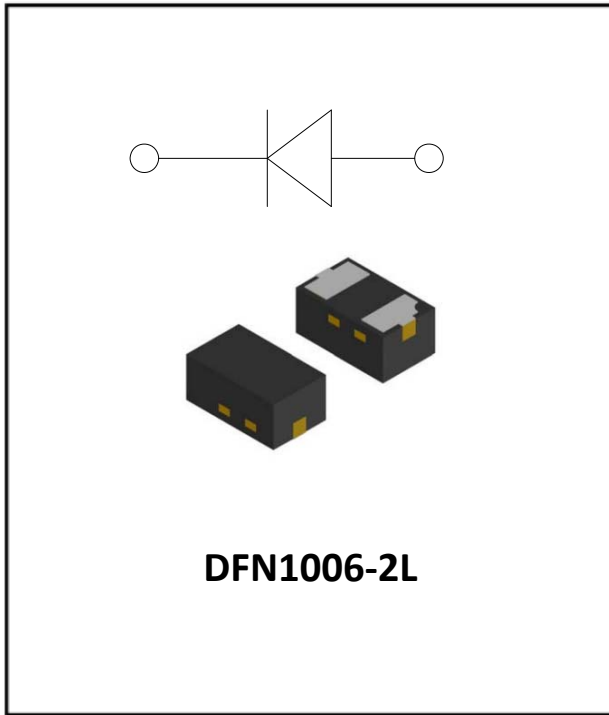


Small Signal Zener Diodes



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

- Automotive applications

Mechanical Data

- Package: DFN1006-2L
- Terminals: Tin plated leads, solderable per J-STD-002 and JESD22-B102
- Polarity: Cathode line denotes the cathode end

■ Maximum Ratings

PARAMETER	SYMBOL	UNIT	VALUE
Power dissipation	P_D	mW	150
Junction temperature	T_j	°C	-55 ~ +150
Storage temperature range	T_{stg}	°C	-55 ~ +150
Maximum Regulator Current	I_{ZM}	mA	P_D / V_z
Maximum Forward Voltage (IF=10mA dc)	V_F	V	0.9
Thermal Resistance Junction to Ambient Air*	$R_{\theta JA}$	°C / W	833

■ Ordering Information (Example)

PREFERRED P/N	UNIT WEIGHT(mg)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
BZT52C2V4L3PQ THRU BZT52C47L3PQ	Approximate 0.9	10K	100K	400K	Tape & Reel



BZT52C2V4L3PQ THRU BZT52C47L3PQ

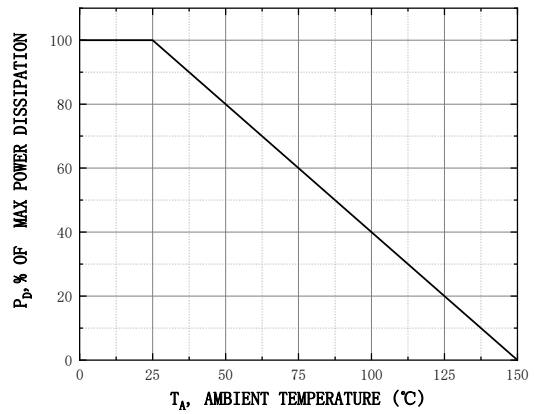
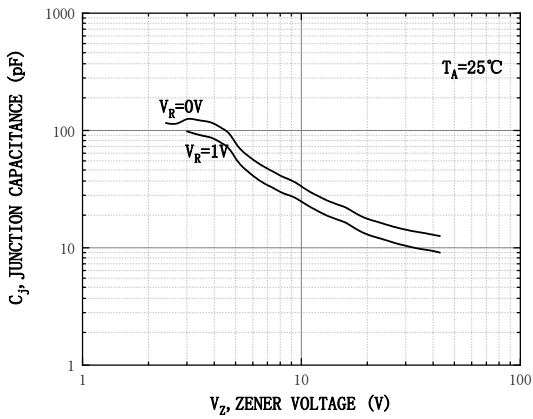
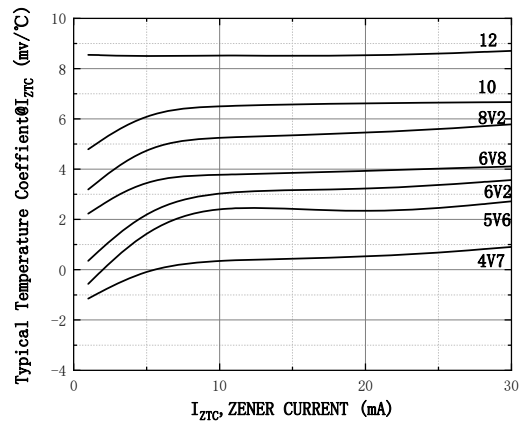
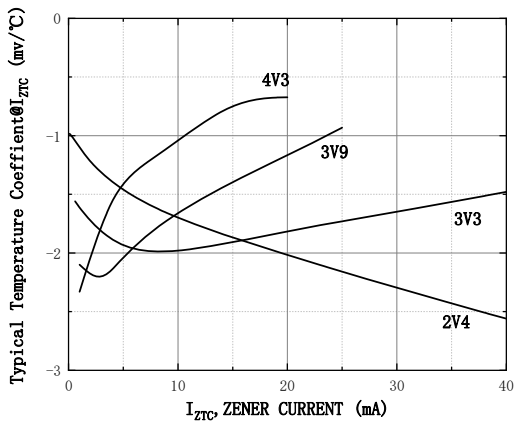
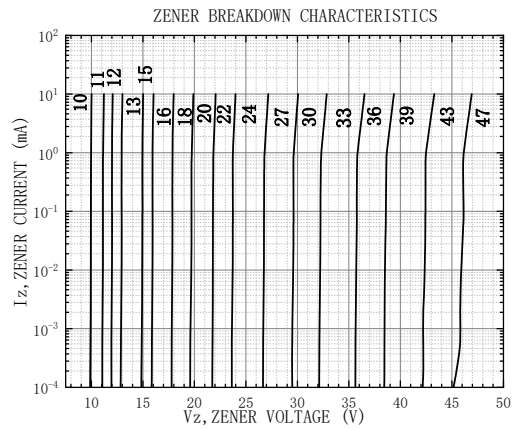
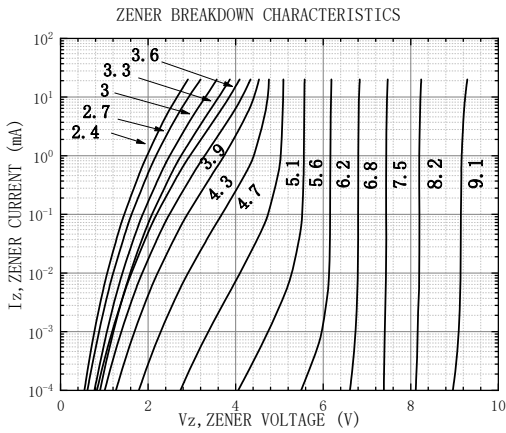
■Electrical Characteristics (Ta=25°C Unless otherwise specified)

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
BZT52C2V4L3PQ	WX	2.2	2.4	2.6	5	5	100	1.0	600	50	1.0	-3.5	0	5
BZT52C2V7L3PQ	W1	2.5	2.7	2.9	5	5	100	1.0	600	20	1.0	-3.5	0	5
BZT52C3V0L3PQ	W2	2.8	3.0	3.2	5	5	95	1.0	600	10	1.0	-3.5	0	5
BZT52C3V3L3PQ	W3	3.1	3.3	3.5	5	5	95	1.0	600	5	1.0	-3.5	0	5
BZT52C3V6L3PQ	W4	3.4	3.6	3.8	5	5	90	1.0	600	5	1.0	-3.5	0	5
BZT52C3V9L3PQ	W5	3.7	3.9	4.1	5	5	90	1.0	600	3	1.0	-3.5	0	5
BZT52C4V3L3PQ	W6	4.0	4.3	4.6	5	5	90	1.0	600	3	1.0	-3.5	0	5
BZT52C4V7L3PQ	W7	4.4	4.7	5.0	5	5	80	1.0	500	3	2.0	-3.5	0.2	5
BZT52C5V1L3PQ	9Y	4.8	5.1	5.4	5	5	60	1.0	480	2	2.0	-2.7	1.2	5
BZT52C5V6L3PQ	9A	5.32	5.6	5.88	5	5	40	1.0	400	1	2.0	-2	2.5	5
BZT52C6V2L3PQ	9B	5.8	6.2	6.6	5	5	10	1.0	150	3	4.0	0.4	3.7	5
BZT52C6V8L3PQ	9C	6.4	6.8	7.2	5	5	15	1.0	80	2	4.0	1.2	4.5	5
BZT52C7V5L3PQ	9D	7.0	7.5	7.9	5	5	15	1.0	80	1	5.0	2.5	5.3	5
BZT52C8V2L3PQ	9E	7.7	8.2	8.7	5	5	15	1.0	80	0.7	5.0	3.2	6.2	5
BZT52C9V1L3PQ	9F	8.5	9.1	9.6	5	5	15	1.0	100	0.5	6.0	3.8	7.0	5
BZT52C10L3PQ	9G	9.4	10	10.6	5	5	20	1.0	150	0.2	7.0	4.5	8.0	5
BZT52C11L3PQ	9H	10.4	11	11.6	5	5	20	1.0	150	0.1	8.0	5.4	9.0	5
BZT52C12L3PQ	9J	11.4	12	12.7	5	5	25	1.0	150	0.1	8.0	6.0	10.0	5
BZT52C13L3PQ	9K	12.4	13	14.1	5	5	30	1.0	170	0.1	8.0	7.0	11.0	5
BZT52C15L3PQ	9L	13.8	15	15.6	5	5	30	1.0	170	0.1	10.5	9.2	13.0	5
BZT52C16L3PQ	9M	15.3	16	17.1	5	5	40	1.0	170	0.1	11.2	10.4	14.0	5
BZT52C18L3PQ	9N	16.8	18	19.1	5	5	45	1.0	225	0.1	12.6	12.4	16.0	5
BZT52C20L3PQ	9P	18.8	20	21.2	5	5	55	1.0	225	0.1	14.0	14.4	18.0	5
BZT52C22L3PQ	9R	20.8	22	23.3	5	5	55	1.0	250	0.1	15.4	16.4	20.0	5
BZT52C24L3PQ	9S	22.8	24	25.6	5	5	70	1.0	250	0.1	16.8	18.4	22.0	5
BZT52C27L3PQ	9T	25.1	27	28.9	2	2	80	0.5	300	0.1	18.9	21.4	25.3	2
BZT52C30L3PQ	9U	28	30	32	2	2	80	0.5	300	0.1	21.0	24.4	29.4	2
BZT52C33L3PQ	9V	31	33	35	2	2	80	0.5	325	0.1	23.1	27.4	33.4	2
BZT52C36L3PQ	9W	34	36	38	2	2	90	0.5	350	0.1	25.2	30.4	37.4	2
BZT52C39L3PQ	9X	37	39	41	2	2	130	0.5	350	0.1	27.3	33.4	41.2	2
BZT52C43L3PQ	9Y	40	43	46	2	2	100	0.5	700	0.1	32	37.6	50.6	2
BZT52C47L3PQ	9Z	44	47	50	2	2	100	0.5	750	0.1	35	42.0	55.8	2



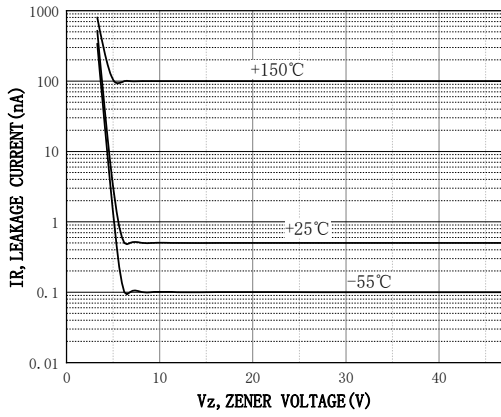
BZT52C2V4L3PQ THRU BZT52C47L3PQ

■ Characteristics (Typical)





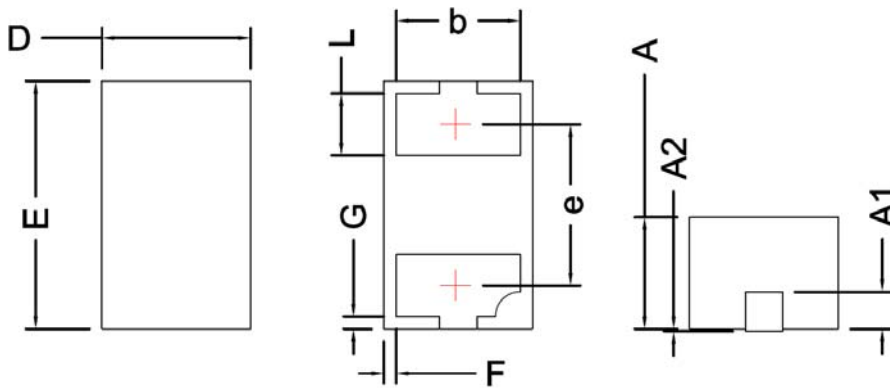
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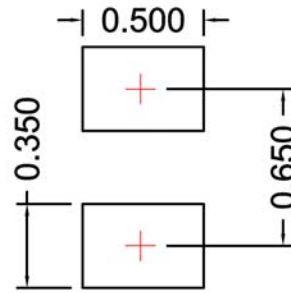


BZT52C2V4L3PQ THRU BZT52C47L3PQ

■ Outline Dimensions

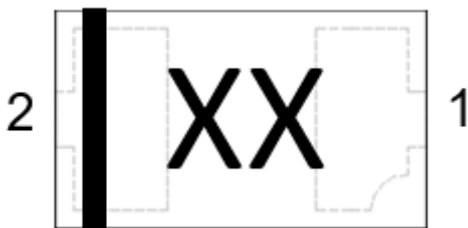


SYMBOL	MILLIMETER		
	MIN	NOM	MAX
D	0.50	0.60	0.70
E	0.90	1.00	1.10
A	0.35	0.45	0.55
A1	0.15 BSC		
A2			0.10
F	0.005		
G	0.005		
L	0.15	0.25	0.35
b	0.41	0.50	0.59
e	0.65 BSC		



Unit: mm

■ 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



BZT52C2V4L3PQ THRU BZT52C47L3PQ

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