Elektronische Bauelemente

MM8ZxxxB-C

Voltage 2V~75V

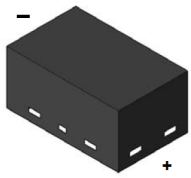
200mW Surface Mount Zener Voltage Regulators

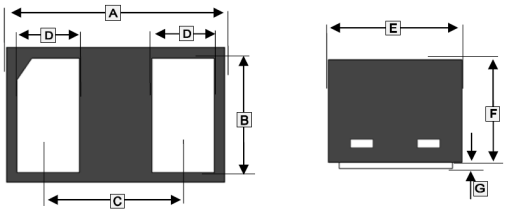
RoHS Compliant Product
A suffix of "-C" specifies halogen & lead-free

FEATURES

- High Speed Switching
- Small Surface Mounting Type
- Green EMC
- Matte Tin(Sn) Lead Finish
- Band Indicates Cathode

SOD-882





REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	0.95	1.05	E	0.55	0.65
B	0.45	0.55	F	0.46	0.50
C	0.65 TYP		G	-	0.03
D	0.20	0.30			

PACKAGE INFORMATION

Package	MPQ	Leader Size
SOD-882	10K	7 inch

ORDER INFORMATION

Part Number	Type
MM8ZxxxB-C	Lead (Pb)-free and Halogen-free

ABSOLUTE MAXIMUM RATINGS (T_A=25℃ unless otherwise specified)

Parameter	Symbol	Ratings	Unit
Power Dissipation	P_D	200	mW
Forward Voltage @I_F=10mA	V_F	1	V
Operating and Storage Temperature Range	T_J, T_{STG}	150, -55~150	℃

ELECTRICAL CHARACTERISTICS (T_A=25℃ unless otherwise specified)

Part Number	Marking	Zener Voltage Range [1]				Maximum Zener Impedance [2]			Maximum Reverse Current	
		V_Z @I_{ZT}			I_{ZT}	Z_{ZT} @I_{ZT}	Z_{ZK} @I_{ZK}		I_R @V_R	
		Min.	Nom.	Max.						
		V			mA	Ω	mA	Ω	μA	V
MM8Z2V0B-C	±8	1.95	2	2.05	5	100	1	564	120	0.5
MM8Z2V2B-C	⊥8	2.14	2.2	2.26	5	100	1	564	120	0.7
MM8Z2V4B-C	08	2.35	2.4	2.45	5	100	1	564	45	1
MM8Z2V7B-C	18	2.65	2.7	2.75	5	100	1	564	18	1
MM8Z3V0B-C	28	2.94	3	3.06	5	100	1	564	9	1
MM8Z3V3B-C	38	3.23	3.3	3.37	5	95	1	564	4.5	1
MM8Z3V6B-C	48	3.53	3.6	3.67	5	90	1	564	4.5	1
MM8Z3V9B-C	+8	3.82	3.9	3.98	5	90	1	564	2.7	1
MM8Z4V3B-C	68	4.21	4.3	4.39	5	90	1	564	2.7	1

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ELECTRICAL CHARACTERISTICS (T_A=25℃ unless otherwise specified)

Part Number	Marking	Zener Voltage Range [1]				Maximum Zener Impedance [2]			Maximum Reverse Current	
		V_Z @I_{ZT}			I_{ZT}	Z_{ZT} @I_{ZT}	Z_{ZK} @I_{ZK}		I_R @V_R	
		Min.	Nom.	Max.						
		V			mA	Ω	mA	Ω	μA	V
MM8Z4V7B-C	78	4.61	4.7	4.79	5	80	1	470	2.7	2
MM8Z5V1B-C	88	5	5.1	5.2	5	60	1	451	1.8	2
MM8Z5V6B-C	98	5.49	5.6	5.71	5	40	1	376	0.9	2
MM8Z6V2B-C	A8	6.08	6.2	6.32	5	10	1	141	2.7	4
MM8Z6V8B-C	B8	6.66	6.8	6.94	5	15	1	75	1.8	4
MM8Z7V5B-C	C8	7.35	7.5	7.65	5	15	1	75	0.9	5
MM8Z8V2B-C	D8	8.04	8.2	8.36	5	15	1	75	0.63	5
MM8Z9V1B-C	E8	8.92	9.1	9.28	5	15	1	94	0.45	6
MM8Z10VB-C	F8	9.8	10	10.2	5	20	1	141	0.18	7
MM8Z11VB-C	G8	10.78	11	11.22	5	20	1	141	0.09	8
MM8Z12VB-C	H8	11.76	12	12.24	5	25	1	141	0.09	8
MM8Z13VB-C	J8	12.74	13	13.26	5	30	1	160	0.09	8
MM8Z15VB-C	K8	14.7	15	15.3	5	30	1	188	0.045	10.5
MM8Z16VB-C	L8	15.68	16	16.32	5	40	1	188	0.045	11.2
MM8Z18VB-C	M8	17.64	18	18.36	5	45	1	212	0.045	12.6
MM8Z20VB-C	N8	19.6	20	20.4	5	55	1	212	0.045	14
MM8Z22VB-C	P8	21.56	22	22.44	5	55	1	235	0.045	15.4
MM8Z24VB-C	R8	23.52	24	24.48	5	70	1	235	0.045	16.8
MM8Z27VB-C	S8	26.46	27	27.54	2	80	0.5	282	0.045	18.9
MM8Z30VB-C	T8	29.4	30	30.6	2	80	0.5	282	0.045	21
MM8Z33VB-C	U8	32.34	33	33.66	2	80	0.5	306	0.045	23
MM8Z36VB-C	V8	35.28	36	36.72	2	90	0.5	329	0.045	25.2
MM8Z39VB-C	X8	38.22	39	37.78	2	130	0.5	329	0.045	27.3
MM8Z47VB-C	Z8	46.06	47	47.94	2	170	0.5	353	0.045	33
MM8Z51VB-C	−8	49.98	51	52.02	2	180	0.5	376	0.045	35.7
MM8Z56VB-C	=8	54.88	56	57.12	2	200	0.5	400	0.045	39.2
MM8Z62VB-C	≡8	60.76	62	63.24	2	215	0.5	423	0.045	43.4
MM8Z68VB-C	>8	66.64	68	69.36	2	240	0.5	447	0.045	47.6
MM8Z75VB-C	<8	73.5	75	76.5	2	255	0.5	470	0.045	52.5

Notes:

1. The Zener Voltage (V_Z) is tested under pulse condition of 10mS.
2. 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}.

RATING AND CHARACTERISTIC CURVES

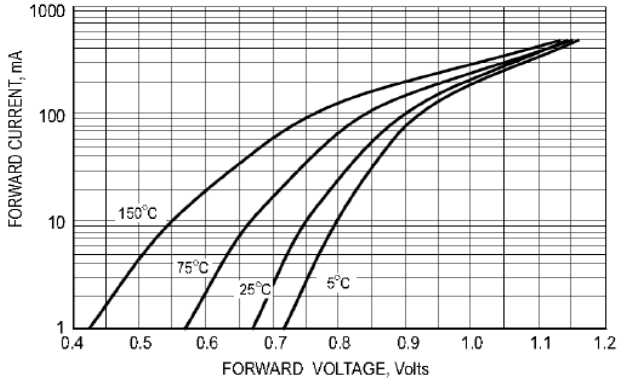


Fig.1 TYPICAL FORWARD VOLTAGE

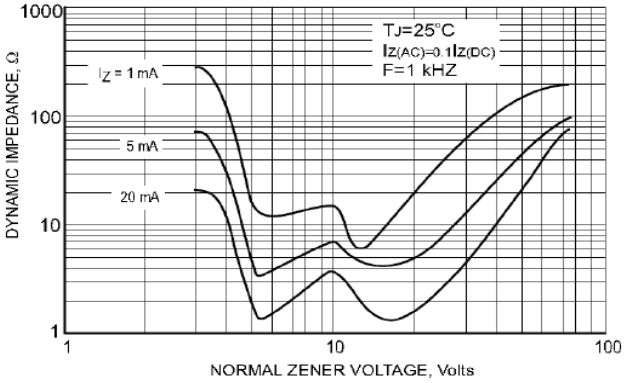


Fig.2 EFFECT OF ZENER VOLTAGE ON ZENER IMPEDANCE

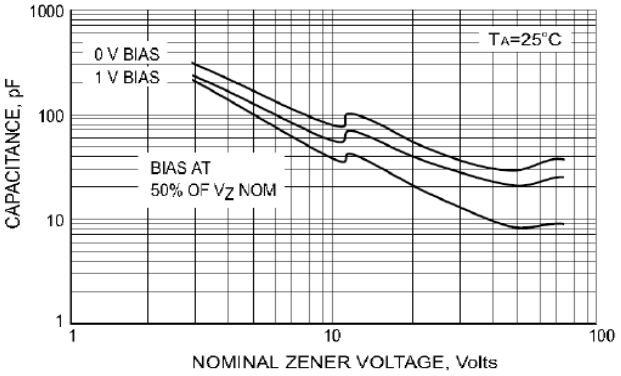


Fig.4 TYPICAL CAPACITANCE

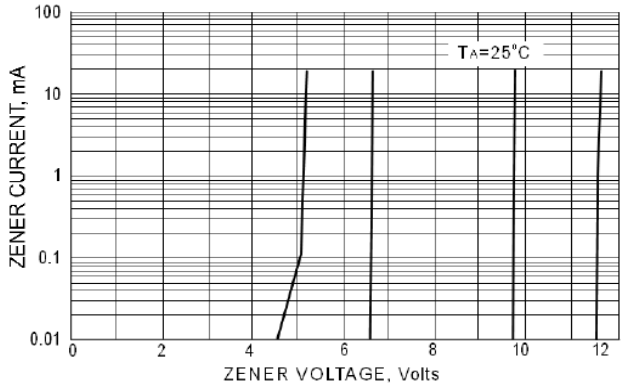


Fig.5 ZENER BREAKDOWN CHARACTERISTICS

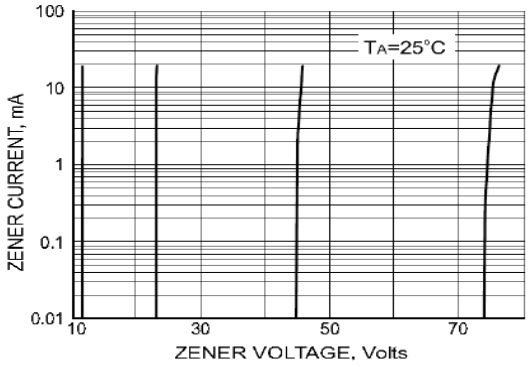


Fig.6 ZENER BREAKDOWN CHARACTERISTICS

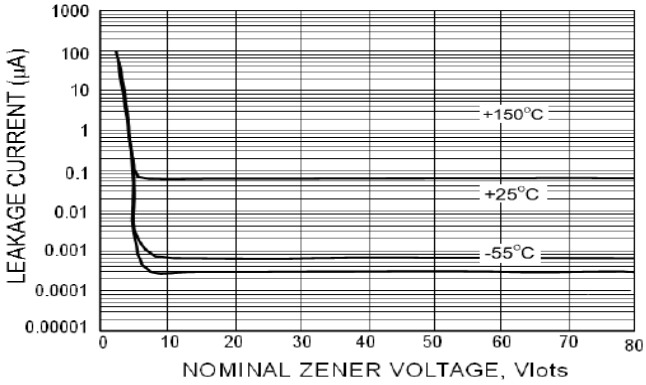
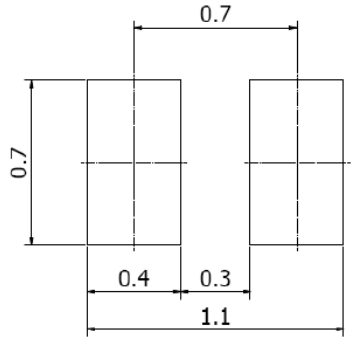


Fig.7 TYPICAL LEAKGE CURRENT



*Dimensions in millimeters

Fig.8 MOUNTING PAD LAYOUT