



MM3Z2V0 THRU MM3Z75

Silicon Planar Zener Diodes

Features

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

Mechanical Data

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

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

Parameter	Symbol	Value	Unit
Power Dissipation	P_{tot}	300	mW
Forward Voltage at $I_F=10\text{mA}$	V_F	0.9	V
Typical Thermal Resistance Junction To Ambient ⁽¹⁾	$R_{\theta JA}$	417	$^\circ\text{C/W}$
Operating and Storage Temperature Range	T_J, T_{STG}	$-55 \sim +150$	$^\circ\text{C}$

Note: (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.

Typical Characteristics

Fig.1 Maximum Continuous Power Derating

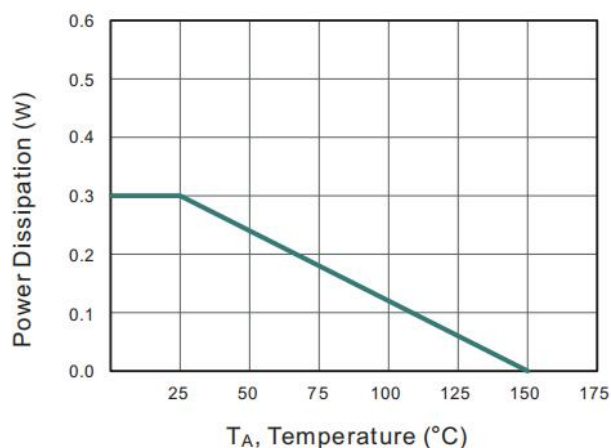
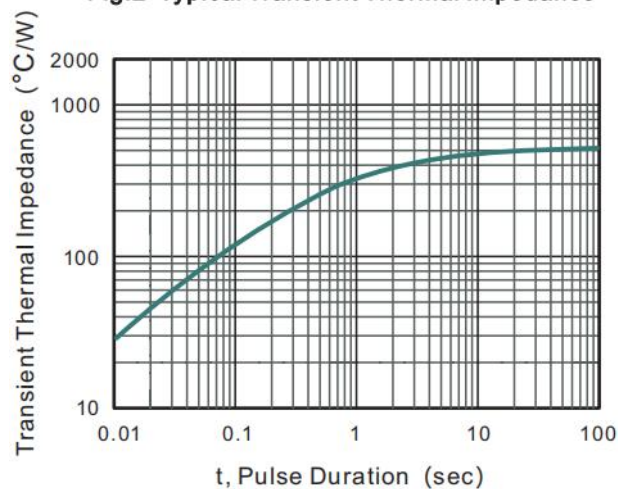


Fig.2 Typical Transient Thermal Impedance





MM3Z2V0 THRU MM3Z75

MM3Z2V0~ MM3Z75

Characteristics (T_A=25°C)

Type	Marking	Zener Voltage Range ¹⁾				Dynamic Impedance	Reverse Leakage Current	
		V _{ZT} (at I _{ZT})			I _{ZT}	Z _{ZT} (at I _{ZT})	I _R	at V _R
		Min(V)	Nom(V)	Max(V)	(mA)	Max(Ω)	Max(uA)	(V)
MM3Z2V0	WY	1.8	2.0	2.15	5	100	120	0.5
MM3Z2V2	WZ	2.08	2.2	2.33	5	100	120	0.7
MM3Z2V4	00	2.28	2.4	2.56	5	100	120	1
MM3Z2V7	01	2.5	2.7	2.9	5	110	120	1
MM3Z3V0	02	2.8	3.0	3.2	5	120	50	1
MM3Z3V3	05	3.1	3.3	3.5	5	130	20	1
MM3Z3V6	06	3.4	3.6	3.8	5	130	10	1
MM3Z3V9	07	3.7	3.9	4.1	5	130	5	1
MM3Z4V3	08	4	4.3	4.6	5	130	5	1
MM3Z4V7	09	4.4	4.7	5	5	130	2	1
MM3Z5V1	0A	4.8	5.1	5.4	5	130	2	1.5
MM3Z5V6	0C	5.2	5.6	6	5	80	1	2.5
MM3Z6V2	0E	5.8	6.2	6.6	5	50	1	3
MM3Z6V8	0F	6.4	6.8	7.2	5	30	0.5	3.5
MM3Z7V5	0G	7	7.5	7.9	5	30	0.5	4
MM3Z8V2	0H	7.7	8.2	8.7	5	30	0.5	5
MM3Z9V1	0K	8.5	9.1	9.6	5	30	0.5	6
MM3Z10	0L	9.4	10	10.6	5	30	0.1	7
MM3Z11	0M	10.4	11	11.6	5	30	0.1	8
MM3Z12	0N	11.4	12	12.7	5	35	0.1	9
MM3Z13	0P	12.4	13	14.1	5	35	0.1	10
MM3Z15	0T	13.8	15	15.6	5	40	0.1	11
MM3Z16	0U	15.3	16	17.1	5	40	0.1	12



MM3Z2V0 THRU MM3Z75

MM3Z18	0W	16.8	18	19.1	5	45	0.1	13
MM3Z20	0Z	18.8	20	21.2	5	50	0.1	15
MM3Z22	10	20.8	22	23.3	5	55	0.1	17
MM3Z24	11	22.8	24	25.6	5	60	0.1	19
MM3Z27	12	25.1	27	28.9	2	70	0.1	21
MM3Z30	14	28	30	32	2	80	0.1	23
MM3Z33	18	31	33	35	2	80	0.1	25
MM3Z36	19	34	36	38	2	90	0.1	27
MM3Z39	20	37	39	41	2	100	0.1	30
MM3Z43	21	40	43	46	2	130	0.1	33
MM3Z47	1A	44	47	50	2	150	0.1	36
MM3Z51	1C	48	51	54	2	180	0.1	39
MM3Z56	1D	52	56	60	2	200	0.1	43
MM3Z62	1E	58	62	66	2	215	0.1	47
MM3Z68	1F	64	68	72	2	240	0.1	52
MM3Z75	1G	70	75	79	2	265	0.1	56

Note:(1)V_{VT} is tested with pulses (20ms).

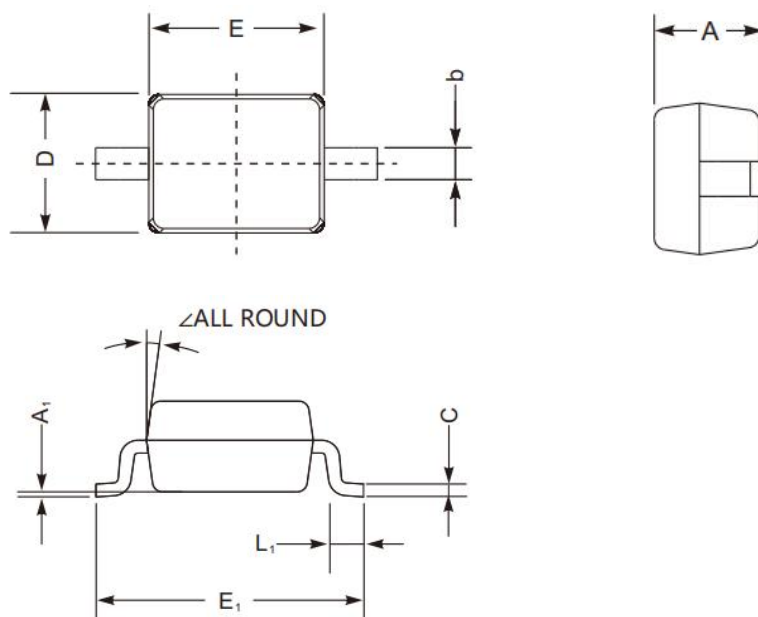


MM3Z2V0 THRU MM3Z75

Package Information

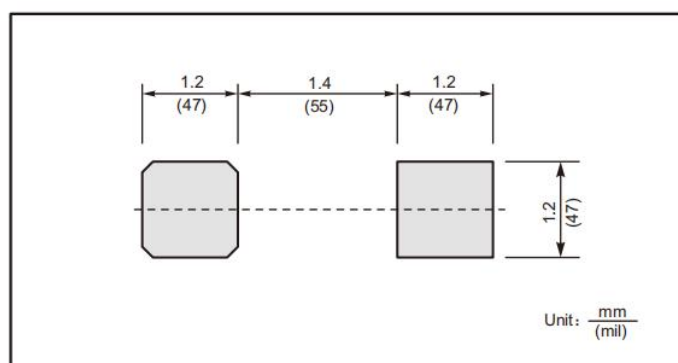
SOD-323

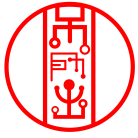
Dimensions in mm



Unit		A	C	D	E	b	L1	A1		∠
mm	max	1.1	0.15	1.4	1.8	2.75	0.4	0.45	0.2	9°
	min	0.8	0.08	1.2	1.4	2.55	0.25	0.2		
mil	max	43	5.9	55	70	108	16	16	8	
	min	32	3.1	47	55	100	9.8	7.9		

The recommended mounting pad size





MM3Z2V0 THRU MM3Z75

Shikues Disclaimer

1.Accuracy of Information and Right to Modify

The information provided in this document is for reference only. Shikues reserves the right to make changes to this document and to the specifications of the products described herein at any time, without prior notice, for the purpose of improving reliability, function, design, or for any other reason. It is the customer's responsibility to obtain and verify the latest product information and specifications before making any final design, procurement, or usage decisions.

2.No Warranty

Shikues makes no express or implied warranties, representations, or guarantees regarding the suitability of its products for any particular purpose.

Shikues assumes no liability for any assistance provided or for the design of customer products. All products are supplied "as is."

3.Intended Use and Limitation of Liability

The products described in this document are intended for use in general-purpose electronic devices. They are neither designed nor tested nor authorized for use in transportation equipment or applications requiring high reliability. Unless expressly authorized in writing by Shikues, these products must not be used as critical components in life-support systems or any applications where failure could directly pose a risk to human life (including, but not limited to, medical devices, transportation systems, aerospace equipment, nuclear facilities, and safety-critical systems).

Shikues assumes no responsibility or liability for any consequences arising from the use of its products in unauthorized or unintended applications.

Neither Shikues nor its representatives shall be held liable for any resulting damages.

4.Intellectual Property

This document does not grant any express or implied license—whether by estoppel, implication, or otherwise—to use any intellectual property rights of Shikues.