



Features

- Total power dissipation: Max.300mW
- Wide zenerreverse voltage range 2.0V to 75V
- Small plastic package suitable for surface mounted design
- Tolerance approximately $\pm 5\%$



SOD-323



Package Marking and Ordering Information

Product ID	Pack	Marking	Qty(PCS)
MM3ZxxT1G	SOD-323	XX	3000

XX=Device code, see table on page2 the marking code.

The marking bar indicates the cathode.

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

Characteristic	Symbol	Value	Unit
Forward voltage @ $I_F = 10\text{mA}$	V_F	0.9	V
Power Dissipation	P_D	300	mW
Thermal Resistance, Junction to Ambient Air	$R_{\theta JA}$	417	°C/W
Junction Temperature	T_j	150	°C
Storage Temperature Range	T_{stg}	-55 ~ +150	°C

Notes: Device mounted on ceramic PCB; 5.0mm×7.0mm with pad areas 35 mm²



Electrical Characteristics (Ta=25°C unless otherwise specified)

Type	Marking	Zener Voltage Range ⁽¹⁾			I _{ZT}	Z _{ZT} (at I _{ZT})	Reverse Current	
		V _{ZT} (at I _{ZT})					I _R	at V _R
		Min (V)	Nom (V)	Max (V)	(mA)	Max (Ω)	Max (μA)	(V)
MM3Z2V0T1G	B0	1.8	2.0	2.15	5	100	120	0.5
MM3Z2V2T1G	C0	2.08	2.2	2.33	5	100	120	0.7
MM3Z2V4T1G	1C	2.28	2.4	2.56	5	100	120	1
MM3Z2V7T1G	1D	2.5	2.7	2.9	5	110	120	1
MM3Z3V0T1G	1E	2.8	3.0	3.2	5	120	50	1
MM3Z3V3T1G	1F	3.1	3.3	3.5	5	130	20	1
MM3Z3V6T1G	1H	3.4	3.6	3.8	5	130	10	1
MM3Z3V9T1G	1J	3.7	3.9	4.1	5	130	5	1
MM3Z4V3T1G	1K	4	4.3	4.6	5	130	5	1
MM3Z4V7T1G	1M	4.4	4.7	5	5	130	2	1
MM3Z5V1T1G	1N	4.8	5.1	5.4	5	130	2	1.5
MM3Z5V6T1G	1P	5.2	5.6	6	5	80	1	2.5
MM3Z6V2T1G	1R	5.8	6.2	6.6	5	50	1	3
MM3Z6V8T1G	1X	6.4	6.8	7.2	5	30	0.5	3.5
MM3Z7V5T1G	1Y	7	7.5	7.9	5	30	0.5	4
MM3Z8V2T1G	1Z	7.7	8.2	8.7	5	30	0.5	5
MM3Z9V1T1G	2A	8.5	9.1	9.6	5	30	0.5	6
MM3Z10VT1G	2B	9.4	10	10.6	5	30	0.1	7
MM3Z11VT1G	2C	10.4	11	11.6	5	30	0.1	8
MM3Z12VT1G	2D	11.4	12	12.7	5	35	0.1	9
MM3Z13VT1G	2E	12.4	13	14.1	5	35	0.1	10
MM3Z15VT1G	2F	13.8	15	15.6	5	40	0.1	11
MM3Z16VT1G	2H	15.3	16	17.1	5	40	0.1	12
MM3Z18VT1G	2J	16.8	18	19.1	5	45	0.1	13
MM3Z20VT1G	2K	18.8	20	21.2	5	50	0.1	15
MM3Z22VT1G	2M	20.8	22	23.3	5	55	0.1	17
MM3Z24VT1G	2N	22.8	24	25.6	5	60	0.1	19
MM3Z27VT1G	2P	25.1	27	28.9	2	70	0.1	21
MM3Z30VT1G	2R	28	30	32	2	80	0.1	23
MM3Z33VT1G	2X	31	33	35	2	80	0.1	25
MM3Z36VT1G	2Y	34	36	38	2	90	0.1	27
MM3Z39VT1G	2Z	37	39	41	2	100	0.1	30
MM3Z43VT1G	3A	40	43	46	2	130	0.1	33
MM3Z47VT1G	3B	44	47	50	2	150	0.1	36
MM3Z51VT1G	3C	48	51	54	2	180	0.1	39
MM3Z56VT1G	3D	52	56	60	2	200	0.1	43
MM3Z62VT1G	3E	58	62	66	2	215	0.1	47
MM3Z68VT1G	3F	64	68	72	2	240	0.1	52
MM3Z75VT1G	3H	70	75	79	2	265	0.1	56

(1) V_{ZT} is tested with pulses (20 ms)



Typical Characteristics

Fig.1 Maximum Continuous Power Derating

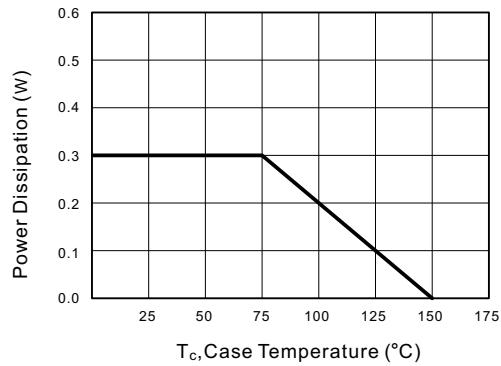
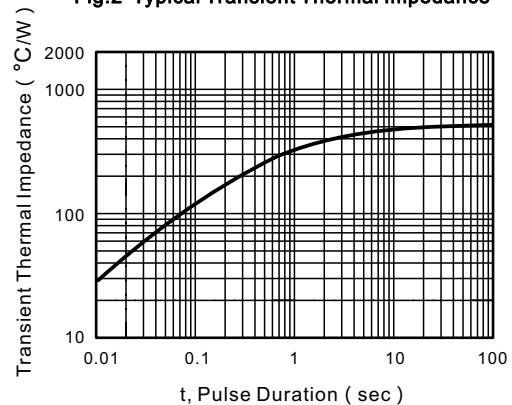
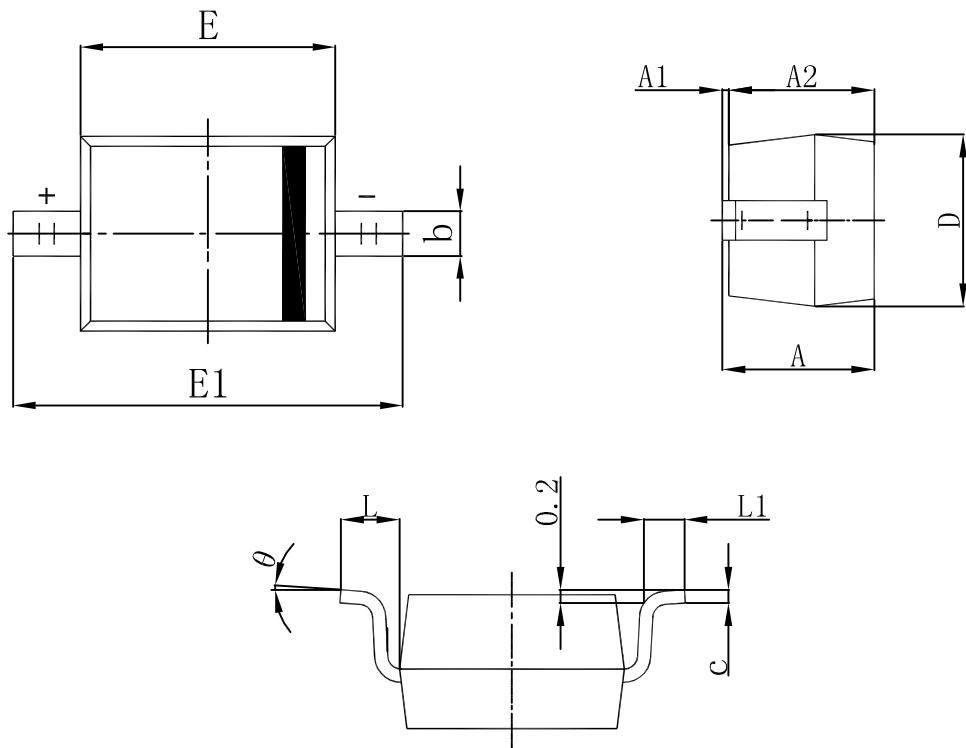


Fig.2 Typical Transient Thermal Impedance





SOD-323 Package Outline Dimensions



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A		1.100		0.043
A1	0.000	0.100	0.000	0.004
A2	0.800	1.000	0.031	0.039
b	0.250	0.350	0.010	0.014
c	0.080	0.150	0.003	0.006
D	1.200	1.400	0.047	0.055
E	1.600	1.800	0.063	0.071
E1	2.500	2.750	0.098	0.108
L	0.475 REF		0.019 REF	
L1	0.250	0.400	0.010	0.016
θ	0°	8°	0°	8°



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