

Features

- Halogen Free. "Green" Device (Note 1)
- AEC-Q101 Qualified
- 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
- Lead Free Finish/RoHS Compliant ("P" Suffix Designates RoHS Compliant. See Ordering Information)

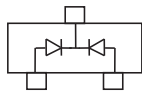
Maximum Ratings

- 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

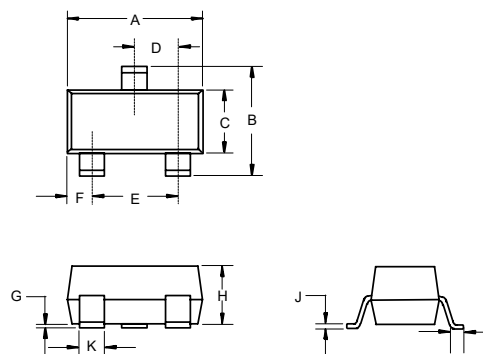
Note: 1. Halogen free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.

Internal Structure



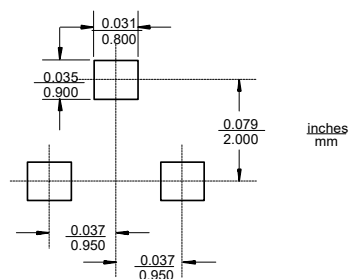
**300 mW
Zener Diode
2.4 to 47 Volts**

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 (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	
DZ23C2V4HE3	2.28	2.4	2.52	5.0	85	1.00	600	100.0	1.0	V0
DZ23C2V7HE3	2.57	2.7	2.84	5.0	83	1.00	600	75	1.0	KV1
DZ23C3V0HE3	2.85	3.0	3.15	5.0	95	1.00	600	50	1.0	KV2
DZ23C3V3HE3	3.14	3.3	3.47	5.0	95	1.00	600	25	1.0	KV3
DZ23C3V6HE3	3.42	3.6	3.78	5.0	95	1.00	600	15	1.0	KV4
DZ23C3V9HE3	3.71	3.9	4.10	5.0	95	1.00	600	10	1.0	KV5
DZ23C4V3HE3	4.09	4.3	4.52	5.0	95	1.00	600	5.0	1.0	KV6
DZ23C4V7HE3	4.47	4.7	4.94	5.0	78	1.00	500	5.0	2.0	V7
DZ23C5V1HE3	4.85	5.1	5.36	5.0	60	1.00	480	0.1	0.8	KV8
DZ23C5V6HE3	5.32	5.6	5.88	5.0	40	1.00	400	0.1	1.0	KV9
DZ23C6V2HE3	5.89	6.2	6.51	5.0	10	1.00	150	0.1	2.0	KVA
DZ23C6V8HE3	6.46	6.8	7.14	5.0	8	1.00	80	0.1	3.0	KVB
DZ23C7V5HE3	7.13	7.5	7.88	5.0	7	1.00	80	0.1	5.0	KVC
DZ23C8V2HE3	7.79	8.2	8.61	5.0	7	1.00	80	0.1	6.0	KVD
DZ23C9V1HE3	8.65	9.1	9.56	5.0	10	1.00	100	0.1	7.0	KVE
DZ23C10HE3	9.50	10	10.50	5.0	15	1.00	150	0.1	7.5	KVF
DZ23C11HE3	10.45	11	11.55	5.0	20	1.00	150	0.1	8.5	KVG
DZ23C12HE3	11.40	12	12.60	5.0	20	1.00	150	0.1	9.0	KVH
DZ23C13HE3	12.35	13	13.65	5.0	25	1.00	170	0.1	10.0	KVI
DZ23C14HE3	13.30	14	14.70	5.0	25	1.00	170	0.1	10.5	VA
DZ23C15HE3	14.25	15	15.75	5.0	30	1.00	200	0.1	11.0	V19
DZ23C16HE3	15.20	16	16.80	5.0	40	1.00	200	0.1	12.0	KVK
DZ23C17HE3	16.15	17	17.85	5.0	40	1.00	200	0.1	13.0	VB
DZ23C18HE3	17.10	18	18.90	5.0	50	1.00	225	0.1	14.0	KVL
DZ23C20HE3	19.00	20	21.00	5.0	50	1.00	225	0.1	15.0	KVM
DZ23C22HE3	20.90	22	23.10	5.0	55	1.00	250	0.1	17.0	KVN
DZ23C24HE3	22.80	24	25.20	5.0	80	1.00	250	0.1	18.0	KVO
DZ23C27HE3	25.65	27	28.35	5.0	80	1.00	300	0.1	20.0	KVP
DZ23C28HE3	26.60	28	29.40	5.0	80	1.00	300	0.1	22.0	VC
DZ23C30HE3	28.50	30	31.50	5.0	80	1.00	300	0.1	22.5	KVQ
DZ23C33HE3	31.35	33	34.65	5.0	80	1.00	325	0.1	25.0	KVR
DZ23C36HE3	34.20	36	37.80	5.0	90	1.00	350	0.1	27.0	KVS
DZ23C39HE3	37.05	39	40.95	5.0	90	1.00	350	0.1	29.0	KVT
DZ23C43HE3	40.85	43	45.15	5.0	100	1.00	700	0.1	32.0	KVU
DZ23C47HE3	44.65	47	49.35	5.0	100	1.00	750	0.1	35.0	KVV

Curve Characteristics

Fig. 1 - Power Derating Curve

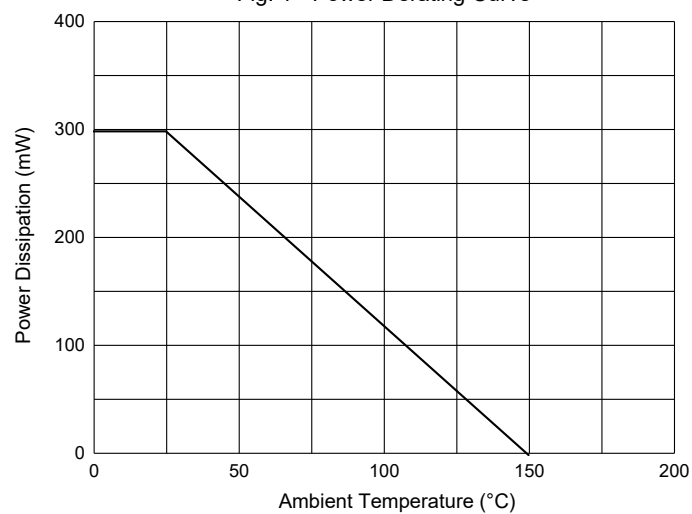


Fig. 2 - Typical Zener Breakdown Characteristics

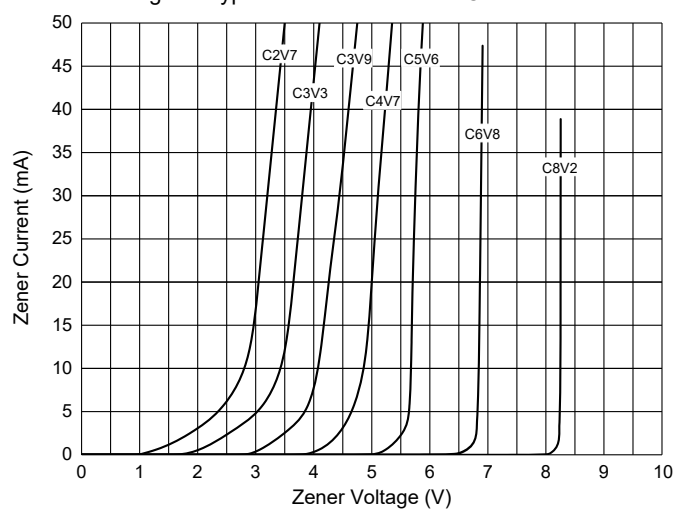
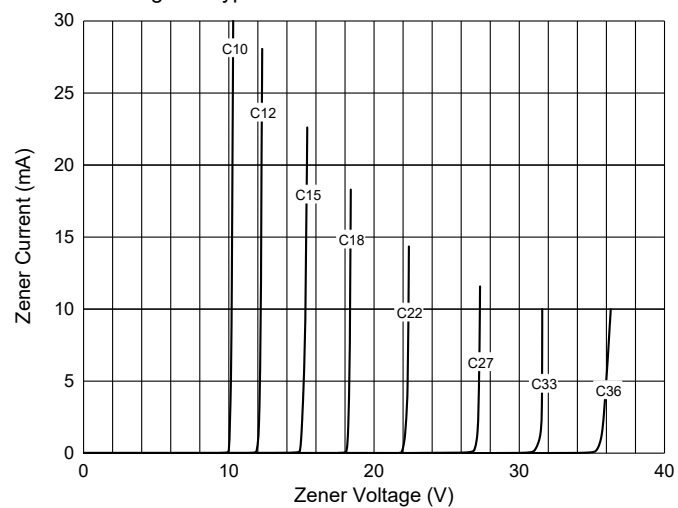


Fig. 3 - Typical Zener Breakdown Characteristics



Ordering Information

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

IMPORTANT NOTICE

Micro Commercial Components Corp. reserves the right to make changes without further notice to any product herein to make corrections, modifications , enhancements , improvements , or other changes . **Micro Commercial Components Corp** . does not assume any liability arising out of the application or use of any product described herein; neither does it convey any license under its patent rights ,nor the rights of others . The user of products in such applications shall assume all risks of such use and will agree to hold **Micro Commercial Components Corp** . and all the companies whose products are represented on our website, harmless against all damages. **Micro Commercial Components Corp.** products are sold subject to the general terms and conditions of commercial sale, as published at <https://www.mccsemi.com/Home/TermsAndConditions>.

LIFE SUPPORT

MCC's products are not authorized for use as critical components in life support devices or systems without the express written approval of Micro Commercial Components Corporation.

CUSTOMER AWARENESS

Counterfeiting of semiconductor parts is a growing problem in the industry. Micro Commercial Components (MCC) is taking strong measures to protect ourselves and our customers from the proliferation of counterfeit parts. MCC strongly encourages customers to purchase MCC parts either directly from MCC or from Authorized MCC Distributors who are listed by country on our web page cited below. Products customers buy either from MCC directly or from Authorized MCC Distributors are genuine parts, have full traceability, meet MCC's quality standards for handling and storage. **MCC will not provide any warranty coverage or other assistance for parts bought from Unauthorized Sources.** MCC is committed to combat this global problem and encourage our customers to do their part in stopping this practice by buying direct or from authorized distributors.

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Micro Commercial Components (MCC):

[DZ23C10HE3-TP](#) [DZ23C11HE3-TP](#) [DZ23C12HE3-TP](#) [DZ23C13HE3-TP](#) [DZ23C14HE3-TP](#) [DZ23C15HE3-TP](#)
[DZ23C6V2HE3-TP](#) [DZ23C6V8HE3-TP](#) [DZ23C7V5HE3-TP](#) [DZ23C8V2HE3-TP](#) [DZ23C9V1HE3-TP](#) [DZ23C43HE3-TP](#)
[DZ23C47HE3-TP](#) [DZ23C4V3HE3-TP](#) [DZ23C4V7HE3-TP](#) [DZ23C5V1HE3-TP](#) [DZ23C5V6HE3-TP](#) [DZ23C36HE3-TP](#)
[DZ23C39HE3-TP](#) [DZ23C3V0HE3-TP](#) [DZ23C3V3HE3-TP](#) [DZ23C3V6HE3-TP](#) [DZ23C3V9HE3-TP](#) [DZ23C27HE3-TP](#)
[DZ23C28HE3-TP](#) [DZ23C2V4HE3-TP](#) [DZ23C2V7HE3-TP](#) [DZ23C30HE3-TP](#) [DZ23C33HE3-TP](#) [DZ23C16HE3-TP](#)
[DZ23C17HE3-TP](#) [DZ23C18HE3-TP](#) [DZ23C20HE3-TP](#) [DZ23C22HE3-TP](#) [DZ23C24HE3-TP](#)