Elektronische Bauelemente

MM3ZxxxBW-C Series

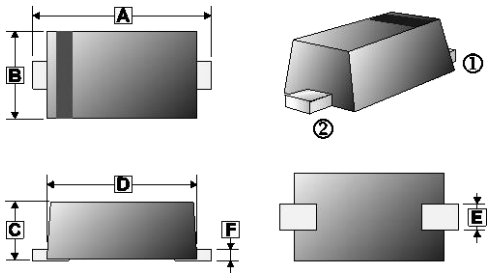
200mW, SOD-323L Series
Surface Mount Zener Diodes

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

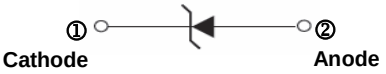
FEATURES

- Wide Zener Voltage Range Selection, 2.4V to 75V
- VZ Tolerance Selection of ±2% (B Series)
- Flat Lead SOD-323L Small Outline Plastic Package
- Surface Device Type Mounting
- RoHS Compliant
- Green EMC
- Matte Tin(Sn) Lead Finish
- Band Indicates Cathode

SOD-323L



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	2.30	2.80	D	1.60	2.10
B	1.05	1.60	E	0.25	0.70
C	0.60	1.08	F	0.05	0.25



PACKAGING INFORMATION

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

ORDER INFORMATION

Part Number	Type
MM3ZxxxBW-C Series	Lead (Pb)-free and Halogen-free

MAXIMUM RATINGS (T_A=25°C unless otherwise specified)

Parameter	Symbol	Value	Unit
Power Dissipation [1]	P_D	200	mW
Operating and Storage Temperature Range	T_J, T_{STG}	-65~150	°C

ELECTRICAL RATINGS (T_A=25°C unless otherwise specified)

Type Number	Marking	Zener Voltage Range				Maximum Zener Impedance			Maximum Reverse Leakage Current	
		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
MM3Z2V4BW-C	0Z	2.35	2.4	2.45	5	100	1	564	45	1
MM3Z2V7BW-C	1Z	2.65	2.7	2.75	5	100	1	564	18	1
MM3Z3V0BW-C	2Z	2.94	3.0	3.06	5	100	1	564	9	1
MM3Z3V3BW-C	3Z	3.23	3.3	3.37	5	95	1	564	4.5	1
MM3Z3V6BW-C	4Z	3.53	3.6	3.67	5	90	1	564	4.5	1
MM3Z3V9BW-C	5Z	3.82	3.9	3.98	5	90	1	564	2.7	1
MM3Z4V3BW-C	6Z	4.21	4.3	4.39	5	90	1	564	2.7	1
MM3Z4V7BW-C	7Z	4.61	4.7	4.79	5	80	1	470	2.7	2
MM3Z5V1BW-C	8Z	5.00	5.1	5.20	5	60	1	451	1.8	2
MM3Z5V6BW-C	9Z	5.49	5.6	5.71	5	40	1	376	0.9	2

Elektronische Bauelemente

MM3ZxxxBW-C Series

200mW, SOD-323L Series
Surface Mount Zener Diodes

ELECTRICAL RATINGS (T_A=25°C unless otherwise specified)

Type Number	Marking	Zener Voltage Range				Maximum Zener Impedance			Maximum Reverse Leakage Current	
		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
MM3Z6V2BW-C	AZ	6.08	6.2	6.32	5	10	1	141	2.7	4
MM3Z6V8BW-C	BZ	6.66	6.8	6.94	5	15	1	75	1.8	4
MM3Z7V5BW-C	CZ	7.35	7.5	7.65	5	15	1	75	0.9	5
MM3Z8V2BW-C	DZ	8.04	8.2	8.36	5	15	1	75	0.63	5
MM3Z9V1BW-C	EZ	8.92	9.1	9.28	5	15	1	94	0.45	6
MM3Z10VBW-C	FZ	9.80	10	10.20	5	20	1	141	0.18	7
MM3Z11VBW-C	GZ	10.78	11	11.22	5	20	1	141	0.09	8
MM3Z12VBW-C	HZ	11.76	12	12.24	5	25	1	141	0.09	8
MM3Z13VBW-C	JZ	12.74	13	13.26	5	30	1	160	0.09	8
MM3Z15VBW-C	KZ	14.70	15	15.30	5	30	1	188	0.045	10.5
MM3Z16VBW-C	LZ	15.68	16	16.32	5	40	1	188	0.045	11.2
MM3Z18VBW-C	MZ	17.64	18	18.36	5	45	1	212	0.045	12.6
MM3Z20VBW-C	NZ	19.60	20	20.40	5	55	1	212	0.045	14.0
MM3Z22VBW-C	PZ	21.56	22	22.44	5	55	1	235	0.045	15.4
MM3Z24VBW-C	RZ	23.52	24	24.48	5	70	1	235	0.045	16.8
MM3Z27VBW-C	SZ	26.46	27	27.54	2	80	0.5	282	0.045	18.9
MM3Z30VBW-C	TZ	29.40	30	30.60	2	80	0.5	282	0.045	21.0
MM3Z33VBW-C	UZ	32.34	33	33.66	2	80	0.5	306	0.045	23.0
MM3Z36VBW-C	VZ	35.28	36	36.72	2	90	0.5	329	0.045	25.2
MM3Z39VBW-C	WZ	38.22	39	39.78	2	130	0.5	329	0.045	27.3
MM3Z43VBW-C	XZ	42.14	43	43.86	2	150	0.5	353	0.045	30.1
MM3Z47VBW-C	YZ	46.06	47	47.94	2	170	0.5	353	0.045	33.0
MM3Z51VBW-C	-Z	49.98	51	52.02	2	180	0.5	376	0.045	35.7
MM3Z56VBW-C	=Z	54.88	56	57.12	2	200	0.5	400	0.045	39.2
MM3Z62VBW-C	≡Z	60.76	62	63.24	2	215	0.5	423	0.045	43.4
MM3Z68VBW-C	＞Z	66.64	68	69.36	2	240	0.5	447	0.045	47.6
MM3Z75VBW-C	＜Z	73.50	75	76.50	2	255	0.5	470	0.045	52.5
(V_F) Forward Voltage=1V Maximum @I_F=10mA for all types.										

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 ±2%.
3. For detailed information on price, availability and delivery of nominal zener voltages between the voltages shown and tighter voltage tolerances, contact your nearest SeCoS representative.
4. 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}.

Elektronische Bauelemente

MM3ZxxxBW-C Series

200mW, SOD-323L Series
Surface Mount Zener Diodes

CHARACTERISTIC CURVES

Fig.1 TYPICAL FORWARD VOLTAGE

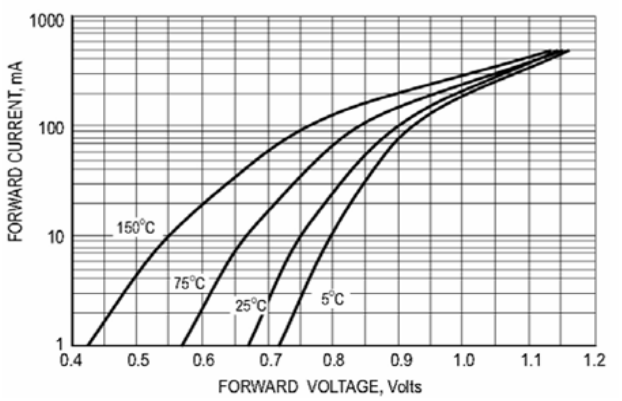


Fig.2 EFFECT OF ZENER VOLTAGE ON ZENER IMPEDANCE

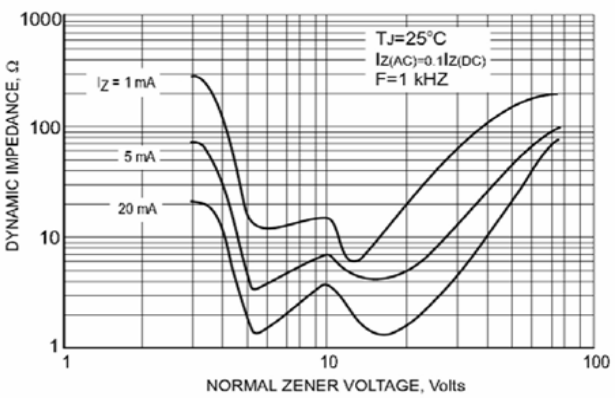


Fig.3 POWER DISSIPATION VS. AMBIENT TEMP.

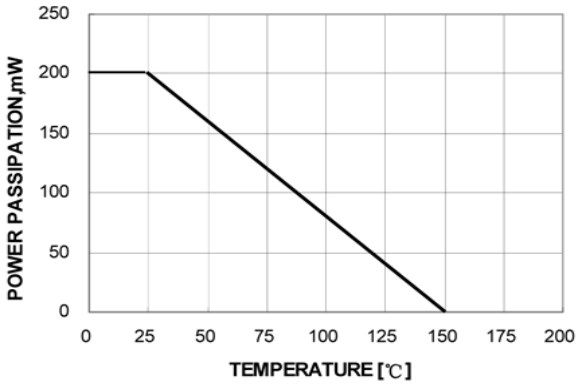


Fig.4 TYPICAL CAPACITANCE

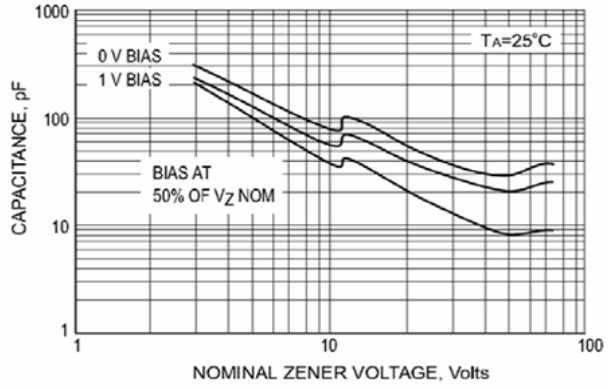


Fig.5 ZENER BREAKDOWN CHARACTERISTICS

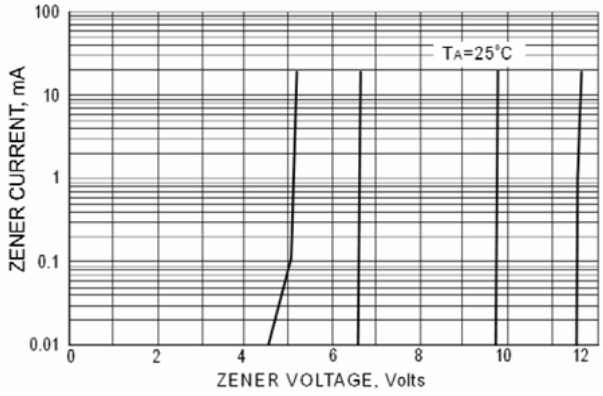


Fig.6 ZENER BREAKDOWN CHARACTERISTICS

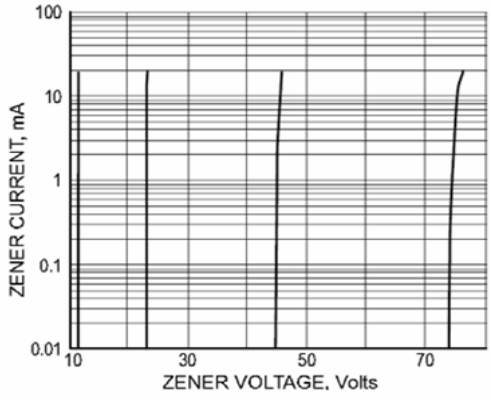


Fig.7 TYPICAL LEAKGE CURRENT

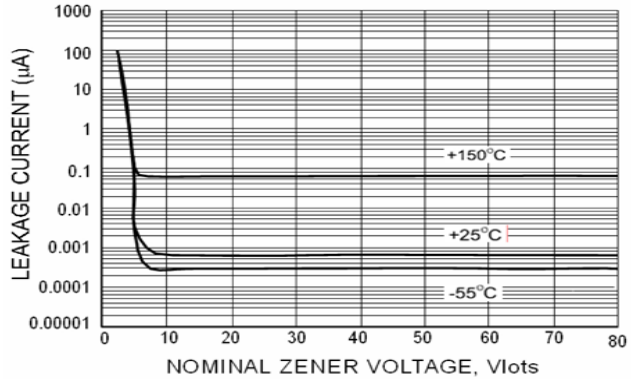
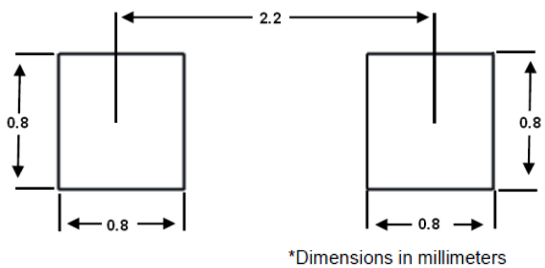


Fig.8 MOUNTING PAD LAYOUT



*Dimensions in millimeters