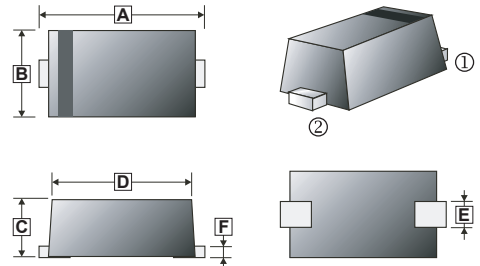


RoHS Compliant Product  
A suffix of "-C" specifies halogen & lead-free

**FEATURES**

- Wide Zener Voltage Range Selection, 2.4V to 75V
- $V_Z$  Tolerance Selection of  $\pm 5\%$  (C Series)
- Flat Lead SOD-323L Small Outline Plastic Package
- Surface Device Type Mounting
- Green EMC
- Matte Tin(Sn) Lead Finish
- Band Indicates Cathode

**SOD-323L**



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	2.30	2.70	D	1.60	1.80
B	1.15	1.35	E	0.25	0.40
C	0.80	1.10	F	0.05	0.25

**PACKAGE INFORMATION**

Package	MPQ	Leader Size
SOD-323L	3K	7 inch



**ABSOLUTE MAXIMUM RATINGS** ( $T_A=25^\circ\text{C}$  unless otherwise specified)

Parameter	Symbol	Rating	Unit
Power Dissipation	$P_D$	200	mW
Operating and Storage Temperature Range	$T_J, T_{STG}$	-65~150	$^\circ\text{C}$

**ELECTRICAL CHARACTERISTICS** ( $T_A=25^\circ\text{C}$  unless otherwise specified,  $V_F=1\text{V}$  Maximum @  $I_F=10\text{mA}$ )

Type Number	Marking	Zener Voltage Range				Maximum Zener Impedance			Maximum Reverse Leakage Current	
		$V_Z@I_{ZT}$			$I_{ZT}$	$Z_{ZT}@I_{ZT}$	$Z_{ZK}@I_{ZK}$	$I_{ZK}$	$I_R@V_R$	
		Min(V)	Nom(V)	Max(V)	mA	$\Omega$	$\Omega$	mA	$\mu\text{A}$	V
MM3Z2V4CW	Z0	2.28	2.4	2.52	5	100	564	1	45	1
MM3Z2V7CW	Z1	2.57	2.7	2.84	5	100	564	1	18	1
MM3Z3V0CW	Z2	2.85	3	3.15	5	100	564	1	9	1
MM3Z3V3CW	Z3	3.14	3.3	3.47	5	95	564	1	4.5	1
MM3Z3V6CW	Z4	3.42	3.6	3.78	5	90	564	1	4.5	1
MM3Z3V9CW	Z5	3.71	3.9	4.1	5	90	564	1	2.7	1
MM3Z4V3CW	Z6	4.09	4.3	4.52	5	90	564	1	2.7	1
MM3Z4V7CW	Z7	4.47	4.7	4.94	5	80	470	1	2.7	2
MM3Z5V1CW	Z8	4.85	5.1	5.36	5	60	451	1	1.8	2
MM3Z5V6CW	Z9	5.32	5.6	5.88	5	40	376	1	0.9	2
MM3Z6V2CW	ZA	5.89	6.2	6.51	5	10	141	1	2.7	4
MM3Z6V8CW	ZB	6.46	6.8	7.14	5	15	75	1	1.8	4
MM3Z7V5CW	ZC	7.11	7.5	7.86	5	15	75	1	0.9	5
MM3Z8V2CW	ZD	7.79	8.2	8.61	5	15	75	1	0.63	5
MM3Z9V1CW	ZE	8.65	9.1	9.56	5	15	94	1	0.45	6
MM3Z10VCW	ZF	9.5	10	10.5	5	20	141	1	0.18	7
MM3Z11VCW	ZG	10.45	11	11.55	5	20	141	1	0.09	8
MM3Z12VCW	ZH	11.4	12	12.6	5	25	141	1	0.09	8
MM3Z13VCW	ZJ	12.35	13	13.65	5	30	160	1	0.09	8
MM3Z15VCW	ZK	14.25	15	15.75	5	30	188	1	0.045	10.5
MM3Z16VCW	ZL	15.2	16	16.8	5	40	188	1	0.045	11.2
MM3Z18VCW	ZM	17.1	18	18.9	5	45	212	1	0.045	12.6
MM3Z20VCW	ZN	19	20	21	5	55	212	1	0.045	14
MM3Z22VCW	ZP	20.9	22	23.1	5	55	235	1	0.045	15.4
MM3Z24VCW	ZR	22.8	24	25.2	5	70	235	1	0.045	16.8
MM3Z27VCW	ZS	25.65	27	28.35	2	80	282	0.5	0.045	18.9
MM3Z30VCW	ZT	28.5	30	31.5	2	80	282	0.5	0.045	21
MM3Z33VCW	ZU	31.35	33	34.65	2	80	306	0.5	0.045	23
MM3Z36VCW	ZV	34.2	36	37.8	2	90	329	0.5	0.045	25.2
MM3Z39VCW	ZW	37.05	39	40.95	2	130	329	0.5	0.045	27.3

**ELECTRICAL CHARACTERISTICS** ( $T_A=25^\circ\text{C}$  unless otherwise specified,  $V_F=1\text{V}$  Maximum @  $I_F=10\text{mA}$ )

Type Number	Marking	Zener Voltage Range				Maximum Zener Impedance			Maximum Reverse Leakage Current	
		$V_Z@I_{ZT}$			$I_{ZT}$	$Z_{ZT}@I_{ZT}$	$Z_{ZK}@I_{ZK}$	$I_{ZK}$	$I_R@V_R$	
		Min(V)	Nom(V)	Max(V)	mA	$\Omega$	$\Omega$	mA	$\mu\text{A}$	V
MM3Z43VCW	ZX	40.85	43	45.15	2	150	353	0.5	0.045	30.1
MM3Z47VCW	ZY	44.65	47	49.35	2	170	353	0.5	0.045	33
MM3Z51VCW	Z-	48.45	51	53.55	2	180	376	0.5	0.045	35.7
MM3Z56VCW	Z=	53.2	56	58.8	2	200	400	0.5	0.045	39.2
MM3Z62VCW	Z≡	58.9	62	65.1	2	215	423	0.5	0.045	43.4
MM3Z68VCW	Z>	64.6	68	71.4	2	240	447	0.5	0.045	47.6
MM3Z75VCW	Z<	71.25	75	78.75	2	255	470	0.5	0.045	52.5

Notes:

1. The zener voltage ( $V_Z$ ) is tested under pulse condition of 10mS.
2. The device numbers listed have a standard tolerance on the nominal zener voltage of  $\pm 5\%$ .
3. The zener impedance is derived from the 60-cycle ac voltage, which results when an ac current having an rms value equal to 10% of the dc zener current ( $I_{ZT}$  or  $I_{ZK}$ ) is superimposed to  $I_{ZT}$  or  $I_{ZK}$ .

**CHARACTERISTIC CURVES**

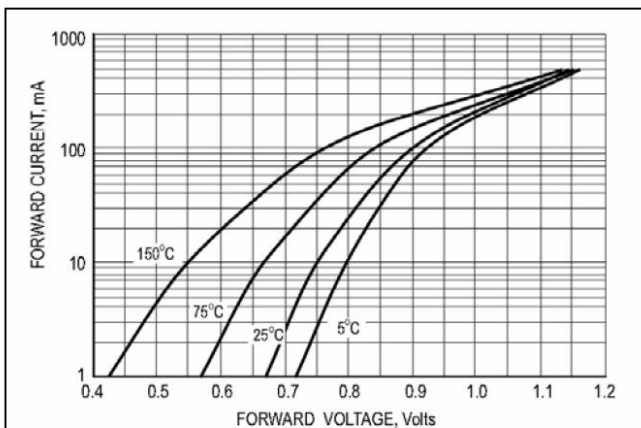


Fig.1 TYPICAL FORWARD VOLTAGE

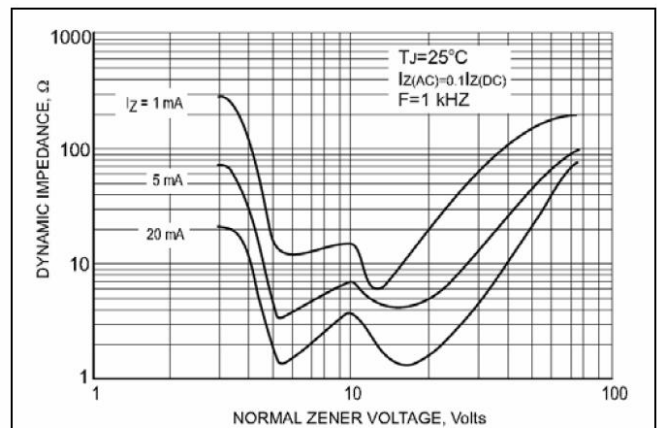


Fig.2 EFFECT OF ZENER VOLTAGE ON ZENER IMPEDANCE

**CHARACTERISTIC CURVES**

