

# MSKSEMI 美森科

SEMICONDUCTOR



ESD



TVS



TSS



MOV



GDT



PLED

**1SMA4728A-MS - 1SMA4777A-MS**

**Product specification**


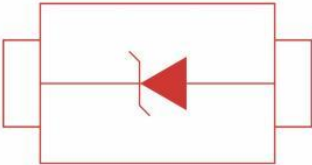
## FEATURES

- Total power dissipation: Max. 1 W.
- Wide zener reverse voltage range 3.3V to 330V.
- Small plastic package suitable for surface mounted design.

## Mechanical Data

- Case: SMA
- Terminals: Solderable per MIL- STD- 750, Method 2026
- Approx . Weight: 0 .055g / 0 .002oz

## Reference News

PACKAGE OUTLINE	PIN CONFIGURATION
	
Simplified outline SMA and symbol	

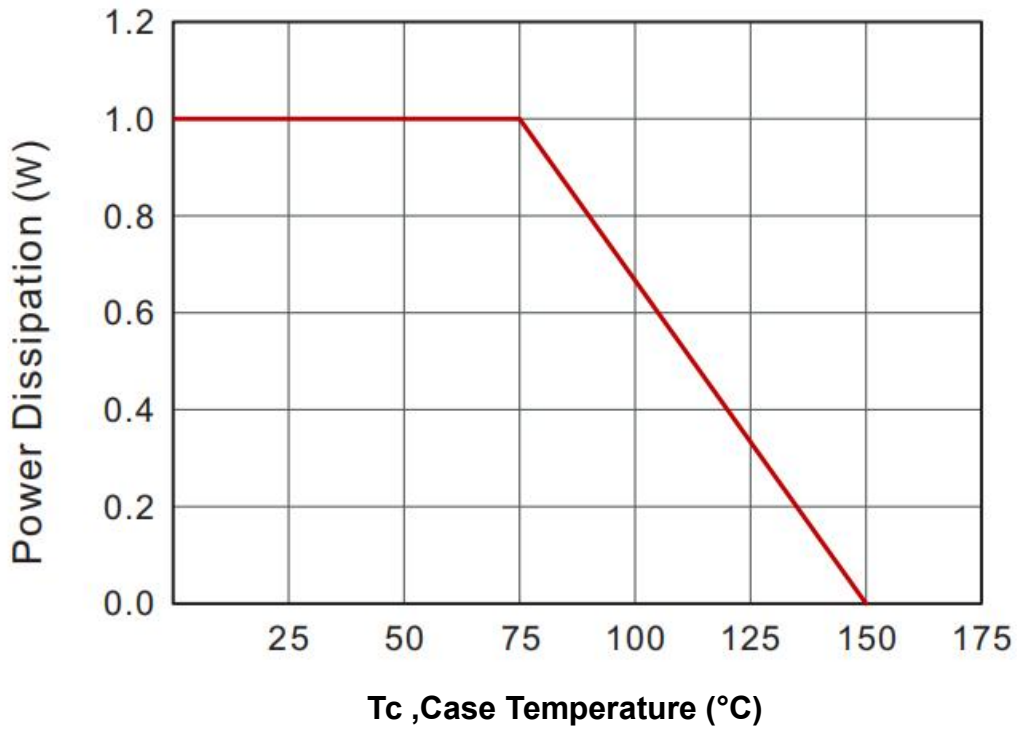
## PINNING

PIN	DESCRIPTION
1	Cathode
2	A node

**Absolute Maximum Ratings And Characteristics (Ta = 25 °C)**

Parameter	Symbol	Value	Unit
Power Dissipation at T <sub>c</sub> = 75°C	P <sub>D</sub>	1	W
Forward Voltage at I <sub>F</sub> = 200 mA	V <sub>F</sub>	1.2	V
Junction Temperature Range	T <sub>J</sub>	- 55 to + 150	°C
Storage Temperature Range	T <sub>S</sub>	- 55 to + 150	°C

**Fig.1 Maximum Continuous Power Derating**

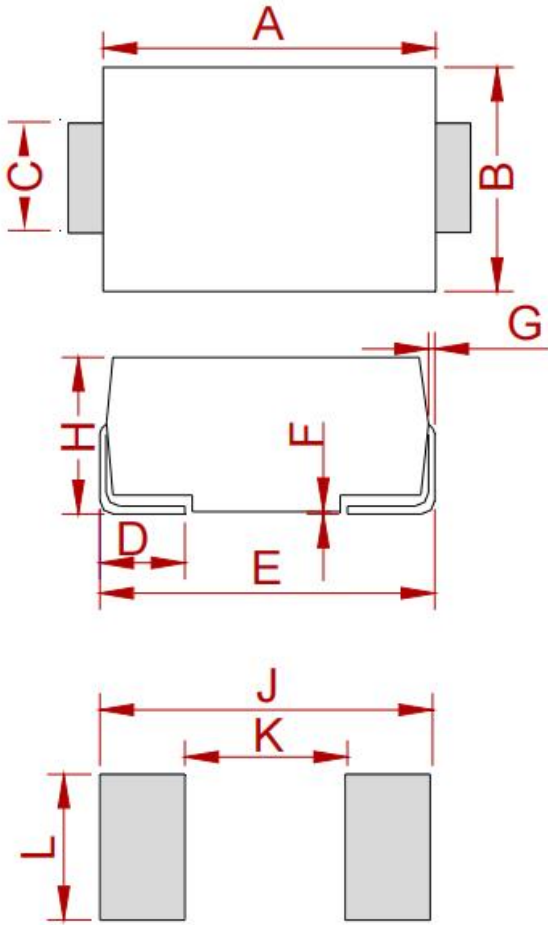


**C haracteristics at Ta = 25°C**

Type	Marking	Zener Voltage Range <sup>(1)</sup>			I <sub>ZT</sub>	Dynamic Impedance	Reverse Current		Admissible Zener Current
		V <sub>ZT</sub> ( at 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)	I <sub>ZM</sub> (mA)
1SMA4728A-MS	728A	3.10	3.3	3.50	75	10	100	1	285
1SMA4729A-MS	729A	3.40	3.6	3.80	69	10	100	1	263
1SMA4730A-MS	730A	3.70	3.9	4.10	64	9.0	50	1	243
1SMA4731A-MS	731A	4.06	4.3	4.56	58	9.0	25	1	219
1SMA4732A-MS	732A	4.50	4.7	4.93	53	8.0	10	1	203
1SMA4733A-MS	733A	4.84	5.1	5.36	49	7.0	10	1	186
1SMA4734A-MS	734A	5.32	5.6	5.92	45	5.0	10	2	170
1SMA4735A-MS	735A	5.86	6.2	6.51	41	2.0	10	3	154
1SMA4736A-MS	736A	6.46	6.8	7.18	37	3.5	10	4	140
1SMA4737A-MS	737A	7.12	7.5	7.88	34	4.0	10	5	127
1SMA4738A-MS	738A	7.79	8.2	8.67	31	4.5	10	6	116
1SMA4739A-MS	739A	8.60	9.1	9.59	28	5.0	10	7	104
1SMA4740A-MS	740A	9.50	10	10.5	25	7.0	10	7	95
1SMA4741A-MS	741A	10.4	11	11.6	23	8.0	5	8	86
1SMA4742A-MS	742A	11.4	12	12.6	21	9.0	5	9	79
1SMA4743A-MS	743A	12.4	13	14.1	19	10	5	10	71
1SMA4744A-MS	744A	13.8	15	15.8	17	14	5	11	63
1SMA4745A-MS	745A	15.2	16	17.1	16	16	5	12	58
1SMA4746A-MS	746A	16.8	18	19.2	14	20	5	13	52
1SMA4747A-MS	747A	19.0	20	21.2	13	22	5	15	47
1SMA4748A-MS	748A	20.8	22	23.3	12	23	5	17	43
1SMA4749A-MS	749A	22.8	24	26.0	11	25	5	18	38
1SMA4750A-MS	750A	25.3	27	28.9	9.5	35	5	21	35
1SMA4751A-MS	751A	28.2	30	32.0	8.5	40	5	23	31
1SMA4752A-MS	752A	31.3	33	34.9	7.5	45	5	25	28
1SMA4753A-MS	753A	34.2	36	37.9	7.0	50	5	27	26
1SMA4754A-MS	754A	37.2	39	41.5	6.5	60	5	30	24
1SMA4755A-MS	755A	40.9	43	45.6	6.0	70	1	32	22
1SMA4756A-MS	756A	44.9	47	49.8	5.5	80	1	35	20
1SMA4757A-MS	757A	48.6	51	54.0	5.0	95	1	38	18
1SMA4758A-MS	758A	53.6	56	58.8	4.5	110	1	42	17
1SMA4759A-MS	759A	58.9	62	65.6	4.0	125	1	47	15
1SMA4760A-MS	760A	64.6	68	71.7	3.7	150	1	52	14
1SMA4761A-MS	761A	71.2	75	78.8	3.3	175	1	56	12
1SMA4762A-MS	762A	77.9	82	87.0	3.0	200	1	62	11
1SMA4763A-MS	763A	86.0	91	96.0	2.8	250	1	69	10
1SMA4764A-MS	764A	95.0	100	105	2.5	350	1	76	9.5
1SMA4765A-MS	765A	104	110	116	2.3	450	1	84	8.6
1SMA4766A-MS	766A	114	120	127	2.0	550	1	91	7.8
1SMA4767A-MS	767A	125	135	142	1.9	700	1	100	7.0
1SMA4768A-MS	768A	140	150	157	1.7	900	1	110	6.3
1SMA4769A-MS	769A	155	165	172	1.6	1100	1	120	5.8
1SMA4770A-MS	770A	170	180	191	1.4	1200	1	135	5.2
1SMA4771A-MS	771A	189	200	211	1.2	1400	1	150	4.7
1SMA4772A-MS	772A	209	220	231	1.0	1600	1	165	4.3
1SMA4773A-MS	773A	229	240	251	1.0	1800	1	180	3.9
1SMA4774A-MS	774A	249	260	271	1.0	2000	1	190	3.7
1SMA4775A-MS	775A	269	280	291	1.0	2100	1	205	3.4
1SMA4776A-MS	776A	289	300	315	1.0	2300	1	230	3.1
1SMA4777A-MS	777A	313	330	346	1.0	2500	1	250	2.8

(1) VZT is tested with pulses (20 ms)

**PACKAGE MECHANICAL DATA**



**SMA**

Ref.	Dimensions			
	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	4.25	4.65	0.167	0.183
B	2.50	2.90	0.098	0.114
C	1.35	1.65	0.053	0.065
D	0.76	1.52	0.030	0.060
E	4.93	5.28	0.194	0.208
F	0.051	0.203	0.002	0.008
G	0.15	0.31	0.006	0.012
H	1.98	2.41	0.078	0.095
J	6.50		0.256	
K		2.30		0.090
L	1.70		0.067	

**REEL SPECIFICATION**

P/N	PKG	QTY
1SMA47XXA-MS	SMA	2000

## Attention

- Any and all MSKSEMI Semiconductor products described or contained herein do not have specifications that can handle applications that require extremely high levels of reliability, such as life-support systems, aircraft's control systems, or other applications whose failure can be reasonably expected to result in serious physical and/or material damage. Consult with your MSKSEMI Semiconductor representative nearest you before using any MSKSEMI Semiconductor products described or contained herein in such applications.
- MSKSEMI Semiconductor assumes no responsibility for equipment failures that result from using products at values that exceed, even momentarily, rated values (such as maximum ratings, operating condition ranges, or other parameters) listed in products specifications of any and all MSKSEMI Semiconductor products described or contained herein.
- Specifications of any and all MSKSEMI Semiconductor products described or contained herein stipulate the performance, characteristics, and functions of the described products in the independent state, and are not guarantees of the performance, characteristics, and functions of the described products as mounted in the customer's products or equipment. To verify symptoms and states that cannot be evaluated in an independent device, the customer should always evaluate and test devices mounted in the customer's products or equipment.
- MSKSEMI Semiconductor strives to supply high-quality high-reliability products. However, any and all semiconductor products fail with some probability. It is possible that these probabilistic failures could give rise to accidents or events that could endanger human lives, that could give rise to smoke or fire, or that could cause damage to other property. When designing equipment, adopt safety measures so that these kinds of accidents or events cannot occur. Such measures include but are not limited to protective circuits and error prevention circuits for safe design, redundant design, and structural design.
- In the event that any or all MSKSEMI Semiconductor products (including technical data, services) described or contained herein are controlled under any of applicable local export control laws and regulations, such products must not be exported without obtaining the export license from the authorities concerned in accordance with the above law.
- No part of this publication may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying and recording, or any information storage or retrieval system, or otherwise, without the prior written permission of MSKSEMI Semiconductor.
- Information (including circuit diagrams and circuit parameters) herein is for example only ; it is not guaranteed for volume production. MSKSEMI Semiconductor believes information herein is accurate and reliable, but no guarantees are made or implied regarding its use or any infringement of intellectual property rights or other rights of third parties.
- Any and all information described or contained herein are subject to change without notice due to product/technology improvement, etc. When designing equipment, refer to the "Delivery Specification" for the MSKSEMI Semiconductor product that you intend to use.

## X-ON Electronics

Largest Supplier of Electrical and Electronic Components

*Click to view similar products for [Zener Diodes](#) category:*

*Click to view products by [MSKSEMI](#) manufacturer:*

Other Similar products are found below :

[RKZ13B2KG#P1](#) [DL5234B](#) [EDZTE6113B](#) [1N4682](#) [1N4693](#) [1N4732A](#) [1N4736A](#) [1N4750A](#) [1N4759ARL](#) [1N5241B](#) [1N5365B](#) [1N5369B](#)  
[1N747A](#) [1N964B](#) [1N966B](#) [1N968B](#) [1N972B](#) [JANS1N4974US](#) [JANTX1N5907](#) [1N4692](#) [1N4700](#) [1N4702](#) [1N4704](#) [1N4711](#) [1N4714](#)  
[1N4745ARL](#) [1N4752ARL](#) [1N4760ARL](#) [1N5221B](#) [1N5242BTR](#) [1N5350B](#) [1N5352B](#) [1N961BRR1](#) [1N964BRL](#) [RKZ5.1BKU#P6](#)  
[3SMAJ5946B-TP](#) [3SMAJ5950B-TP](#) [3SMBJ5925B-TP](#) [MMSZ5230BQ-13-F](#) [MMSZ5232BQ-13-F](#) [BZX84C7V5](#) [3SMAJ5945B-TP](#)  
[3SMAJ5947B-TP](#) [3SMBJ5941B-TP](#) [DL4732A-T3](#) [DZ2S240M0L](#) [SMAZ27-TP](#) [ZMM5224B-7](#) [RD16UM-T1-A](#) [RD39S-T1-A](#)