

# MSKSEMI 美森科

SEMICONDUCTOR



ESD



TVS



TSS



MOV



GDT



PLED

**4532-xxx-LF-MS**

---

**Product specification**

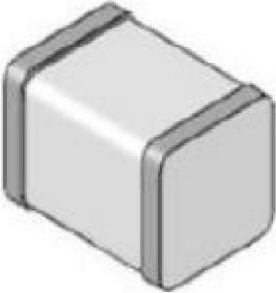
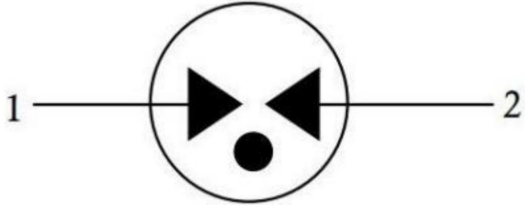
## Features

- High insulation resistance: 1GΩ@100V
- Size design: 4.5\*3.2\*2.7mm
- Surge capability: 2KA@8/20us
- Very low capacitance:0.5pF@1MHz,0V

## Applications

- AC Power

## Reference News

PACKAGE OUTLINE	Schematic Symbol
	
1812	

**Electrical characteristics(T=25°C)**

Model Name	DC spark-over Voltage	Tolerance of Vs	Max . Impulse Breakdown Voltage	Discharge Current (8/20us)	Minimum Insulation Resistance		Max. Capacitance 1 MHz
	100V/S		1KV/us	10 times	Test Voltage DC(V)	(GΩ)	(Pf)
	V	%	V	KA			
4532-075-LF-MS	75	±30	600	2	50	1	<0.5
4532-091-LF-MS	90	±30	600	2	50	1	<0.5
4532-150-LF-MS	150	±20	600	2	100	1	<0.5
4532-230-LF-MS	230	±20	800	2	100	1	<0.5
4532-301-LF-MS	300	±20	850	2	100	1	<0.5
4532-350-LF-MS	350	±20	950	2	100	1	<0.5
4532-401-LF-MS	400	±20	1000	2	100	1	<0.5
4532-471-LF-MS	470	±20	1 100	2	100	1	<0.5
4532-600-LF-MS	600	±20	1300	2	100	1	<0.5

**Notes:**

- 1) At delivery AQL 0.65 level II ISO 2828. 1-2003
- 2) In ionized mode
- 3) Terms and current waveforms in accordance with ITU-T Rec. K. 12; IEC 61643-21

**Environmental Reliability Characteristics**

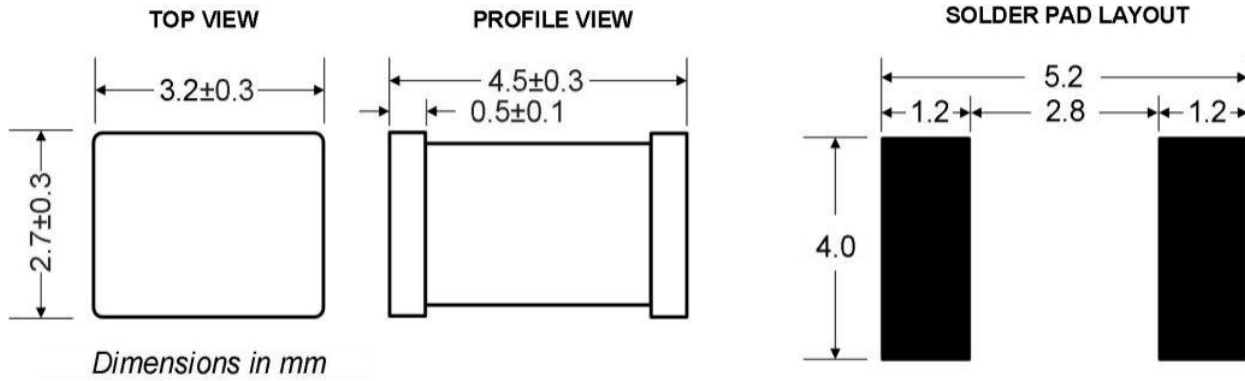
Testing items	Technical standards
High Temperature Storage Test	Temperature: 90 °C Time:2H
Low Temperature Storage Test	Temperature: -40 °C Time:2H
Vibration	Frequency: 10-500Hz Amplitude: 0 . 15 mm Time: 45 mins
Resistance of soldering heat	Temperature: 260±5 °C Time of dip soldering: 10s, 1time

Note:Up-screen program can be specified by customer's request via contacting MSKSEMI service

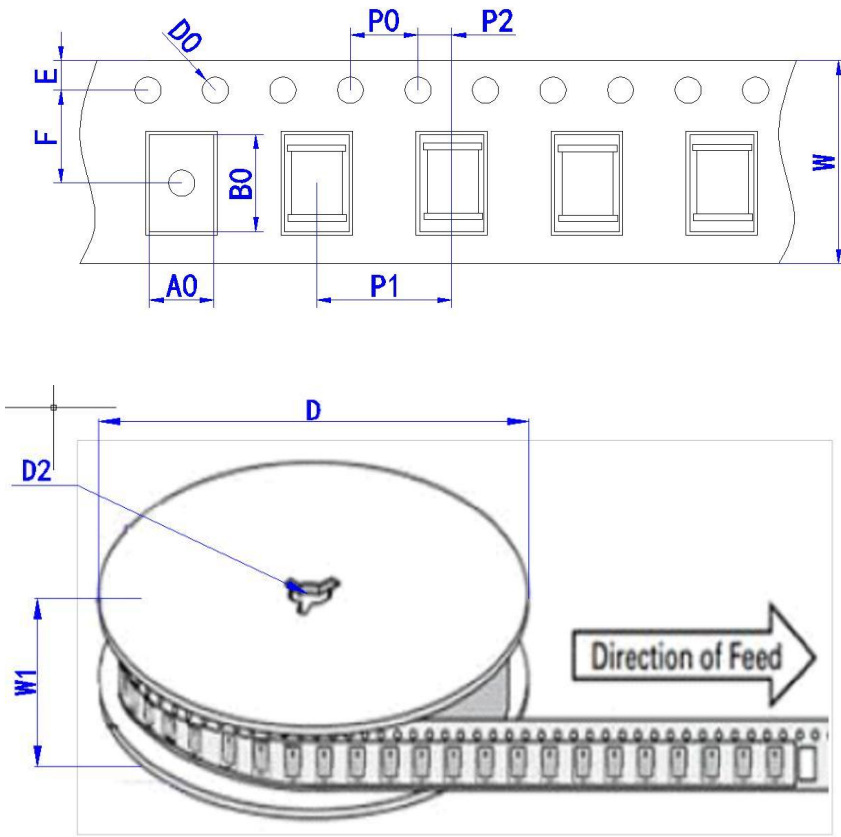
**Soldering parameters**

Solderability	SolderPotTemperature	245°C±5°C
	SolderDwellTime	4-6seconds

**Package mechanical data**



**Tape & reel specification**



Sym .	Dimensions( mm)
A0	3.90±0.20
B0	4.90±0.20
D0	φ 1.50±0.10
E	1.75±0.20
F	5.50±0.20
P1	8.00±0.20
P0	4.00±0.20
P2	2.00±0.20
W	12.00±0.30
W1	16.80±2.00
D	φ333±4.00
D2	φ 13.±0.2

**Marking & Packeging Information**

Marking	Packaging	Reel Size
/	2500/Reel	330mm

## 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 infringements 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.