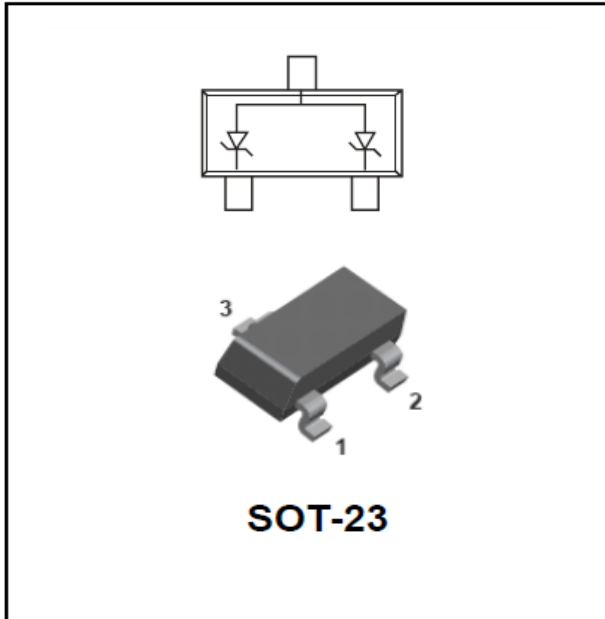


## ZENER DIODE



### FEATURES

- Dual zeners in common anode configuration.
- 300mW power dissipation rating.
- Ideally suited for automatic insertion.
- $\Delta V_Z$  for both diodes in one case is  $\leq 5\%$ .

### ■ Limiting Values (Absolute Maximum Rating, $T_a=25^\circ\text{C}$ Unless otherwise specified)

Characteristic	Symbol	Value	Units
Power Dissipation	$P_D$	300	mW
Thermal Resistance from Junction to Ambient	$R_{\theta JA}$	417	$^\circ\text{C} / \text{W}$
Storage Temperature Range	$T_{STG}$	-55~+150	$^\circ\text{C}$

### ■ Ordering Information (Example)

PREFERRED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
AZ23C2V7-AZ23C47	F2	Approximate 0.008	3000	30000	120000	7" reel



# AZ23C2V7-AZ23C47

## ■Electrical Characteristics (T<sub>a</sub>=25°C Unless otherwise specified)

Type Number	Marking Code	Nominal Zener Voltage			Maximum Zener Impedance				Min Reverse Leakage Current	
		V <sub>Z</sub> (V)@ I <sub>ZT</sub>			Z <sub>ZT</sub> @I <sub>ZT</sub>		Z <sub>Zk</sub> @I <sub>Zk</sub>		I <sub>R</sub> @ V <sub>R</sub>	
		Min.	Typ.	Max.	Ω	mA	Ω	mA	uA	V
AZ23C2V7	KD1	2.5	2.7	2.9	100	5	600	1	20	1
AZ23C3V0	KD2	2.8	3.0	3.2	95	5	600	1	10	1
AZ23C3V3	KD3	3.1	3.3	3.5	95	5	600	1	5	1
AZ23C3V6	KD4	3.4	3.6	3.8	90	5	600	1	5	1
AZ23C3V9	KD5	3.7	3.9	4.1	90	5	600	1	3	1
AZ23C4V3	KD6	4.0	4.3	4.6	90	5	600	1	3	1
AZ23C4V7	KD7	4.4	4.7	5.0	80	5	500	1	3	2
AZ23C5V1	KD8	4.8	5.1	5.4	60	5	480	1	2	2
AZ23C5V6	KD9	5.2	5.6	6.0	40	5	400	1	1	2
AZ23C6V2	KDA	5.8	6.2	6.6	10	5	150	1	3	4
AZ23C6V8	KDB	6.4	6.8	7.2	15	5	80	1	2	4
AZ23C7V5	KDC	7.0	7.5	7.9	15	5	80	1	1	5
AZ23C8V2	KDD	7.7	8.2	8.7	15	5	80	1	0.7	5
AZ23C9V1	KDE	8.5	9.1	9.6	15	5	100	1	0.5	6
AZ23C10	KDF	9.4	10	10.6	20	5	150	1	0.2	7
AZ23C11	KDG	10.4	11	11.6	20	5	150	1	0.1	8
AZ23C12	KDH	11.4	12	12.7	25	5	150	1	0.1	8
AZ23C13	KDI	12.4	13	14.1	30	5	170	1	0.1	8
AZ23C15	KDJ	13.8	15	15.6	30	5	200	1	0.1	10.5
AZ23C16	KDK	15.3	16	17.1	40	5	200	1	0.1	11.2
AZ23C18	KDL	16.8	18	19.1	45	5	225	1	0.1	12.6
AZ23C20	KDM	18.8	20	21.2	55	5	225	1	0.1	14
AZ23C22	KDN	20.8	22	23.3	55	5	250	1	0.1	15.4
AZ23C24	KDO	22.8	24	25.6	70	5	250	1	0.1	16.8
AZ23C27	KDP	25.1	27	28.9	80	2	300	1	0.1	18.9
AZ23C30	KDQ	28	30	32	80	2	300	1	0.1	21.0
AZ23C33	KDR	31	33	35	80	2	325	1	0.1	23.1
AZ23C36	KDS	34	36	38	90	2	350	1	0.1	25.2
AZ23C39	KDT	37	39	41	130	2	350	1	0.1	27.3
AZ23C43	D30	40.85	43	45.15	150	5	375	1	0.1	30.1
AZ23C47	D31	44.65	47	49.35	170	5	375	1	0.1	32.9

Notes: 1. Short duration test pulse used to minimize self-heating effect.  
2. f=1kHz



## ■ Characteristics(Typical)

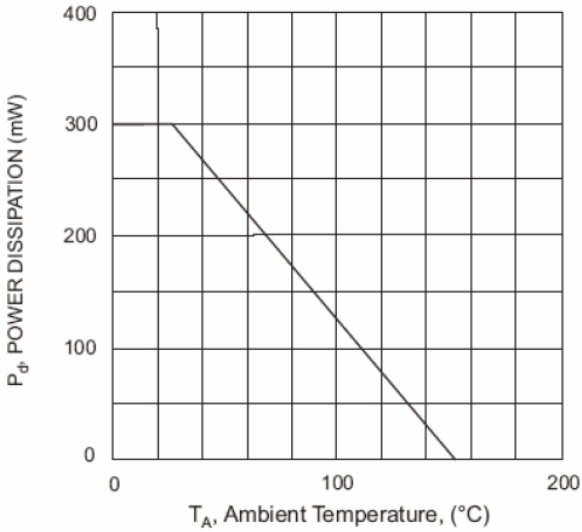


Fig. 1 Power Derating Curve

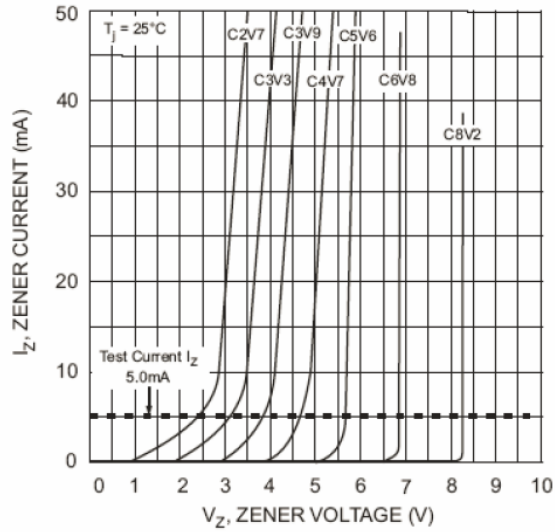


Fig. 2 Zener Breakdown Characteristics

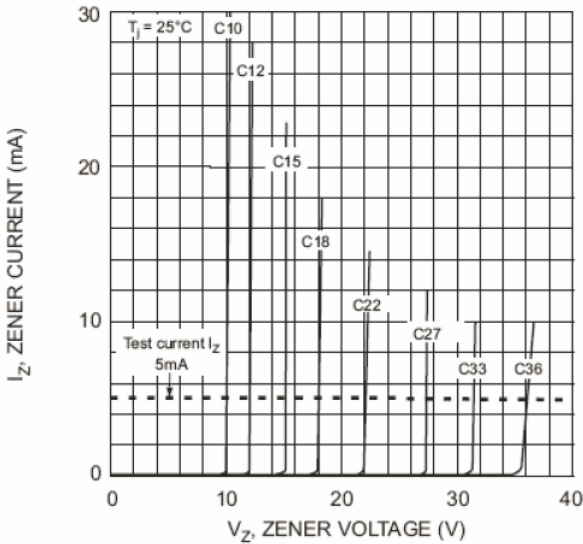


Fig. 3 Zener Breakdown Characteristics

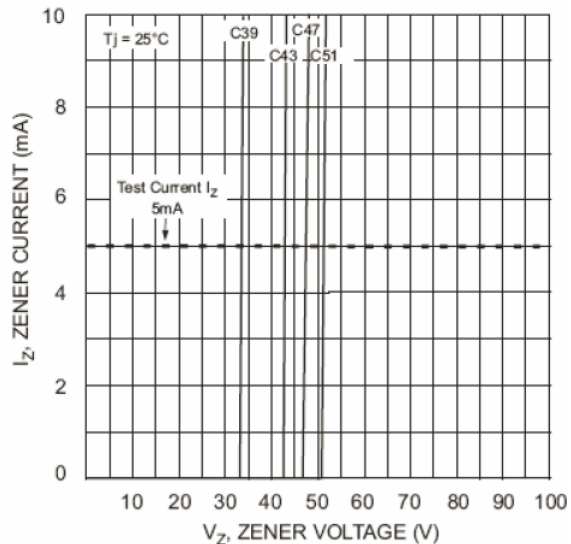


Fig. 4 Zener Breakdown Characteristics

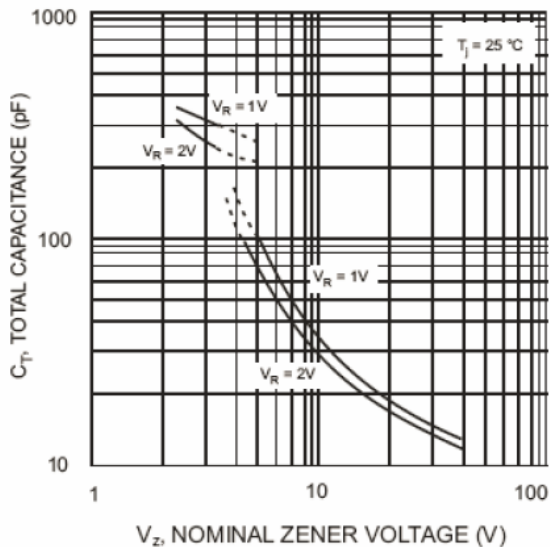
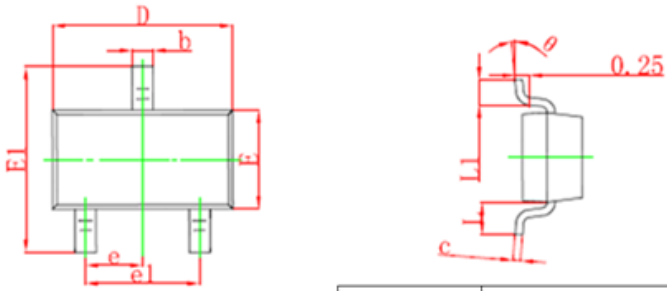


Fig. 5 Total Capacitance vs. Nominal Zener Voltage



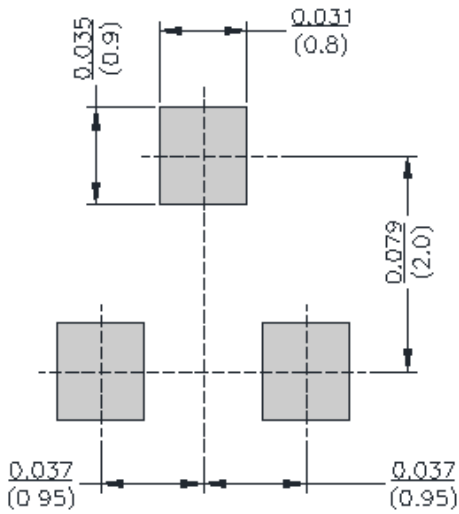
# AZ23C2V7-AZ23C47

## ■SOT-23 Package Outline Dimensions



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	0.900	1.150	0.035	0.045
A1	0.000	0.100	0.000	0.004
A2	0.900	1.050	0.035	0.041
b	0.300	0.500	0.012	0.020
c	0.100	0.200	0.004	0.008
D	2.800	3.000	0.110	0.118
E	1.200	1.400	0.047	0.055
E1	2.250	2.550	0.089	0.100
e	0.950TYP		0.037TYP	
e1	1.800	2.000	0.071	0.079
L	0.550REF		0.022REF	
L1	0.300	0.500	0.012	0.020
θ	0°	8°	0°	8°

## ■SOT-23Suggested Pad Layout





### **Disclaimer**

The information presented in this document is for reference only. Yangzhou Yangjie Electronic Technology Co., Ltd. reserves the right to make changes without notice for the specification of the products displayed herein to improve reliability, function or design or otherwise.

The product listed herein is designed to be used with ordinary electronic equipment or devices, and not designed to be used with equipment or devices which require high level of reliability and the malfunction of which would directly endanger human life (such as medical instruments, transportation equipment, aerospace machinery, nuclear-reactor controllers, fuel controllers and other safety devices), Yangjie or anyone on its behalf, assumes no responsibility or liability for any damages resulting from such improper use of sale.

This publication supersedes & replaces all information previously supplied. For additional information, please visit our website [http:// www.21yangjie.com](http://www.21yangjie.com) , or consult your nearest Yangjie's sales office for further assistance.

## X-ON Electronics

Largest Supplier of Electrical and Electronic Components

*Click to view similar products for [Zener Diodes](#) category:*

*Click to view products by [Yangjie](#) manufacturer:*

Other Similar products are found below :

[RKZ13B2KG#P1](#) [DL5234B](#) [EDZTE6113B](#) [1N4682](#) [1N4693](#) [1N4732A](#) [1N4736A](#) [1N4750A](#) [1N4759ARL](#) [1N5241B](#) [1N5365B](#) [1N5369B](#)  
[1N747A](#) [1N964B](#) [1N966B](#) [1N968B](#) [1N972B](#) [JANS1N4974US](#) [JANTX1N5907](#) [1N4692](#) [1N4700](#) [1N4702](#) [1N4704](#) [1N4711](#) [1N4714](#)  
[1N4745ARL](#) [1N4752ARL](#) [1N4760ARL](#) [1N5221B](#) [1N5242BTR](#) [1N5350B](#) [1N5352B](#) [1N961BRR1](#) [1N964BRL](#) [RKZ5.1BKU#P6](#)  
[3SMAJ5946B-TP](#) [3SMAJ5950B-TP](#) [3SMBJ5925B-TP](#) [MMSZ5230BQ-13-F](#) [MMSZ5232BQ-13-F](#) [BZX84C7V5](#) [3SMAJ5945B-TP](#)  
[3SMAJ5947B-TP](#) [3SMBJ5941B-TP](#) [DL4732A-T3](#) [DZ2S240M0L](#) [SMAZ27-TP](#) [ZMM5224B-7](#) [RD16UM-T1-A](#) [RD39S-T1-A](#)