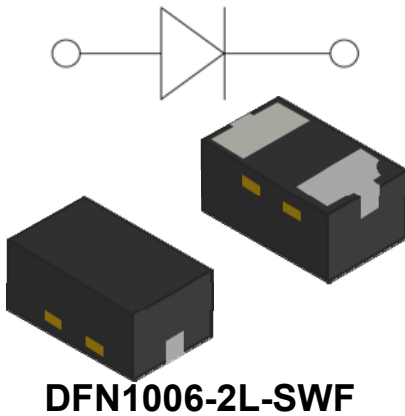


Small Signal Zener Diodes



Features

- Epoxy meets UL-94 V-0 flammability rating and halogen free
- 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:** DFN1006-2L-SWF
- **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	365 [1]
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 ($I_F=10\text{mA}_{dc}$)	V_F	V	0.9
Thermal Resistance Junction to Ambient Air*	$R_{\theta JA}$	$^\circ\text{C} / \text{W}$	340 [1]

[1] Device mounted on a FR4 PCB, single-sided 70um copper, tin-plated and standard footprint.

■ Ordering Information (Example)

PREFERRED P/N	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
BZX884SC2V4HQ THRU BZX884SC47HQ	Approximate 0.0009	10K	100K	400K	Tape & Reel



BZX884SC2V4HQ THRU BZX884SC47HQ

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

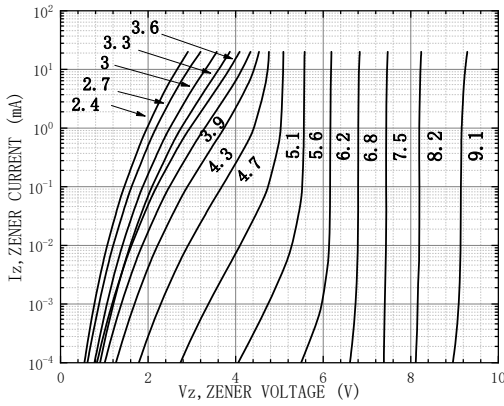
Type Number	Device Marking	V _z at I _{zT} (V)			I _{zT}	Z _{zT} (Ω)		Z _{zK} (Ω)		I _R (μA)@V _R		Typical Temperature Coefficient@ I _{ZTC} mV/°C		Test Current I _{ZTC}
		min.	typ.	max.	mA	I _z (mA)	max.	I _{zK} (mA)	max.	max	V _R (V)	Min	Max	mA
BZX884SC2V4HQ	4A	2.2	2.4	2.6	5	5	100	1.0	600	50	1.0	-3.5	0	5
BZX884SC2V7HQ	4B	2.5	2.7	2.9	5	5	100	1.0	600	20	1.0	-3.5	0	5
BZX884SC3V0HQ	4C	2.8	3.0	3.2	5	5	95	1.0	600	10	1.0	-3.5	0	5
BZX884SC3V3HQ	4D	3.1	3.3	3.5	5	5	95	1.0	600	5	1.0	-3.5	0	5
BZX884SC3V6HQ	4E	3.4	3.6	3.8	5	5	90	1.0	600	5	1.0	-3.5	0	5
BZX884SC3V9HQ	4F	3.7	3.9	4.1	5	5	90	1.0	600	3	1.0	-3.5	0	5
BZX884SC4V3HQ	4G	4.0	4.3	4.6	5	5	90	1.0	600	3	1.0	-3.5	0	5
BZX884SC4V7HQ	4H	4.4	4.7	5.0	5	5	80	1.0	500	3	2.0	-3.5	0.2	5
BZX884SC5V1HQ	4I	4.8	5.1	5.4	5	5	60	1.0	480	2	2.0	-2.7	1.2	5
BZX884SC5V6HQ	4J	5.32	5.6	5.88	5	5	40	1.0	400	1	2.0	-2	2.5	5
BZX884SC6V2HQ	4K	5.8	6.2	6.6	5	5	10	1.0	150	3	4.0	0.4	3.7	5
BZX884SC6V8HQ	4L	6.4	6.8	7.2	5	5	15	1.0	80	2	4.0	1.2	4.5	5
BZX884SC7V5HQ	4M	7.0	7.5	7.9	5	5	15	1.0	80	1	5.0	2.5	5.3	5
BZX884SC8V2HQ	4N	7.7	8.2	8.7	5	5	15	1.0	80	0.7	5.0	3.2	6.2	5
BZX884SC9V1HQ	4O	8.5	9.1	9.6	5	5	15	1.0	100	0.5	6.0	3.8	7.0	5
BZX884SC10HQ	4P	9.4	10	10.6	5	5	20	1.0	150	0.2	7.0	4.5	8.0	5
BZX884SC11HQ	4Q	10.4	11	11.6	5	5	20	1.0	150	0.1	8.0	5.4	9.0	5
BZX884SC12HQ	4R	11.4	12	12.7	5	5	25	1.0	150	0.1	8.0	6.0	10.0	5
BZX884SC13HQ	4S	12.4	13	14.1	5	5	30	1.0	170	0.1	8.0	7.0	11.0	5
BZX884SC15HQ	4T	13.8	15	15.6	5	5	30	1.0	170	0.1	10.5	9.2	13.0	5
BZX884SC16HQ	4U	15.3	16	17.1	5	5	40	1.0	170	0.1	11.2	10.4	14.0	5
BZX884SC18HQ	4V	16.8	18	19.1	5	5	45	1.0	225	0.1	12.6	12.4	16.0	5
BZX884SC20HQ	4W	18.8	20	21.2	5	5	55	1.0	225	0.1	14.0	14.4	18.0	5
BZX884SC22HQ	4X	20.8	22	23.3	5	5	55	1.0	250	0.1	15.4	16.4	20.0	5
BZX884SC24HQ	4Y	22.8	24	25.6	5	5	70	1.0	250	0.1	16.8	18.4	22.0	5
BZX884SC27HQ	4Z	25.1	27	28.9	2	2	80	0.5	300	0.1	18.9	21.4	25.3	2
BZX884SC30HQ	5A	28	30	32	2	2	80	0.5	300	0.1	21.0	24.4	29.4	2
BZX884SC33HQ	5B	31	33	35	2	2	80	0.5	325	0.1	23.1	27.4	33.4	2
BZX884SC36HQ	5C	34	36	38	2	2	90	0.5	350	0.1	25.2	30.4	37.4	2
BZX884SC39HQ	5D	37	39	41	2	2	130	0.5	350	0.1	27.3	33.4	41.2	2
BZX884SC43HQ	5E	40	43	46	2	2	100	0.5	700	0.1	32	37.6	50.6	2
BZX884SC47HQ	5F	44	47	50	2	2	100	0.5	750	0.1	35	42.0	55.8	2



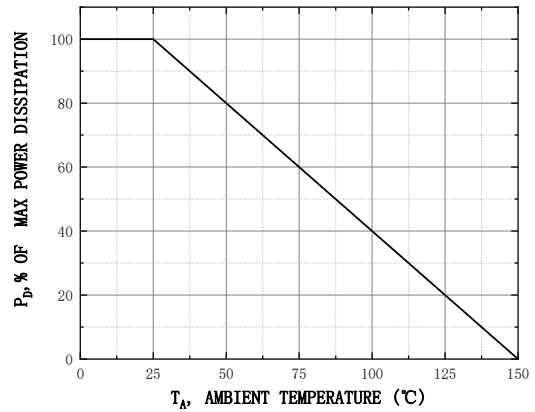
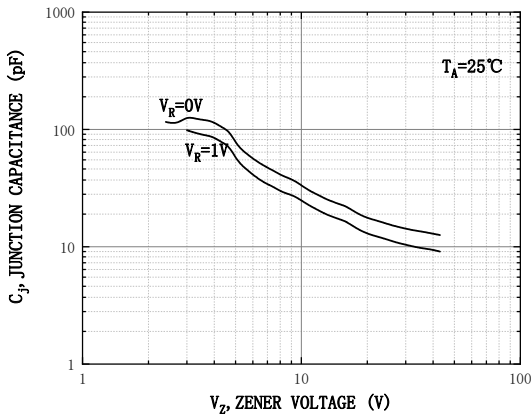
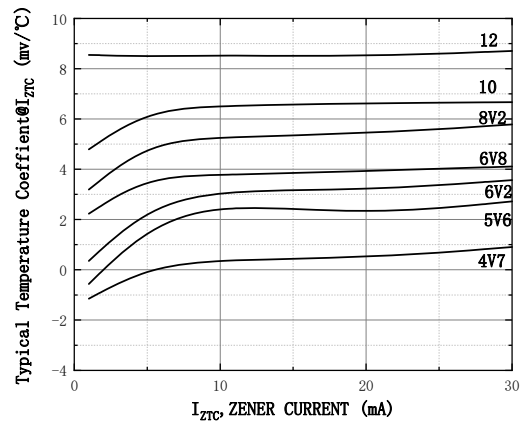
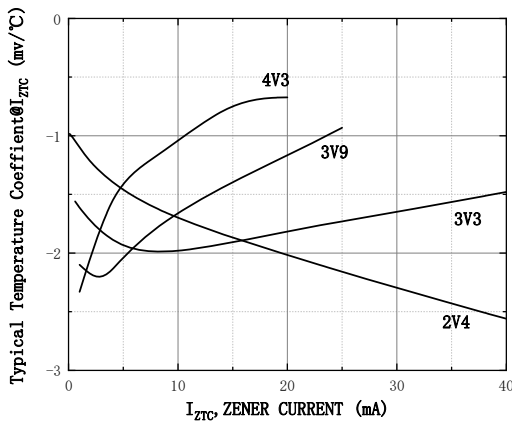
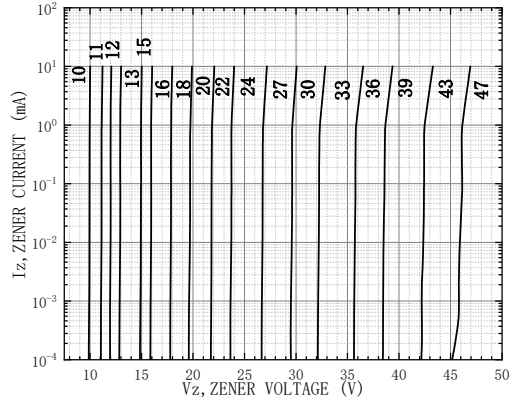
BZX884SC2V4HQ THRU BZX884SC47HQ

■ Characteristics (Typical)

ZENER BREAKDOWN CHARACTERISTICS



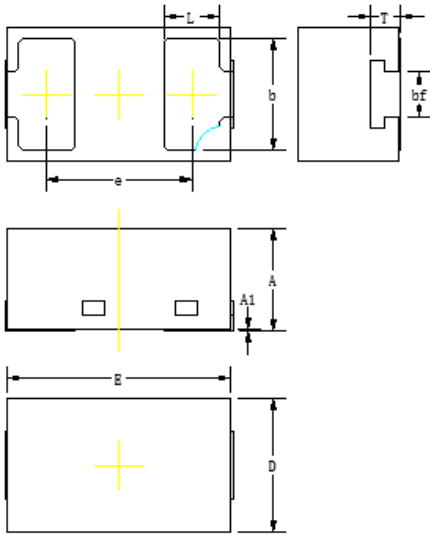
ZENER BREAKDOWN CHARACTERISTICS





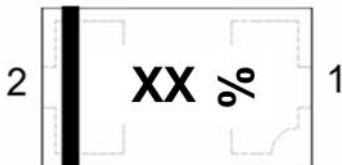
BZX884SC2V4HQ THRU BZX884SC47HQ

■ Outline Dimensions



SYMBOL	MILLIMETER		
	MIN	NOM	MAX
A	0.4200	0.4700	0.5200
A1	0.0000		0.1000
bf	REF. 0.20		
b	0.4100	0.5000	0.5900
D	0.5000	0.6000	0.7000
E	0.9000	1.0000	1.1000
e	REF. 0.65		
L	0.1500	0.2500	0.3500
T	0.1000	0.1600	0.2200

■ Marking Information



Note:

1. All marking is at middle of the product body
2. All marking is in laser marking
3. Body color: Black
4. XX is Marking Code
5. % is a date code, rotated 90° counterclockwise

*Date Code vary depending upon production date



BZX884SC2V4HQ THRU BZX884SC47HQ

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