



**THE DATASHEET OF  
DZ23C3V9-TP**





Micro Commercial Components



Micro Commercial Components  
20736 Marilla Street Chatsworth  
CA 91311  
Phone: (818) 701-4933  
Fax: (818) 701-4939

# DZ23C2V4 THRU DZ23C75

**300 mW  
Zener Diode  
2.4 to 75 Volts**

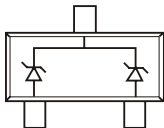
## Features

- Lead Free Finish/RoHS Compliant ("P" Suffix designates RoHS Compliant. See ordering information)
- Dual zeners in common cathode configuration.
- 300mW power dissipation rating.
- Ideally suited for automatic insertion.
- $\Delta v_z$  for both diodes in one case is  $\leq 5\%$ .
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Halogen free available upon request by adding suffix "-HF"

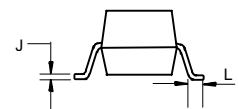
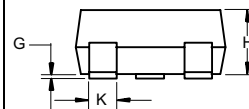
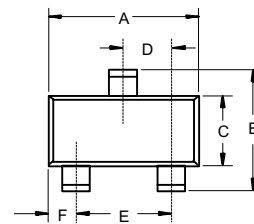
## Absolute Maximum Ratings

Symbol	Parameter	Rating	Unit
$P_D$	Power dissipation	300	mW
$R_{thJA}$	Thermal Resistance, Junction to Ambient Air	420	$^{\circ}C/W$
$T_{STG}$	Storage Temperature Range	-65 to +150	$^{\circ}C$

\*Pin Configuration - Top View



## SOT-23

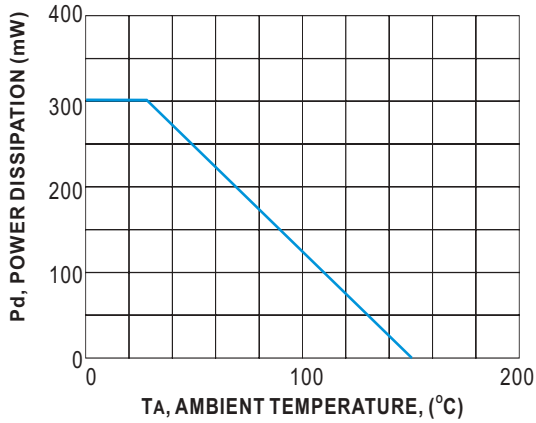


DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.110	.120	2.80	3.04	
B	.083	.104	2.10	2.64	
C	.047	.055	1.20	1.40	
D	.035	.041	.89	1.03	
E	.070	.081	1.78	2.05	
F	.018	.024	.45	.60	
G	.0005	.0039	.013	.100	
H	.035	.044	.89	1.12	
J	.003	.007	.085	.180	
K	.015	.020	.37	.51	
L	.007	.020	.20	.50	

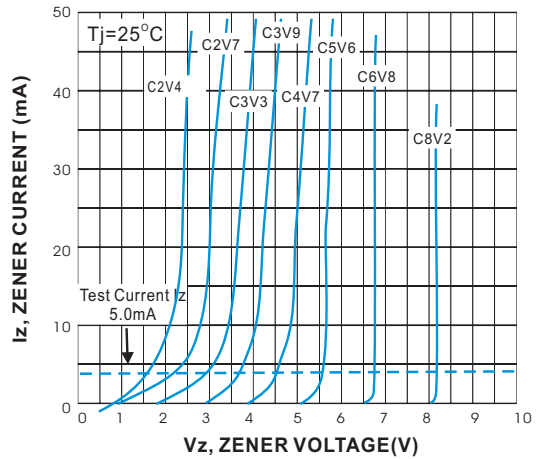
**DZ23C2V4 THRU DZ23C75**

Part Number	Nominal Zener Voltage			Max. Zener Impedance				Max Reverse Leakage Current		Marking Code
	Vz @ IzT			ZzT @ IzT		Zzk @ Izk		IR @ VR		
	Nom. V	Min. V	Max. V	Ω	mA	Ω	mA	μA	V	
DZ23C2V4	2.4	2.28	2.52	85	5.0	600	1.00	100.0	1.0	V0
DZ23C2V7	2.7	2.57	2.84	83	5.0	600	1.00	75	1.0	V1/KV1
DZ23C3V0	3.0	2.85	3.15	95	5.0	600	1.00	50	1.0	V2/KV2
DZ23C3V3	3.3	3.14	3.47	95	5.0	600	1.00	25	1.0	V3/KV3
DZ23C3V6	3.6	3.42	3.78	95	5.0	600	1.00	15	1.0	V4/KV4
DZ23C3V9	3.9	3.71	4.10	95	5.0	600	1.00	10	1.0	V5/KV5
DZ23C4V3	4.3	4.09	4.52	95	5.0	600	1.00	5.0	1.0	V6/KV6
DZ23C4V7	4.7	4.47	4.94	78	5.0	500	1.00	5.0	2.0	V7/KV7
DZ23C5V1	5.1	4.85	5.36	60	5.0	480	1.00	0.1	0.8	V8/KV8
DZ23C5V6	5.6	5.32	5.88	40	5.0	400	1.00	0.1	1.0	V9/KV9
DZ23C6V2	6.2	5.89	6.51	10	5.0	150	1.00	0.1	2.0	V10/KVA
DZ23C6V8	6.8	6.46	7.14	8	5.0	80	1.00	0.1	3.0	V11/KVB
DZ23C7V5	7.5	7.13	7.88	7	5.0	80	1.00	0.1	5.0	V12/KVC
DZ23C8V2	8.2	7.79	8.61	7	5.0	80	1.00	0.1	6.0	V13/KVD
DZ23C9V1	9.1	8.65	9.56	10	5.0	100	1.00	0.1	7.0	V14/KVE
DZ23C10	10	9.50	10.50	15	5.0	150	1.00	0.1	7.5	V15/KVF
DZ23C11	11	10.45	11.55	20	5.0	150	1.00	0.1	8.5	V16/KVG
DZ23C12	12	11.40	12.60	20	5.0	150	1.00	0.1	9.0	V17/KVH
DZ23C13	13	12.35	13.65	25	5.0	170	1.00	0.1	10.0	V18/KVI
DZ23C14	14	13.30	14.70	25	5.0	170	1.00	0.1	10.5	VA
DZ23C15	15	14.25	15.75	30	5.0	200	1.00	0.1	11.0	V19/KVJ
DZ23C16	16	15.20	16.80	40	5.0	200	1.00	0.1	12.0	V20/KVK
DZ23C17	17	16.15	17.85	40	5.0	200	1.00	0.1	13.0	VB
DZ23C18	18	17.10	18.90	50	5.0	225	1.00	0.1	14.0	V21/KVL
DZ23C20	20	19.00	21.00	50	5.0	225	1.00	0.1	15.0	V22/KVM
DZ23C22	22	20.90	23.10	55	5.0	250	1.00	0.1	17.0	V23/KVN
DZ23C24	24	22.80	25.20	80	5.0	250	1.00	0.1	18.0	V24/KVO
DZ23C27	27	25.65	28.35	80	5.0	300	1.00	0.1	20.0	V25/KVP
DZ23C28	28	26.60	29.40	80	5.0	300	1.00	0.1	22.0	VC
DZ23C30	30	28.50	31.50	80	5.0	300	1.00	0.1	22.5	V26/KVQ
DZ23C33	33	31.35	34.65	80	5.0	325	1.00	0.1	25.0	V27/KVR
DZ23C36	36	34.20	37.80	90	5.0	350	1.00	0.1	27.0	V28/KVS
DZ23C39	39	37.05	40.95	90	5.0	350	1.00	0.1	29.0	V29/KVT
DZ23C43	43	40.85	45.15	100	5.0	700	1.00	0.1	32.0	V30/KVU
DZ23C47	47	44.65	49.35	100	5.0	750	1.00	0.1	35.0	V31/KVV
DZ23C51	51	48.45	53.55	100	5.0	750	1.00	0.1	38.0	V32/KVW
DZ23C56	56	53.20	58.80	135	2.5	1000	1.00	0.1	42.0	V33
DZ23C62	62	58.90	65.10	150	2.5	1000	1.00	0.1	46.0	V34
DZ23C68	68	64.60	71.40	200	2.5	1000	1.00	0.1	51.0	V35
DZ23C75	75	71.25	78.75	250	2.5	1000	1.00	0.1	56.0	V36

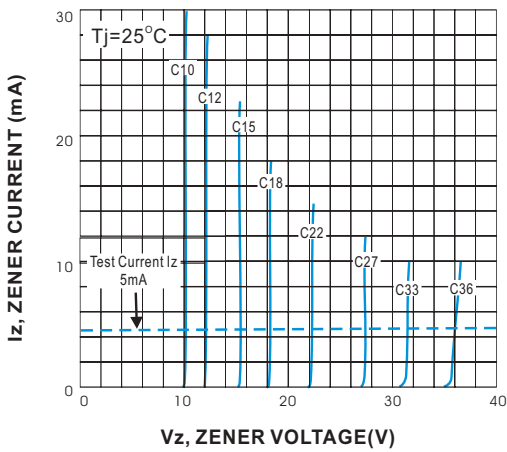
**DZ23C2V4-DZ23C75**



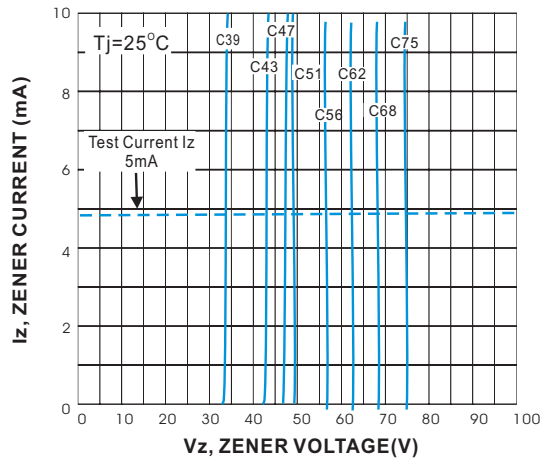
**Fig.1 POWER DERATING CURVE**



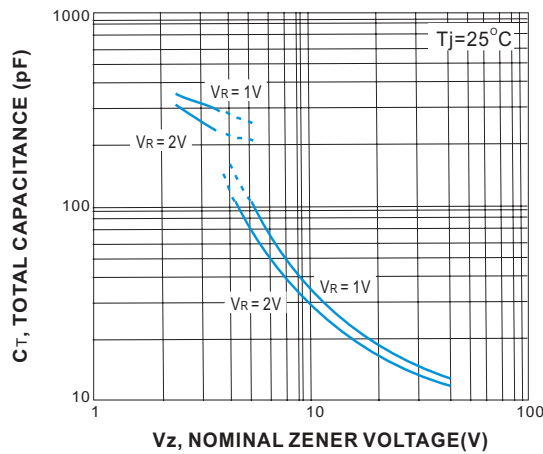
**Fig.2 ZENER BREAKDOWN CHARACTERISTIC**



**Fig.3 ZENER BREAKDOWN CHARACTERISTICS**



**Fig.4 ZENER BREAKDOWN CHARACTERISTICS**



**Fig.5 TOTAL CAPACITANCE VS NOMINAL ZENER VOLTAGE**



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### Ordering Information :

Device	Packing
Part Number-TP	Tape&Reel: 3Kpcs/Reel

Note : Adding "-HF" suffix for halogen free, eg. Part Number-TP-HF

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