



### 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)
HMM3ZxxT1G	SOD-323	XX	3000

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

The marking bar indicates the cathode.

### Absolute Maximum Ratings(Ta=25°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	$^{\circ}\text{C}/\text{W}$
Junction Temperature	$T_j$	150	$^{\circ}\text{C}$
Storage Temperature Range	$T_{stg}$	-55 ~ +150	$^{\circ}\text{C}$

Notes: Device mounted on ceramic PCB;5.0mm×7.0mm with pad areas 35 mm<sup>2</sup>



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

Type	Marking	Zener Voltage Range <sup>(1)</sup>			I <sub>ZT</sub> (mA)	Dynamic Impedance Z <sub>ZT</sub> (at I <sub>ZT</sub> ) Max (Ω)	Reverse Current	
		V <sub>ZT</sub> (at I <sub>ZT</sub> )					I <sub>R</sub>	at V <sub>R</sub>
		Min (V)	Nom (V)	Max (V)			Max (μA)	(V)
HMM3Z2V0T1G	B0	1.8	2.0	2.15	5	100	120	0.5
HMM3Z2V2T1G	C0	2.08	2.2	2.33	5	100	120	0.7
HMM3Z2V4T1G	1C	2.28	2.4	2.56	5	100	120	1
HMM3Z2V7T1G	1D	2.5	2.7	2.9	5	110	120	1
HMM3Z3V0T1G	1E	2.8	3.0	3.2	5	120	50	1
HMM3Z3V3T1G	1F	3.1	3.3	3.5	5	130	20	1
HMM3Z3V6T1G	1H	3.4	3.6	3.8	5	130	10	1
HMM3Z3V9T1G	1J	3.7	3.9	4.1	5	130	5	1
HMM3Z4V3T1G	1K	4	4.3	4.6	5	130	5	1
HMM3Z4V7T1G	1M	4.4	4.7	5	5	130	2	1
HMM3Z5V1T1G	1N	4.8	5.1	5.4	5	130	2	1.5
HMM3Z5V6T1G	1P	5.2	5.6	6	5	80	1	2.5
HMM3Z6V2T1G	1R	5.8	6.2	6.6	5	50	1	3
HMM3Z6V8T1G	1X	6.4	6.8	7.2	5	30	0.5	3.5
HMM3Z7V5T1G	1Y	7	7.5	7.9	5	30	0.5	4
HMM3Z8V2T1G	1Z	7.7	8.2	8.7	5	30	0.5	5
HMM3Z9V1T1G	2A	8.5	9.1	9.6	5	30	0.5	6
HMM3Z10T1G	2B	9.4	10	10.6	5	30	0.1	7
HMM3Z11T1G	2C	10.4	11	11.6	5	30	0.1	8
HMM3Z12T1G	2D	11.4	12	12.7	5	35	0.1	9
HMM3Z13T1G	2E	12.4	13	14.1	5	35	0.1	10
HMM3Z15T1G	2F	13.8	15	15.6	5	40	0.1	11
HMM3Z16T1G	2H	15.3	16	17.1	5	40	0.1	12
HMM3Z18T1G	2J	16.8	18	19.1	5	45	0.1	13
HMM3Z20T1G	2K	18.8	20	21.2	5	50	0.1	15
HMM3Z22T1G	2M	20.8	22	23.3	5	55	0.1	17
HMM3Z24T1G	2N	22.8	24	25.6	5	60	0.1	19
HMM3Z27T1G	2P	25.1	27	28.9	2	70	0.1	21
HMM3Z30T1G	2R	28	30	32	2	80	0.1	23
HMM3Z33T1G	2X	31	33	35	2	80	0.1	25
HMM3Z36T1G	2Y	34	36	38	2	90	0.1	27
HMM3Z39T1G	2Z	37	39	41	2	100	0.1	30
HMM3Z43T1G	3A	40	43	46	2	130	0.1	33
HMM3Z47T1G	3B	44	47	50	2	150	0.1	36
HMM3Z51T1G	3C	48	51	54	2	180	0.1	39
HMM3Z56T1G	3D	52	56	60	2	200	0.1	43
HMM3Z62T1G	3E	58	62	66	2	215	0.1	47
HMM3Z68T1G	3F	64	68	72	2	240	0.1	52
HMM3Z75T1G	3H	70	75	79	2	265	0.1	56

(1) V<sub>ZT</sub> is tested with pulses (20 ms)



## Typical Characteristics

Fig.1 Maximum Continuous Power Derating

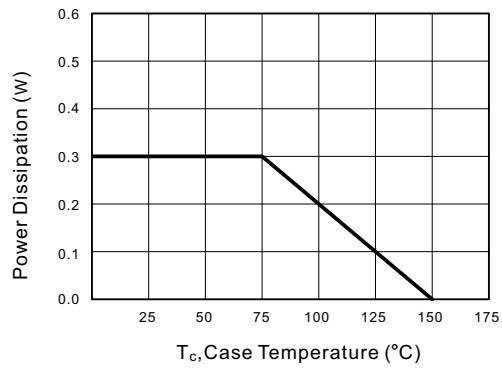
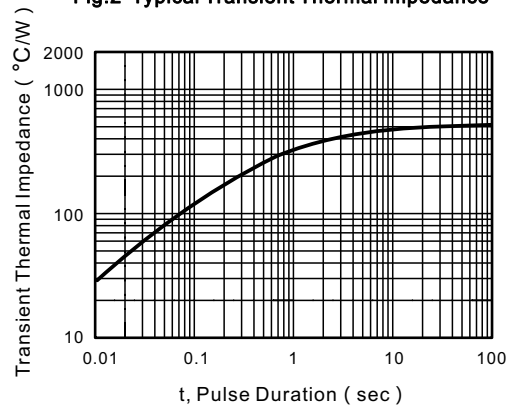
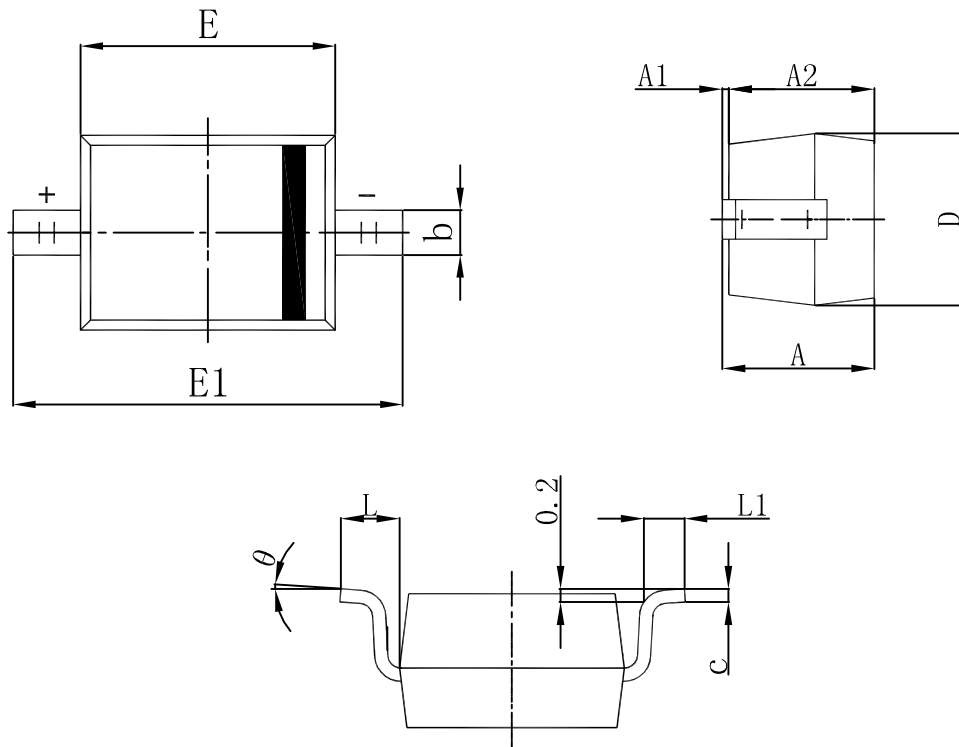


Fig.2 Typical Transient Thermal Impedance





**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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