

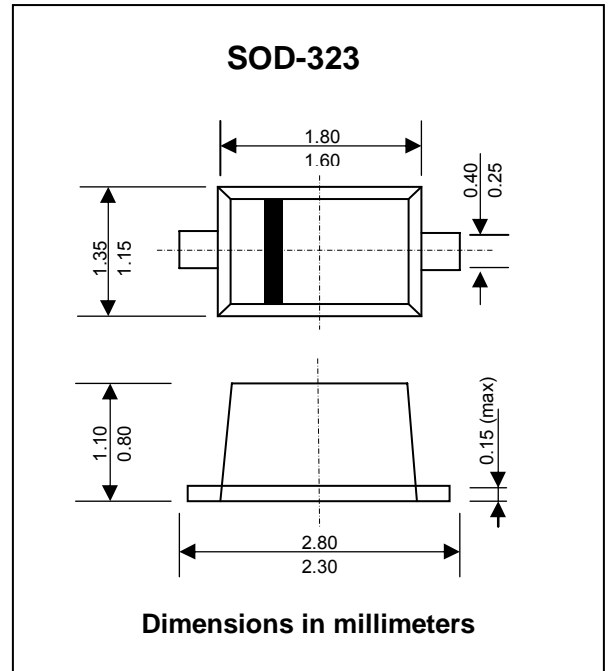
# MM3Z2V0B - MM3Z39B

## ZENER DIODES

$V_Z$  : 2.0 to 39 V  
 $P_D$  : 300 mW

### FEATURES :

- \* Total power dissipation : max. 300 mW
- \* Small plastic package suitable for surface mount design
- \* High reliability
- \* Pb / RoHS Free



### MECHANICAL DATA :

**Case:** SOD-323 Plastic Package

**Weight:** approx. 0.004g

### Maximum Ratings and Thermal Characteristics (Ta = 25 °C)

Parameter	Symbol	Value	Unit
Power Dissipation	$P_D$	300	mW
Forward Voltage at $V_F = 10$ mA	$V_F$	0.9	V
Thermal Resistance Junction to Ambient Air	$R_{\theta JA}$	0.3	K/mW
Junction Temperature Range	$T_J$	150	°C
Storage Temperature Range	$T_{STG}$	-55 to + 150	°C

## ELECTRICAL CHARACTERISTICS

Type No.	Marking	Zener Voltage <sup>(1)</sup>			Test Current $I_{ZT}$	Dynamic Impedance <sup>(2)</sup> $Z_z @ I_z$	Test Current $I_z$	Reverse Leakage Current		Temp. coefficient of Zener Voltage	
		$V_z @ I_{ZT}$	(V)					$I_R @ V_R$	$V_R$	$TK_{VZ} (\%/K)$	
		Min.	Nom.	Max.	(mA)	( $\Omega$ )	(mA)	( $\mu A$ )	(V)	Min.	Max.
MM3Z2V0B	B0	1.80	2.0	2.15	5	100	5	120	0.5	-0.09	-0.06
MM3Z2V2B	MF	2.08	2.2	2.33	5	100	5	120	0.7	-0.09	-0.06
MM3Z2V4B	7C	2.30	2.4	2.65	5	100	5	120	1.0	-0.09	-0.06
MM3Z2V7B	7D	2.65	2.7	2.95	5	110	5	120	1.0	-0.09	-0.06
MM3Z3V0B	7E	2.95	3.0	3.25	5	120	5	50	1.0	-0.08	-0.05
MM3Z3V3B	7F	3.25	3.3	3.55	5	120	5	20	1.0	-0.08	-0.05
MM3Z3V6B	7H	3.60	3.6	3.845	5	100	5	10	1.0	-0.08	-0.05
MM3Z3V9B	7J	3.89	3.9	4.16	5	100	5	5	1.0	-0.08	-0.05
MM3Z4V3B	7K	4.17	4.3	4.43	5	100	5	5	1.0	-0.06	-0.03
MM3Z4V7B	7M	4.55	4.7	4.75	5	100	5	2	1.0	-0.05	+0.02
MM3Z5V1B	7N	4.98	5.1	5.20	5	80	5	2	1.5	-0.02	+0.02
MM3Z5V6B	7P	5.49	5.6	5.73	5	60	5	1	2.5	-0.05	+0.05
MM3Z6V2B	7R	6.06	6.2	6.33	5	60	5	1	3.0	0.03	0.06
MM3Z6V8B	7X	6.65	6.8	6.93	5	40	5	0.5	3.5	0.03	0.07
MM3Z7V5B	7Y	7.28	7.5	7.60	5	30	5	0.5	4.0	0.03	0.07
MM3Z8V2B	7Z	8.02	8.2	8.36	5	30	5	0.5	5.0	0.03	0.08
MM3Z9V1B	8A	8.85	9.1	9.23	5	30	5	0.5	6.0	0.03	0.09
MM3Z10B	8B	9.77	10	10.21	5	30	5	0.1	7.0	0.03	0.10
MM3Z11B	8C	10.76	11	11.22	5	30	5	0.1	8.0	0.03	0.11
MM3Z12B	8D	11.74	12	12.24	5	30	5	0.1	9.0	0.03	0.11
MM3Z13B	8E	12.91	13	13.49	5	37	5	0.1	10	0.03	0.11
MM3Z15B	8F	14.34	15	14.98	5	42	5	0.1	11	0.03	0.11
MM3Z16B	8H	15.85	16	16.51	5	50	5	0.1	12	0.03	0.11
MM3Z18B	8J	17.56	18	18.35	5	65	5	0.1	13	0.03	0.11
MM3Z20B	8K	19.52	20	20.39	5	85	5	0.1	15	0.03	0.11
MM3Z22B	8M	21.54	22	22.47	5	100	5	0.1	17	0.04	0.12
MM3Z24B	8N	23.72	24	24.78	5	120	5	0.1	19	0.04	0.12
MM3Z27B	8P	26.19	27	27.53	5	150	2	0.1	21	0.04	0.12
MM3Z30B	8R	29.19	30	30.69	5	200	2	0.1	23	0.04	0.12
MM3Z33B	8X	32.15	33	33.79	5	250	2	0.1	25	0.04	0.12
MM3Z36B	8Y	35.07	36	36.87	5	300	2	0.1	27	0.04	0.12
MM3Z39B	8Z	37.00	39	41.00	5	100	2	2.0	30	0.04	0.12

### Notes :

(1)  $V_z$  is tested with pulses (20 ms).

(2)  $Z_z$  is measured at  $I_z$  by given a very small A.C. current signal.