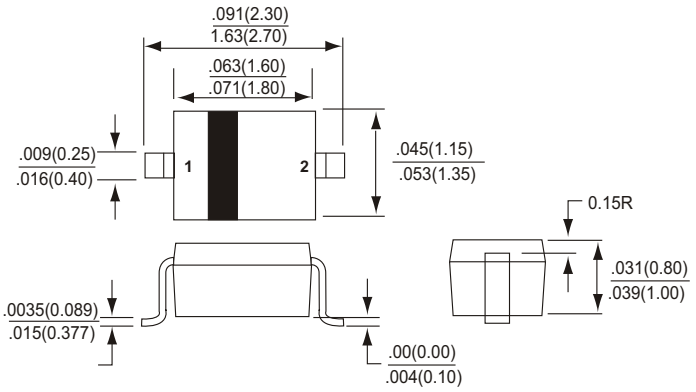
MM3Z2V4 Series

SURFACE MOUNT ZENER DIODES

SOD-323



PIN 1. CATHODE
2. ANODE

FEATURES

- 200mw Power Dissipation
- Ideal for Surface Mountted Application
- Zener Breakdown Voltage Range 2.4V to 75V

MECHANICAL DATA

Case：SOD-323 Molded plastic
Terminals：Solder Plated, solderable per MIL-STD-202, Method 208
Polarity：Cathode Indicated by Polarity Band
Marking：Marking Code (See Table on Page 3)
Weigh：0.004grams (approx)

Maximum Ratings and Electrical Characteristics (at T_A=25°C unless otherwise noted)

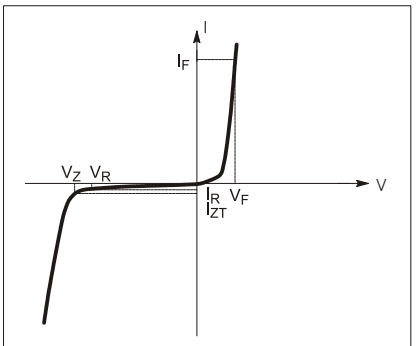
PARAMETER	SYMBOL	VALUE	UNITS
Total Power Dissipation on FR-5 Board[1] @T_A=25°C	P_D	200	mW
Thermal Resistance Junction to Ambient Air[1]	$R_{\theta JA}$	625	°C / W
Forward Voltage @ I_F=10mA	V_F	0.9	V
Junction and Storage Temperature Range	T_J T_{STG}	-65 to +150	°C

NOTE：
1. FR-4 Minimun Pad

ELECTRICAL CHARCTERISTICS

(P inout 1- Anode, 2-No Connection, 3-Cathode)
(T_A=25°C unless otherwise noted, V_F=0.9V Max.@I_F=10mA)

SYMBOL	PARAMETER
V_Z	Reverse Zener Voltage@ I_{ZT}
I_{ZT}	Reverse Current
Z_{ZT}	Maximum Zener Impedance @ I_{ZT}
I_R	Reverse Leakage Current @ V_R
V_R	Reverse Voltage
I_F	Forward Current
V_F	Forward Voltage @ I_F
θV_Z	Maximum Temperature Coefficient of V_Z
C	Max. Capacitance @ V_R=0 and f=1MHz



Zener Voltage Regulator

Device Marking

LTEM	MARKING	EQUIVALENT CIRCUIT DIAGRAM
MM3Z2V4 Series	XX=Specific Device Code (See Table on page 3)	1 Cathode — 2 Anode

ELECTRICAL CHARCTERISTICS

(T_A=25°C unless otherwise noted, V_F=0.90 V Max.@I_F=10mA for all types)

Device	Device Marking	Zener Voltage (Note)				Zener Impedance			Leakage Current		θ Vz(mV/K) @Izt		C @VR=0 f=1MHz
		Vz Volts			@Izt	Zzt@ Izt	Zzk@ Zk		IR@VR				
		Min	Nom	Max	mA	Ω	Ω	mA	A	Volts	Min	Max	
MM3Z2V4T1	00	2.2	2.4	2.6	5	100	1000	0.5	50	1.0	±3.5	0	450
MM3Z2V7T1	01	2.5	2.7	2.9	5	100	1000	0.5	20	1.0	±3.5	0	450
MM3Z3V0T1	02	2.8	3	3.2	5	100	1000	0.5	10	1.0	±3.5	0	450
MM3Z3V3T1	05	3.1	3.3	3.5	5	95	1000	0.5	5	1.0	±3.5	0	450
MM3Z3V6T1	06	3.4	3.6	3.8	5	90	1000	0.5	5	1.0	±3.5	0	450
MM3Z3V9T1	07	3.7	3.9	4.1	5	90	1000	0.5	3	1.0	±3.5	±2.5	450
MM3Z4V3T1	08	4.0	4.3	4.6	5	90	1000	0.5	3	1.0	±3.5	0	450
MM3Z4V7T1	09	4.4	4.7	5	5	80	800	0.5	3	2.0	±3.5	0.2	260
MM3Z5V1T1	0A	4.8	5.1	5.4	5	60	500	0.5	2	2.0	±2.7	1.2	225
MM3Z5V6T1	0C	5.2	5.6	6	5	40	200	0.5	1	2.0	±2.0	2.5	200
MM3Z6V2T1	0E	5.8	6.2	6.6	5	10	100	0.5	3	4.0	0.4	3.7	185
MM3Z6V8T1	0F	6.4	6.8	7.2	5	15	160	0.5	2	4.0	1.2	4.5	155
MM3Z7V5T1	0G	7.0	7.5	7.9	5	15	160	0.5	1	5.0	2.5	5.3	140
MM3Z8V2T1	0H	7.7	8.2	8.7	5	15	160	0.5	0.7	5.0	3.2	6.2	135
MM3Z9V1T1	0K	8.5	9.1	9.6	5	15	160	0.5	0.2	7.0	3.8	7.0	130
MM3Z10VT1	0L	9.4	10	10.6	5	20	160	0.5	0.1	8.0	4.5	8.0	130
MM3Z 11VT1	0M	10.4	11	11.6	5	20	160	0.5	0.1	8.0	5.4	9.0	130
MM3Z 12VT1	0N	11.4	12	12.7	5	25	80	0.5	0.1	8.0	6.0	10.0	130
MM3Z 13VT1	0P	12.4	13.25	14.1	5	30	80	0.5	0.1	8.0	7.0	11.0	120
MM3Z 15VT1	0T	14.3	15	15.8	5	30	80	0.5	0.05	10.5	9.2	13.0	110
MM3Z 16VT1	0U	15.3	16.2	17.1	5	40	80	0.5	0.05	11.2	10.4	14.0	105
MM3Z 18VT1	0W	16.8	18	19.1	5	45	80	0.5	0.05	12.6	12.4	16.0	100
MM3Z 20VT1	0Z	18.8	20	21.2	5	55	100	0.5	0.05	14.0	14.4	18.0	85
MM3Z 22VT1	10	20.8	22	23.3	5	55	100	0.5	0.05	15.4	16.4	20.0	85
MM3Z 24VT1	11	22.8	24.2	25.6	5	70	120	0.5	0.05	16.8	18.4	22.0	80
MM3Z 27VT1	12	25.1	27	28.9	2	80	300	0.5	0.05	18.9	21.4	25.3	70
MM3Z 30VT1	14	28	30	32	2	80	300	0.5	0.05	21.0	24.4	29.4	70
MM3Z 33VT1	18	31	33	35	2	80	300	0.5	0.05	23.2	27.4	33.4	70
MM3Z 36VT1	19	34	36	38	2	90	500	0.5	0.05	25.2	30.4	37.4	70
MM3Z 39VT1	20	37	39	41	2	130	500	0.5	0.05	27.3	33.4	41.2	45
MM3Z 43VT1	21	40	43	46	2	150	500	0.5	0.05	30.1	37.6	46.6	40
MM3Z 47VT1	1A	44	47	50	2	170	500	0.5	0.05	32.9	42.0	51.8	40
MM3Z 51VT1	1C	48	51	54	2	180	500	0.5	0.05	35.7	46.6	57.2	40
MM3Z 56VT1	1D	52	56	60	2	200	500	0.5	0.05	39.2	52.2	63.8	40
MM3Z 62VT1	1E	58	62	66	2	215	500	0.5	0.05	43.4	58.8	71.6	35
MM3Z 68VT1	1F	64	68	72	2	240	500	0.5	0.05	47.6	65.6	79.8	35
MM3Z 75VT1	1G	70	75	79	2	255	500	0.5	0.05	52.5	73.4	88.6	35

NOTE : Zener voltage is measured with a pulse test current Iz at an ambient temperature of 25°C