

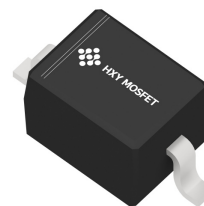


## Features

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

## Features

- Case: SOD-323
- Terminals: Solderable per MIL-STD-750,Method 2026
- Approx. Weight: 5.48mg / 0.00019oz



SOD-323



## Package Marking and Ordering Information

Product ID	Pack	Marking	Qty(PCS)
MM3ZxxVT1GX	SOD-323	XX	3000

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

The marking bar indicates the cathode.

## Absolute Maximum Ratings( $T_a=25^{\circ}\text{C}$ )

Characteristic	Symbol	Value	Unit
Forward voltage @ $I_F=10\text{mA}$	$V_F$	0.9	V
Power Dissipation	$P_{\text{tot}}$	300	mW
Typical thermal resistance junction to ambient <sup>1</sup>	$R_{\theta JA}$	417	$^{\circ}\text{C/W}$
Junction Temperature	$T_j$	150	$^{\circ}\text{C}$
Storage Temperature Range	$T_{\text{stg}}$	-55 ~ +150	$^{\circ}\text{C}$

(1) Thermal resistance from junction to ambient at P.C.B. mounted with 2.0" X 2.0" (5 X 5 cm) copper areas pads.



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

Type	Marking	Zener Voltage Range <sup>(1)</sup>				Dynamic Impedance	Reverse Current		
		V <sub>ZT</sub> ( at I <sub>ZT</sub> )				I <sub>ZT</sub>	Z <sub>ZT</sub> ( at I <sub>ZT</sub> )	I <sub>R</sub>	at V <sub>R</sub>
		Min ( V )	Nom ( V )	Max ( V )		(mA)	Max (Ω)	Max ( μA )	( V )
MM3Z2V0T1GX	B0	1.8	2.0	2.15	5	100	120	0.5	
MM3Z2V2T1GX	C0	2.08	2.2	2.33	5	100	120	0.7	
MM3Z2V4T1GX	1C	2.28	2.4	2.56	5	100	120	1	
MM3Z2V7T1GX	1D	2.5	2.7	2.9	5	110	120	1	
MM3Z3V0T1GX	1E	2.8	3.0	3.2	5	120	50	1	
MM3Z3V3T1GX	1F	3.1	3.3	3.5	5	130	20	1	
MM3Z3V6T1GX	1H	3.4	3.6	3.8	5	130	10	1	
MM3Z3V9T1GX	1J	3.7	3.9	4.1	5	130	5	1	
MM3Z4V3T1GX	1K	4	4.3	4.6	5	130	5	1	
MM3Z4V7T1GX	1M	4.4	4.7	5	5	130	2	1	
MM3Z5V1T1GX	1N	4.8	5.1	5.4	5	130	2	1.5	
MM3Z5V6T1GX	1P	5.2	5.6	6	5	80	1	2.5	
MM3Z6V2T1GX	1R	5.8	6.2	6.6	5	50	1	3	
MM3Z6V8T1GX	1X	6.4	6.8	7.2	5	30	0.5	3.5	
MM3Z7V5T1GX	1Y	7	7.5	7.9	5	30	0.5	4	
MM3Z8V2T1GX	1Z	7.7	8.2	8.7	5	30	0.5	5	
MM3Z9V1T1GX	2A	8.5	9.1	9.6	5	30	0.5	6	
MM3Z10VT1GX	2B	9.4	10	10.6	5	30	0.1	7	
MM3Z11VT1GX	2C	10.4	11	11.6	5	30	0.1	8	
MM3Z12VT1GX	2D	11.4	12	12.7	5	35	0.1	9	
MM3Z13VT1GX	2E	12.4	13	14.1	5	35	0.1	10	
MM3Z15VT1GX	2F	13.8	15	15.6	5	40	0.1	11	
MM3Z16VT1GX	2H	15.3	16	17.1	5	40	0.1	12	
MM3Z18VT1GX	2J	16.8	18	19.1	5	45	0.1	13	
MM3Z20VT1GX	2K	18.8	20	21.2	5	50	0.1	15	
MM3Z22VT1GX	2M	20.8	22	23.3	5	55	0.1	17	
MM3Z24VT1GX	2N	22.8	24	25.6	5	60	0.1	19	
MM3Z27VT1GX	2P	25.1	27	28.9	2	70	0.1	21	
MM3Z30VT1GX	2R	28	30	32	2	80	0.1	23	
MM3Z33VT1GX	2X	31	33	35	2	80	0.1	25	
MM3Z36VT1GX	2Y	34	36	38	2	90	0.1	27	
MM3Z39VT1GX	2Z	37	39	41	2	100	0.1	30	
MM3Z43VT1GX	3A	40	43	46	2	130	0.1	33	
MM3Z47VT1GX	3B	44	47	50	2	150	0.1	36	
MM3Z51VT1GX	3C	48	51	54	2	180	0.1	39	
MM3Z56VT1GX	3D	52	56	60	2	200	0.1	43	
MM3Z62VT1GX	3E	58	62	66	2	215	0.1	47	
MM3Z68VT1GX	3F	64	68	72	2	240	0.1	52	
MM3Z75VT1GX	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

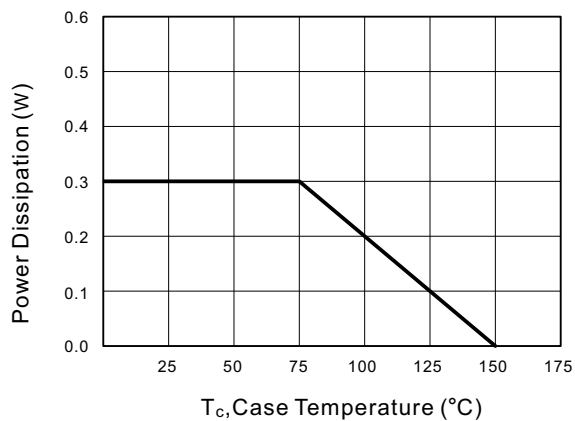
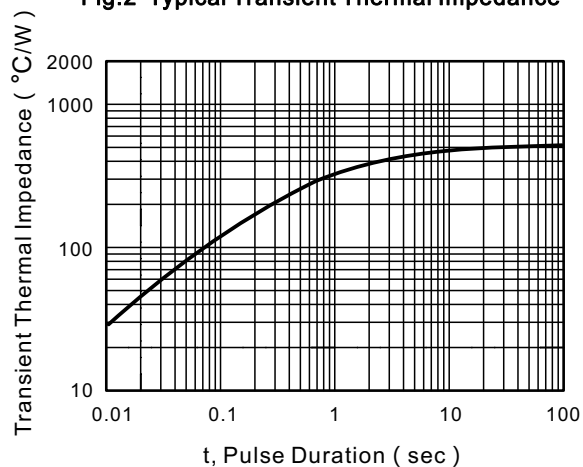
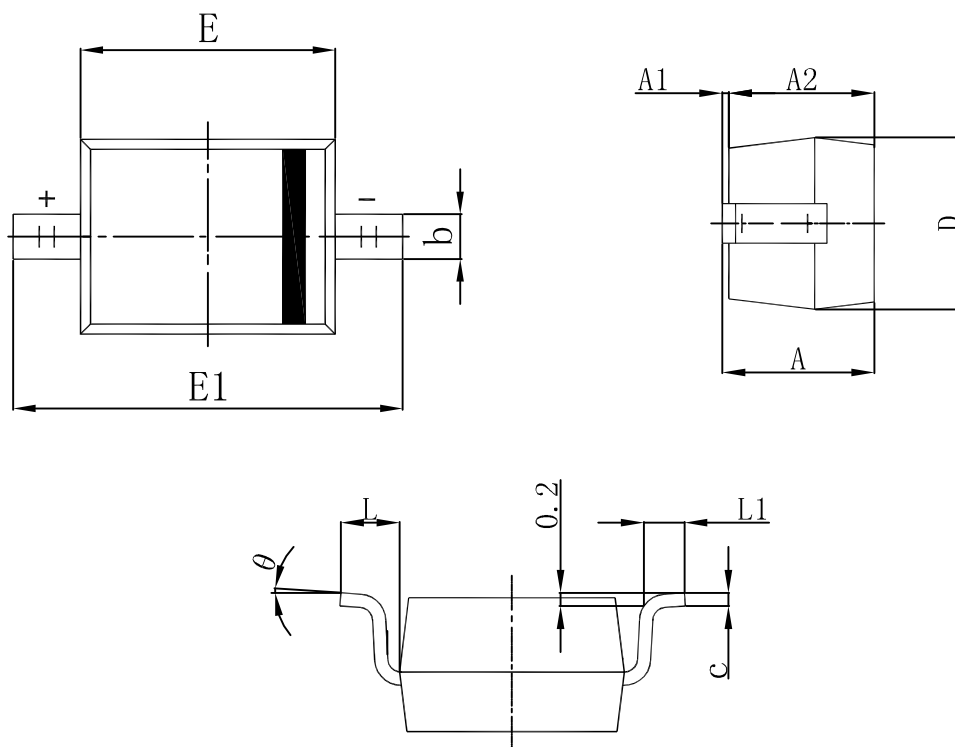


Fig.2 Typical Transient Thermal Impedance





## 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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