

ALPHA[®] TRUEHEIGHT[®] SPACER

Tape & Reel Packaging / Spacer with Solderable Surface

DESCRIPTION

ALPHA TrueHeight Spacers are burr-free, non-collapse copper discs coated with a barrier layer of nickel and finish coated with flash gold. **ALPHA TrueHeight Spacers** are designed to be automatically placed and reflowed onto a printed circuit board pad printed with a nominal amount of solder paste. Since all sides of the spacer are coated, reflow does not result in exposed copper.

After reflow, the **ALPHA TrueHeight Spacer** provides a precise standoff height. Electronic components that are reflow soldered can benefit from the use of **ALPHA TrueHeight Spacers** to improve soldering results, such as to prevent corner signal shorting on large BGA devices with characteristic warping. Through hole components that need to be reflow soldered but do not contain sufficient standoff height can benefit from the use of **ALPHA TrueHeight Spacers**.

READ ENTIRE TECHNICAL DATA SHEET BEFORE USING THIS PRODUCT

FEATURES & BENEFITS

Features

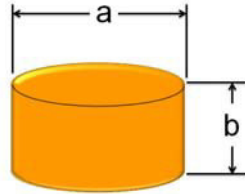
- Non-collapse spacer function
- Nickel/ gold coated copper disc
- Burr free construction
- Excellent height dimensional tolerance – as low as $\pm 0.010\text{mm}$
- Fast placement utilizing standard pick and place equipment
- 7 inch standard IEC reels available

Benefits

- Burr free construction ensures repeatable height after reflow
- Nickel/ gold plating ensures no exposed copper after reflow
- Gold coating ensures highly solderable surface
- Tape and reel packaging for easy integration into standard assembly processes
- Excellent pick and place performance

PRODUCT INFORMATION

Part Dimensions



Size	a		b	
	mm	inch	mm	inch
DS-D076H010	0.76	0.030	0.10	0.004
DS-D076H025	0.76	0.030	0.25	0.010
DS-D076H030	0.76	0.030	0.30	0.012
DS-D076H038	0.76	0.030	0.38	0.015
DS-D050H025	0.50	0.020	0.250	0.010
DS-D050H030	0.50	0.020	0.300	0.012

Tolerance on the part dimension 'a': $\pm 0.05\text{mm}$

Tolerances on the part dimensions 'b': $0.10 \pm 0.010\text{mm}$; $0.25 \pm 0.013\text{mm}$; $0.30 \pm 0.015\text{mm}$; $0.38 \pm 0.020\text{mm}$

Contact your local sales representative for the orderable item number for this part type.

APPLICATION GUIDELINES

ALPHA TrueHeight Spacers are used to maintain a fixed height off the printed circuit board for electronic components. For components such as Ball Grid Array packages, excessive warping during reflow soldering can result in the corner signals shorting against each other as the “frowning” component corners come in near direct contact with the PCB. By adding spacers on the corners of the device, a minimum height is maintained, thus preventing signal shorting.

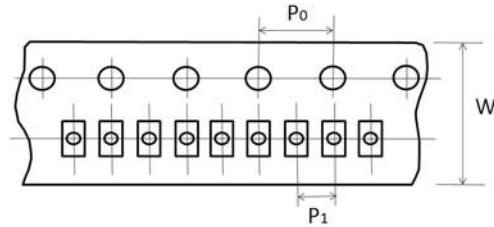
In applications such as reflow soldering of through hole components, adequate clearance between component body and PCB must be maintained to ensure clearance for solder paste print or preforms placed into the paste to add solder volume. If a through hole component does not have adequate clearance off the PCB, ALPHA TrueHeight Spacers can be added to the PCB to enable reflow soldering. This will reduce processing costs (eliminate wave soldering) and improve performance (increase hole fill).

TECHNICAL DATA

Alloy Information

All ALPHA TrueHeight Spacers are constructed of copper with nickel/gold finish.

Tape and Reel Packaging Information



Part Type mm	Tape Dimensions		
	W	P0	P1
	mm	mm	mm
All sizes	8	4	2

RECYCLING SERVICES

We provide safe and efficient recycling services to help companies meet their environmental and legislative requirements and at the same time, maximize the value of their waste streams.

Our service collects solder dross, solder scrap, and various forms of solder paste waste. Please contact your local sales representative for recycling capabilities in your area.



SAFETY & WARNING

It is recommended that the company/operator read and review the Safety Data Sheets for the appropriate health and safety warnings before use. **Safety Data Sheets are available.**

STORAGE

The parts are packaged in ESD safe reels.

CONTACT INFORMATION

www.macdermidalpha.com

<p>North America 140 Centennial Avenue Piscataway, NJ 08854 1.800.367.5460</p>	<p>Europe Unit 2, Genesis Business Park Albert Drive Woking, Surrey, GU21 5RW, UK 44.01483.758400</p>	<p>Asia 14 Joo Koon Crescent, Singapore 629014 65.6430.0700</p>
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Also read carefully warning and safety information on the Safety Data Sheet. This data sheet contains technical information required for safe and economical operation of this product. READ IT THOROUGHLY PRIOR TO PRODUCT USE. Emergency safety directory assistance: US 1 202 464 2554, Europe + 44 1235 239 670, Asia + 65 3158 1074, Brazil 0800 707 7022 and 0800 172 020, Mexico 01800 002 1400 and (55) 5559 1588

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