

Features

- Dual Zeners in Common Cathode Configuration
- ΔV_Z for Both Diodes in One Case is $\leq 5\%$.
- Ideally Suited for Automated Insertion
- Moisture Sensitivity Level 1
- Epoxy Meets UL 94 V-0 Flammability Rating
- Halogen Free. "Green" Device (Note 1)
- Lead Free Finish/RoHS Compliant ("P" Suffix Designates RoHS Compliant. See Ordering Information)

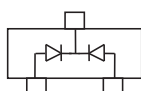
Maximum Ratings

- Operating Junction Temperature Range: -55°C to $+150^{\circ}\text{C}$
- Storage Temperature Range: -55°C to $+150^{\circ}\text{C}$
- Thermal Resistance : 417°C/W Junction to Ambient

Parameter	Symbol	Rating	Unit
Power Dissipation	P_D	300	mW

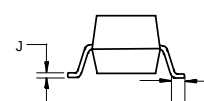
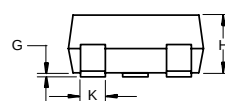
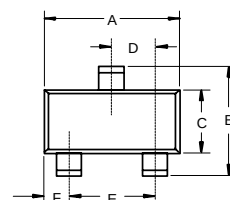
Note: 1. Halogen free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.

Internal Structure



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

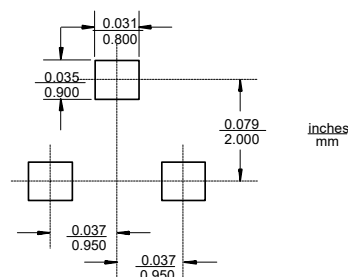
SOT-23



DIMENSIONS

DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.110	0.120	2.80	3.04	
B	0.083	0.104	2.10	2.64	
C	0.047	0.055	1.20	1.40	
D	0.034	0.041	0.85	1.05	
E	0.067	0.083	1.70	2.10	
F	0.018	0.024	0.45	0.60	
G	0.0004	0.006	0.01	0.15	
H	0.035	0.043	0.90	1.10	
J	0.003	0.007	0.08	0.18	
K	0.012	0.020	0.30	0.51	
L	0.007	0.020	0.20	0.50	

Suggested Solder Pad Layout



Electrical Characteristics @ 25°C Unless Otherwise Specified

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

Curve Characteristics

Fig. 1 - Power Derating Curve

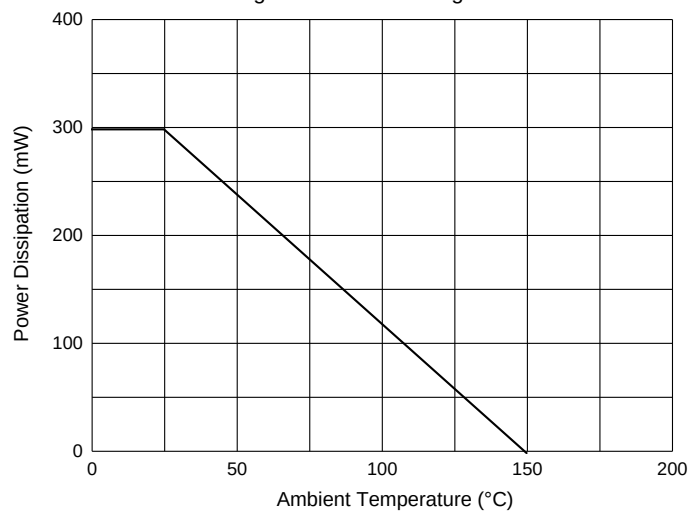


Fig. 2 - Typical Zener Breakdown Characteristics

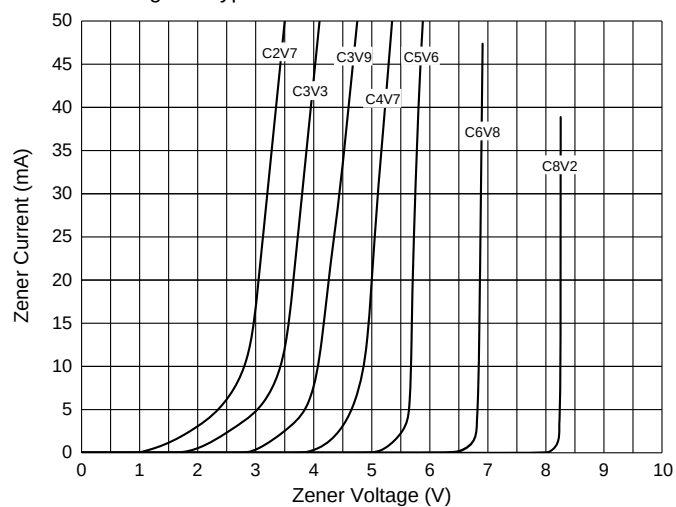
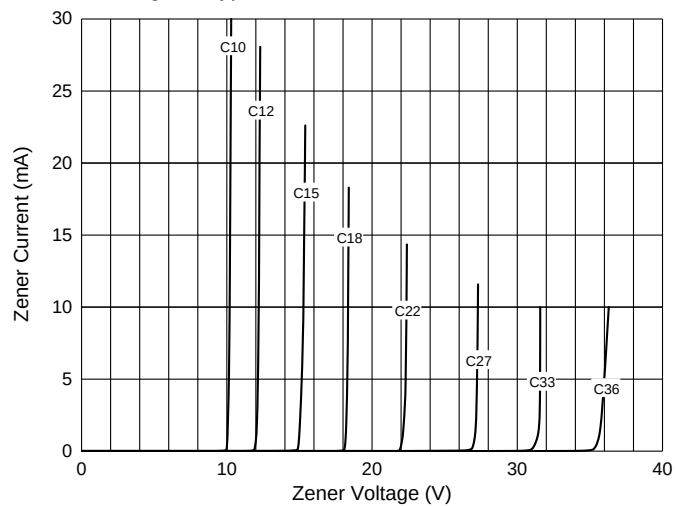


Fig. 3 - Typical Zener Breakdown Characteristics



Ordering Information

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

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