

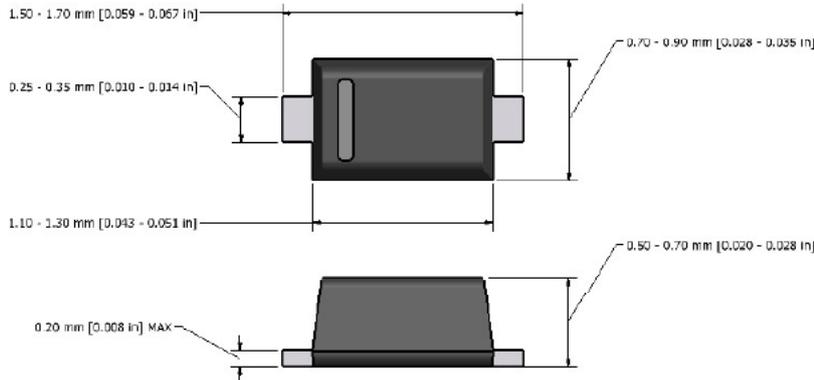


MM5Z2V0~MM5Z75V



200mW SOD-523 SURFACE MOUNT Very Small Outline Flat Lead Plastic Package Zener Voltage Regulators

Flat Lead SOD-523 Package Outline



Note: Dimensions are exclusive of Burrs, Mold Flash & Tie Bar extrusions.



SOD-523 Flat Lead



ELECTRICAL SYMBOL

Absolute Maximum Ratings $T_A = 25^\circ\text{C}$ unless otherwise noted

Symbol	Parameter	Value	Units
P_D	Power Dissipation	200	mW
T_{STG}	Storage Temperature Range	-55 to +150	$^\circ\text{C}$
T_{OPR}	Operating Temperature Range	-55 to +150	$^\circ\text{C}$

These ratings are limiting values above which the serviceability of the diode may be impaired.

Specification Features:

- Wide Zener Voltage Range Selection, 2.0V to 75V
- Flat Lead SOD-523 Small Outline Plastic Package
- Extremely Small SOD-523 Package
- Surface Device Type Mounting
- RoHS Compliant
- Green EMC
- Matte Tin(Sn) Lead Finish
- Band Indicates Cathode



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Electrical Characteristics T_A = 25°C unless otherwise noted

Device Type	Device Marking	V _Z @ I _{ZT} (Volts)			I _{ZT} (mA)	Z _{ZT} @ I _{ZT} (Ohms) Max	I _{ZK} (mA)	Z _{ZK} @ I _{ZK} (Ohms) Max	I _R @ V _R (μA) Max	V _R (Volts)
		Min	Nom	Max						
MM5Z2V0	5+	1.90	2.0	2.10	5	100	1	564	120	0.5
MM5Z2V2	5⊥	2.09	2.2	2.31	5	100	1	564	120	0.7
MM5Z2V4	50	2.2	2.4	2.6	5	100	1	1000	50	1
MM5Z2V7	51	2.5	2.7	2.9	5	100	1	1000	20	1
MM5Z3V0	52	2.8	3.0	3.2	5	100	1	1000	10	1
MM5Z3V3	53	3.1	3.3	3.5	5	95	1	1000	5	1
MM5Z3V6	54	3.4	3.6	3.8	5	90	1	1000	5	1
MM5Z3V9	55	3.7	3.9	4.1	5	90	1	1000	3	1
MM5Z4V3	56	4.0	4.3	4.6	5	90	1	1000	3	1
MM5Z4V7	57	4.4	4.7	5.0	5	80	1	800	3	2
MM5Z5V1	58	4.8	5.1	5.4	5	60	1	500	2	2
MM5Z5V6	59	5.2	5.6	6.0	5	40	1	200	1	2
MM5Z6V2	5A	5.8	6.2	6.6	5	10	1	100	3	4
MM5Z6V8	5B	6.4	6.8	7.2	5	15	1	160	2	4
MM5Z7V5	5C	7.0	7.5	7.9	5	15	1	160	1	5
MM5Z8V2	5D	7.7	8.2	8.7	5	15	1	160	0.7	5
MM5Z9V1	5E	8.5	9.1	9.6	5	15	1	160	0.2	7
MM5Z10V	5F	9.4	10	10.6	5	20	1	160	0.1	8
MM5Z11V	5G	10.4	11	11.6	5	20	1	160	0.1	8
MM5Z12V	5H	11.4	12	12.7	5	25	1	80	0.1	8
MM5Z13V	5J	12.4	13	14.1	5	30	1	80	0.1	8
MM5Z15V	5K	14.3	15	15.8	5	30	1	80	0.05	10.5
MM5Z16V	5L	15.3	16	17.1	5	40	1	80	0.05	11.2
MM5Z18V	5M	16.8	18	19.1	5	45	1	80	0.05	12.6
MM5Z20V	5N	18.8	20	21.2	5	55	1	100	0.05	14
MM5Z22V	5P	20.8	22	23.3	5	55	1	100	0.05	15.4
MM5Z24V	5R	22.8	24	25.6	5	70	1	120	0.05	16.8
MM5Z27V	5S	25.1	27	28.9	2	80	0.5	300	0.05	18.9
MM5Z30V	5T	28	30	32	2	80	0.5	300	0.05	21
MM5Z33V	5U	31	33	35	2	80	0.5	300	0.05	23.2
MM5Z36V	5V	34	36	38	2	90	0.5	500	0.05	25.2
MM5Z39V	5X	37	39	41	2	130	0.5	500	0.05	27.3
MM5Z43V	5Y	40	43	46	2	150	0.5	500	0.05	30.1
MM5Z47V	5Z	44	47	50	2	170	0.5	500	0.05	32.9
MM5Z51V	5-	48	51	54	2	180	0.5	500	0.05	35.7
MM5Z56V	5=	52	56	60	2	200	0.5	500	0.05	39.2
MM5Z62V	5≡	58	62	66	2	215	0.5	500	0.05	43.4
MM5Z68V	5>	64	68	72	2	240	0.5	500	0.05	47.6
MM5Z75V	5<	70	75	79	2	255	0.5	500	0.05	52.5



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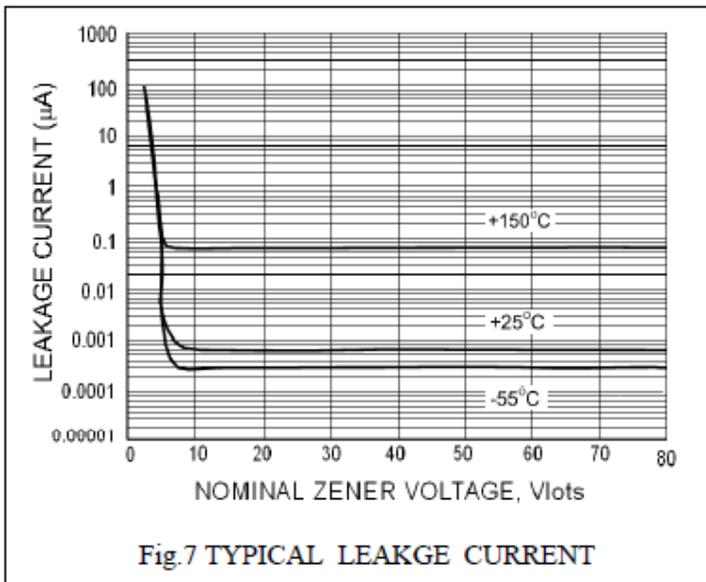


200mW SOD-523 SURFACE MOUNT Very Small Outline Flat Lead Plastic Package Zener Voltage Regulators

V_F Forward Voltage = 1 V Maximum @ $I_F = 10$ mA for all types

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} .





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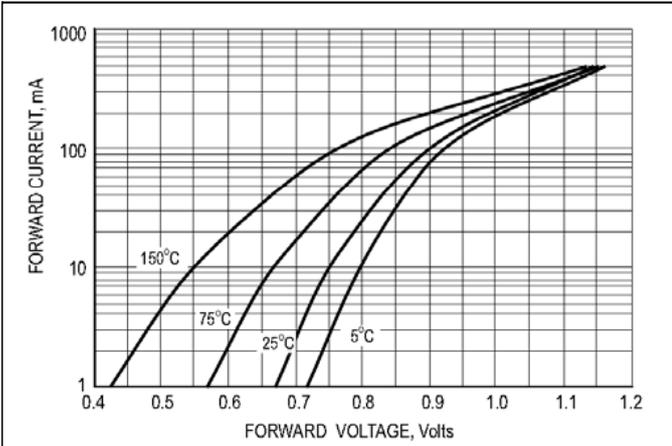


Fig.1 TYPICAL FORWARD VOLTAGE

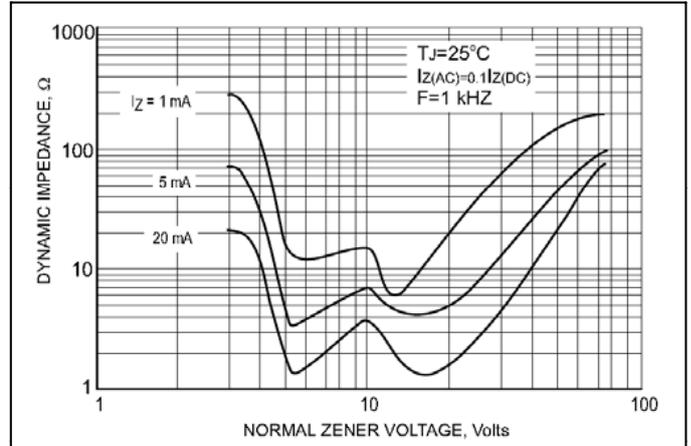


Fig.2 EFFECT OF ZENER VOLTAGE ON ZENER IMPEDANCE

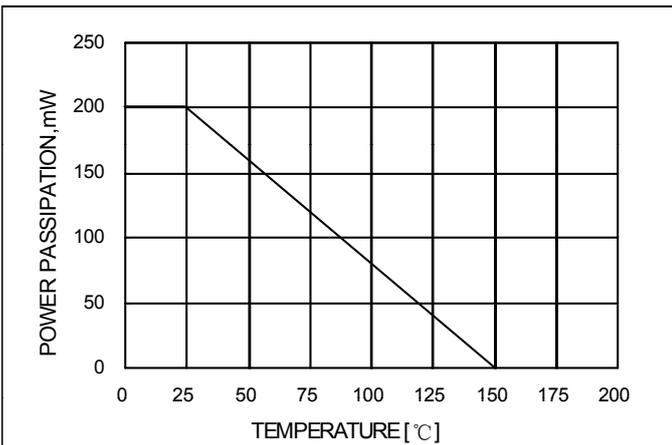


Fig.3 POWER DISSIPATION VS. AMBIENT TEMP.

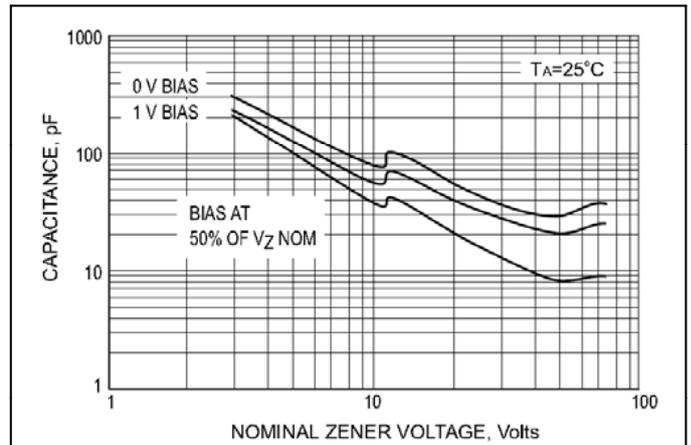


Fig.4 TYPICAL CAPACITANCE

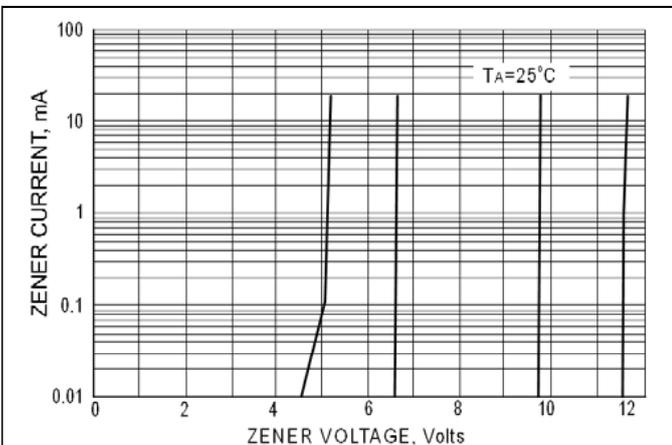


Fig.5 ZENER BREAKDOWN CHARACTERISTICS

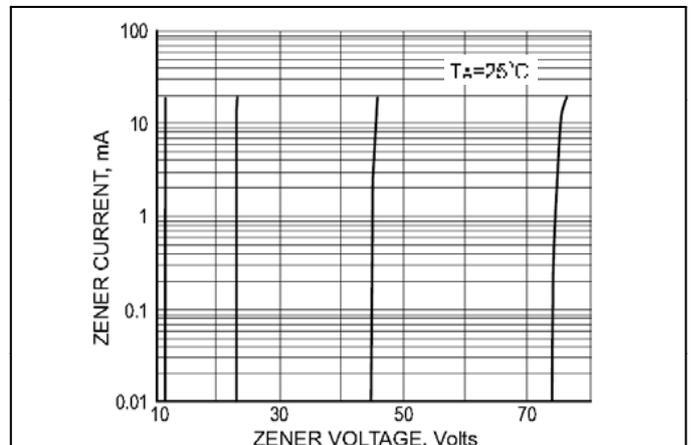


Fig.6 ZENER BREAKDOWN CHARACTERISTICS