

2% 500mW SOD-523 PLANAR ZENER SERIES

Features

- Standard Zener Breakdown Voltage Range 2.0 V to 75 V
- Steady State Power Rating of 500 mW
- P/N suffix V means AEC-Q101 qualified, e.g:MM5Z2V0BV
- Halogen-free

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified.
resistive or inductive load.

Top View
Simplified outline SOD-523 and symbol



PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode

Absolute Maximum Ratings ($T_a = 25\text{ }^\circ\text{C}$)

Parameter	Symbol	Value	Unit
Total Device Dissipation	P_{tot}	500	mW
Junction and Storage Temperature Range	T_j, T_{stg}	- 65 to + 150	$^\circ\text{C}$

Characteristics at $T_a = 25\text{ }^\circ\text{C}$

Parameter	Symbol	Max.	Unit
Forward Voltage at $I_F = 10\text{ mA}$	V_F	0.9	V

Type	Marking Code	Zener Voltage ¹⁾				Zener Impedance			Leakage Current	
		V _{ZT} (V)			at I _{ZT}	Z _{ZT}	Z _{ZK}	at I _{ZK}	I _R	at V _R
		Min.	Nom.	Max.	mA	Ω	Ω	mA	μA	V
MM5Z2V0B	RD	1.96	2.0	2.04	5	100	-	-	120	0.5
MM5Z2V2B	RE	2.15	2.2	2.24	5	100	-	-	120	0.7
MM5Z2V4B	Z7	2.35	2.4	2.45	5	100	1000	1	120	1
MM5Z2V7B	A8	2.65	2.7	2.75	5	100	1000	1	120	1
MM5Z3V0B	B8	2.94	3.0	3.06	5	100	1000	1	50	1
MM5Z3V3B	C8	3.23	3.3	3.37	5	95	1000	1	20	1
MM5Z3V6B	D8	3.53	3.6	3.67	5	90	1000	1	10	1
MM5Z3V9B	E8	3.82	3.9	3.98	5	90	1000	1	5	1
MM5Z4V3B	F8	4.21	4.3	4.39	5	90	1000	1	5	1
MM5Z4V7B	G8	4.61	4.7	4.79	5	80	800	1	2	1
MM5Z5V1B	H8	5.0	5.1	5.2	5	60	500	1	2	1.5
MM5Z5V6B	I8	5.49	5.6	5.71	5	40	200	1	1	2.5
MM5Z6V2B	J8	6.08	6.2	6.32	5	10	100	1	1	3
MM5Z6V8B	K8	6.66	6.8	6.94	5	15	160	1	0.5	3.5
MM5Z7V5B	L8	7.35	7.5	7.65	5	15	160	1	0.5	4
MM5Z8V2B	M8	8.04	8.2	8.36	5	15	160	1	0.5	5
MM5Z9V1B	N8	8.92	9.1	9.28	5	15	160	1	0.5	6
MM5Z10B	O8	9.8	10	10.2	5	20	160	1	0.05	7
MM5Z11B	P8	10.78	11	11.22	5	20	160	1	0.05	8
MM5Z12B	Q8	11.76	12	12.24	5	25	80	1	0.05	9
MM5Z13B	R8	12.74	13	13.26	5	30	80	1	0.05	10
MM5Z15B	S8	14.7	15	15.3	5	30	80	1	0.05	11
MM5Z16B	T8	15.68	16	16.32	2	40	80	1	0.05	12
MM5Z18B	U8	17.64	18	18.36	2	45	80	1	0.05	13
MM5Z20B	V8	19.6	20	20.4	2	55	100	1	0.05	15
MM5Z22B	W8	21.56	22	22.44	2	55	100	1	0.05	17
MM5Z24B	X8	23.52	24	24.48	2	70	120	1	0.05	19
MM5Z27B	Y8	26.46	27	27.54	2	80	300	1	0.05	21
MM5Z30B	Z8	29.4	30	30.6	2	80	300	1	0.05	23
MM5Z33B	A9	32.34	33	33.66	2	80	300	1	0.05	29
MM5Z36B	B9	35.28	36	36.72	2	90	500	1	0.05	27
MM5Z39B	C9	38.22	39	39.78	2	130	500	1	2	30
MM5Z43B	D9	42.14	43	43.86	1	150	500	1	2	33
MM5Z47B	E9	46.06	47	47.94	1	170	500	1	2	36
MM5Z51B	F9	49.98	51	52.02	1	180	500	1	1	39
MM5Z56B	G9	54.88	56	57.12	1	200	500	1	1	43
MM5Z62B	H9	60.76	62	63.24	1	215	500	1	0.2	47
MM5Z68B	I9	66.64	68	69.36	1	240	500	1	0.2	52
MM5Z75B	J9	73.5	75	76.5	1	255	500	1	0.2	57

¹⁾ Tested with pulses t_p = 20 ms.

PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SOD-523



UNIT	A	b_p	C	D	E	H_E	V	
mm	0.70 0.60	0.4 0.3	0.135 0.100	1.25 1.15	0.85 0.75	1.7 1.5	0.1	5°

PACKAGING OF DIODE AND BRIDGE RECTIFIERS

REEL PACK

PACKAGE	PACKING CODE	EA PER REEL	EA PER INNER BOX	COMPONENT SPACE (mm)	TAPE SPACE (mm)	REEL DIA (mm)	CARTON SIZE (mm)	EA PER CARTON	GROSS WEIGHT(Kg)
SOD-523	-T	8,000	--	---	---	178	390*205*31	320,000	6.16