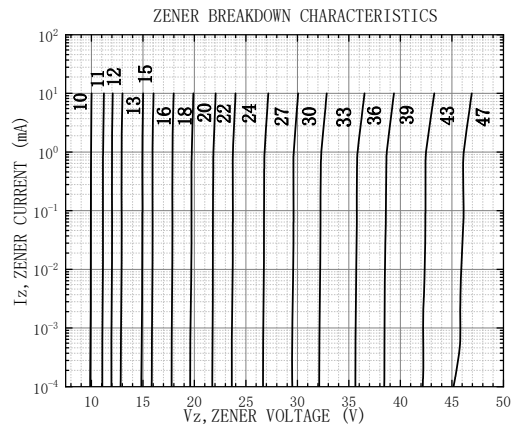
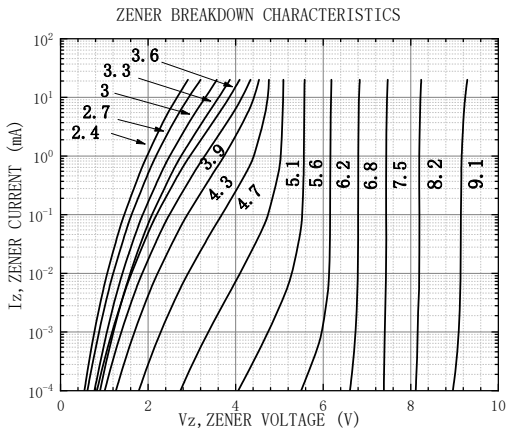
■ Electrical Characteristics (T_a=25°C Unless otherwise specified)

Type Number	Device Marking	V _z at I _z (V)			I _z (mA)	Z _z (Ω)		Z _{zk} (Ω)		I _R (μA)@V _R		Typical Temperature Coefficient@ I _{ZTC} mV/°C		Test Current I _{ZTC} (mA)
		min.	typ.	max.		I _z (mA)	max.	I _{zk} (mA)	max.	uA	V _R (V)	Min	Max	
BZX584C2V4Q	50	2.28	2.4	2.56	5	5	100	1.0	600	50	1.0	-3.5	0	5
BZX584C2V7Q	51	2.5	2.7	2.9	5	5	100	1.0	600	20	1.0	-3.5	0	5
BZX584C3V0Q	52	2.8	3.0	3.2	5	5	95	1.0	600	10	1.0	-3.5	0	5
BZX584C3V3Q	53	3.1	3.3	3.5	5	5	95	1.0	600	5	1.0	-3.5	0	5
BZX584C3V6Q	54	3.4	3.6	3.8	5	5	90	1.0	600	5	1.0	-3.5	0	5
BZX584C3V9Q	55	3.7	3.9	4.1	5	5	90	1.0	600	3	1.0	-3.5	0	5
BZX584C4V3Q	56	4.0	4.3	4.6	5	5	90	1.0	600	3	1.0	-3.5	0	5
BZX584C4V7Q	57	4.4	4.7	5.0	5	5	80	1.0	500	3	2.0	-3.5	0.2	5
BZX584C5V1Q	58	4.8	5.1	5.4	5	5	60	1.0	480	2	2.0	-2.7	1.2	5
BZX584C5V6Q	59	5.2	5.6	6.0	5	5	40	1.0	400	1	2.0	-2	2.5	5
BZX584C6V2Q	5A	5.8	6.2	6.6	5	5	10	1.0	150	3	4.0	0.4	3.7	5
BZX584C6V8Q	5B	6.4	6.8	7.2	5	5	15	1.0	80	2	4.0	1.2	4.5	5
BZX584C7V5Q	5C	7.0	7.5	7.9	5	5	15	1.0	80	1	5.0	2.5	5.3	5
BZX584C8V2Q	5D	7.7	8.2	8.7	5	5	15	1.0	80	0.7	5.0	3.2	6.2	5
BZX584C9V1Q	5E	8.5	9.1	9.6	5	5	15	1.0	100	0.5	6.0	3.8	7.0	5
BZX584C10VQ	5F	9.4	10	10.6	5	5	20	1.0	150	0.2	7.0	4.5	8.0	5
BZX584C11VQ	5G	10.4	11	11.6	5	5	20	1.0	150	0.1	8.0	5.4	9.0	5
BZX584C12VQ	5H	11.4	12	12.7	5	5	25	1.0	150	0.1	8.0	6.0	10.0	5
BZX584C13VQ	5J	12.4	13	14.1	5	5	30	1.0	170	0.1	8.0	7.0	11.0	5
BZX584C15VQ	5K	13.8	15	15.6	5	5	30	1.0	200	0.1	10.5	9.2	13.0	5
BZX584C16VQ	5L	15.3	16	17.1	5	5	40	1.0	200	0.1	11.2	10.4	14.0	5
BZX584C18VQ	5M	16.8	18	19.1	5	5	45	1.0	225	0.1	12.6	12.4	16.0	5
BZX584C20VQ	5N	18.8	20	21.2	5	5	55	1.0	225	0.1	14.0	14.4	18.0	5
BZX584C22VQ	5P	20.8	22	23.3	5	5	55	1.0	250	0.1	15.4	16.4	20.0	5
BZX584C24VQ	5R	22.8	24	25.6	5	5	70	1.0	250	0.1	16.8	18.4	22.0	5
BZX584C27VQ	5S	25.1	27	28.9	2	2	80	0.5	300	0.1	18.9	21.4	25.3	2
BZX584C30VQ	5T	28	30	32	2	2	80	0.5	300	0.1	21.0	24.4	29.4	2
BZX584C33VQ	5U	31	33	35	2	2	80	0.5	325	0.1	23.1	27.4	33.4	2
BZX584C36VQ	5V	34	36	38	2	2	90	0.5	350	0.1	25.2	30.4	37.4	2
BZX584C39VQ	5X	37	39	41	2	2	130	0.5	350	0.1	27.3	33.4	41.2	2
BZX584C43VQ	5Y	40	43	46	2	2	100	0.5	700	0.1	32	37.6	50.6	2
BZX584C47VQ	5Z	44	47	50	2	2	100	0.5	750	0.1	35	42.0	55.8	2



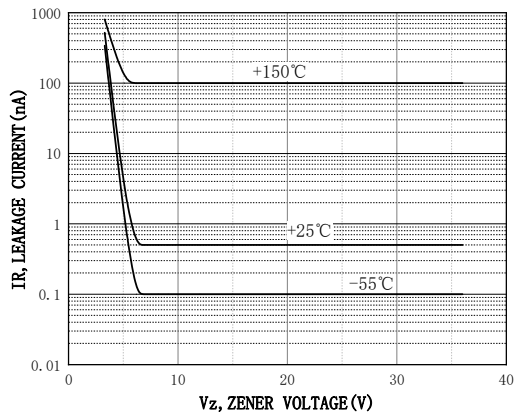
BZX584C2V4Q THRU BZX584C47VQ

■ Characteristics (Typical)





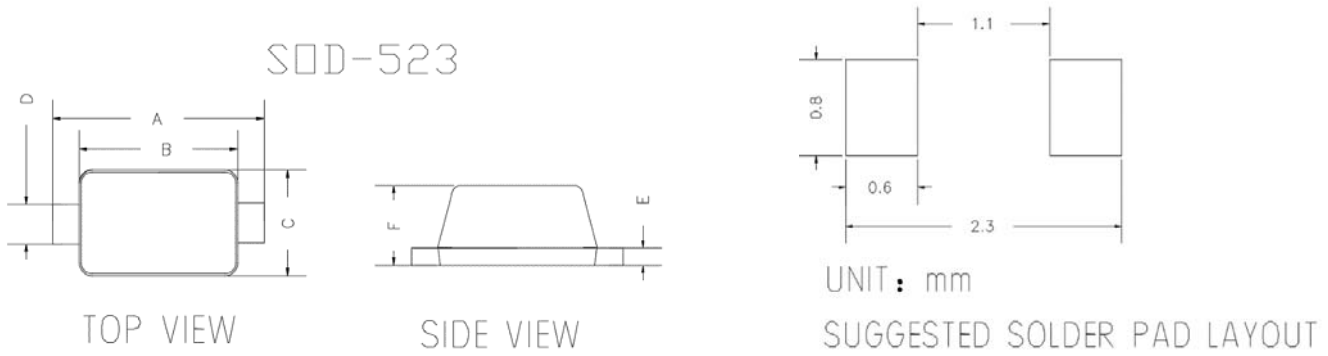
BZX584C2V4Q THRU BZX584C47VQ





BZX584C2V4Q THRU BZX584C47VQ

■ Outline Dimensions



DIMENSIONS				
DIM	INCHES		MM	
	MIN	MAX	MIN	MAX
A	0.059	0.067	1.500	1.700
B	0.043	0.051	1.100	1.300
C	0.028	0.035	0.700	0.900
D	0.010	0.014	0.250	0.350
E	0.002	0.008	0.050	0.200
F	0.020	0.028	0.500	0.700

■ Marking Information



Note:

1. All marking is at middle of the product body
2. All marking is in laser marking
3. XX is Marking Code
4. Body color: Black



BZX584C2V4Q THRU BZX584C47VQ

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