

MM3Z2V4 - MM5Z75V

V_Z : 2.4 to 75 V

P_D : 200 mW

FEATURES :

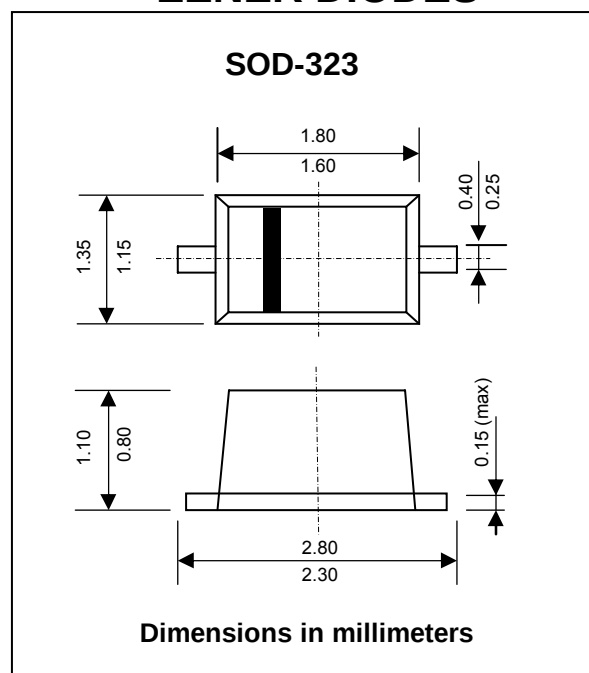
- * Steady State Power Rating of 200 mW
- * Standard Zener Breakdown Voltage Range 2.4 to 75V
- * Pb / RoHS Free

MECHANICAL DATA :

Case: SOD-323 Plastic Package

Weight: approx. 0.004g

ZENER DIODES



Maximum Ratings and Thermal Characteristics

Parameter	Symbol	Value	Unit
Total Device Dissipation FR-5 Board,(Note 1) at $T_a = 25^\circ\text{C}$	P_D	200	mW
Derated above 25°C		1.5	mW/ $^\circ\text{C}$
Thermal Resistance form Junction to Ambient	$R_{\theta JA}$	635	$^\circ\text{C}/\text{W}$
Junction Temperature Range	T_J	-65 to + 150	$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-65 to + 150	$^\circ\text{C}$

Note :

(1) FR-4 Minimum Pad

ELECTRICAL CHARACTERISTICS

(Ta=25 °C unless otherwise noted, V_F = 0.9 V Max. @ I_F =10 mA for all types)

Type No.	Marking	Zener Voltage (Note 1)			Test Current	Zener Impedance		Test Current	Leakage Current		ΘV _Z (mV/k) @ I _{ZT}		C @ V _R =0 f = 1MHz
		V _Z @ I _{ZT} (V)	I _{ZT}	Z _{ZT} @ I _{ZT}		Z _{ZT} @ I _{ZK}	I _{ZK}		I _R @ V _R	Min.	Max.		
		Min.	Nom.	Max.	(mA)	(Ω)	(Ω)	(mA)	(μA)	(V)	Min.	Max.	pF
MM3Z2V4	1C	2.2	2.4	2.6	5	100	1000	0.5	50	1.0	-3.5	0	450
MM3Z2V7	1D	2.5	2.7	2.9	5	100	1000	0.5	20	1.0	-3.5	0	450
MM3Z3V0	1E	2.8	3.0	3.2	5	100	1000	0.5	10	1.0	-3.5	0	450
MM3Z3V3	1F	3.1	3.3	3.5	5	95	1000	0.5	5	1.0	-3.5	0	450
MM3Z3V6	1H	3.4	3.6	3.8	5	90	1000	0.5	5	1.0	-3.5	0	450
MM3Z3V9	1J	3.7	3.9	4.1	5	90	1000	0.5	3	1.0	-3.5	-2.5	450
MM3Z4V3	1K	4.0	4.3	4.6	5	90	1000	0.5	3	1.0	-3.5	0	450
MM3Z4V7	1M	4.4	4.7	5.0	5	80	800	0.5	3	2.0	-3.5	0.2	260
MM3Z5V1	1N	4.8	5.1	5.4	5	60	500	0.5	2	2.0	-2.7	1.2	225
MM3Z5V6	1P	5.2	5.6	6.0	5	40	200	0.5	1	2.0	-2.0	2.5	200
MM3Z6V2	1R	5.8	6.2	6.6	5	10	100	0.5	3	4.0	0.4	3.7	185
MM3Z6V8	1X	6.4	6.8	7.2	5	15	160	0.5	2	4.0	1.2	4.5	155
MM3Z7V5	1Y	7.0	7.5	7.9	5	15	160	0.5	1	5.0	2.5	5.3	140
MM3Z8V2	1Z	7.7	8.2	8.7	5	15	160	0.5	0.7	5.0	3.2	6.2	135
MM3Z9V1	2A	8.5	9.1	9.6	5	15	160	0.5	0.2	7.0	3.8	7.0	130
MM3Z10V	2B	9.4	10	10.6	5	20	160	0.5	0.1	8.0	4.5	8.0	130
MM3Z11V	2C	10.4	11	11.6	5	20	160	0.5	0.1	8.0	5.4	9.0	130
MM3Z12V	2D	11.4	12	12.7	5	25	80	0.5	0.1	8.0	6.0	10.0	130
MM3Z13V	2E	12.4	13.25	14.1	5	30	80	0.5	0.1	8.0	7.0	11.0	120
MM3Z15V	2F	14.3	15	15.8	5	30	80	0.5	0.05	10.5	9.2	13.0	110
MM3Z16V	2H	15.3	16.2	17.1	5	40	80	0.5	0.05	11.2	10.4	14.0	105
MM3Z18V	2J	16.8	18	19.1	5	45	80	0.5	0.05	12.6	12.4	16.0	100
MM3Z20V	2K	18.8	20	21.2	5	55	100	0.5	0.05	14.0	14.4	18.0	85
MM3Z22V	2M	20.8	22	23.3	5	55	100	0.5	0.05	15.4	15.4	20.0	85
MM3Z24V	2N	22.8	24.2	25.6	5	70	120	0.5	0.05	16.8	18.4	22.0	80
MM3Z27V	2P	25.1	27	28.9	2	80	300	0.5	0.05	18.9	21.4	25.3	70
MM3Z30V	2R	28	30	32	2	80	300	0.5	0.05	21.0	24.4	29.4	70
MM3Z33V	2X	31	33	35	2	80	300	0.5	0.05	23.2	27.4	33.4	70
MM3Z36V	2Y	34	36	38	2	90	500	0.5	0.05	25.2	30.4	37.4	70
MM3Z39V	2Z	37	39	41	2	130	500	0.5	0.05	27.3	33.4	41.2	45
MM3Z43V	3A	40	43	46	2	150	500	0.5	0.05	30.1	37.6	46.6	40
MM3Z47V	3B	44	47	50	2	170	500	0.5	0.05	32.9	42.0	51.8	40
MM3Z51V	3C	48	51	54	2	180	500	0.5	0.05	35.7	46.6	57.2	40
MM3Z56V	3D	52	56	60	2	200	500	0.5	0.05	39.2	52.2	63.8	40
MM3Z62V	3E	58	62	66	2	215	500	0.5	0.05	43.4	58.8	71.6	35
MM3Z68V	3F	64	68	72	2	240	500	0.5	0.05	47.6	65.6	79.8	35
MM3Z75V	3H	70	75	79	2	255	500	0.5	0.05	52.5	73.4	88.6	35

Note : (1) Zener voltage is measured with a pulse test current I_Z at an ambient temperature of 25°C.