

ALPHA® TRUEHEIGHT™ SPACER BLOCK

TAPE & REEL PACKAGING / SPACER BLOCK DISC-SOLDERABLE SURFACE

DESCRIPTION

ALPHA TrueHeight Spacer Blocks are burr free, non-collapse copper discs coated with a barrier layer of nickel, and finish coated with flash gold. TrueHeight Spacer Blocks 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 TrueHeight Spacer Block provides a precise standoff height. Electronic components that are reflow soldered can benefit from the use of TrueHeight Spacer Blocks 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 TrueHeight Spacers.

FEATURES & BENEFITS

Features

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

APPLICATION

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, 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).

SAFETY

Consult the MSDS for additional safety information.

SM #1183-2 2014-10-20

an Alent plc Company

ALPHA Global Headquarters
300 Atrium Drive, Somerset, NJ 08873 USA • 1-800-367-5460 • www.alpha.alent.com

The information contained herein is based on data considered accurate and is offered at no charge. No warranty is expressed or implied regarding the accuracy of this data. Liability is expressly disclaimed for any loss or injury arising out of the use of this information or the use of any materials designated.

ALPHA is a registered trademark of Alpha Metals, Inc.

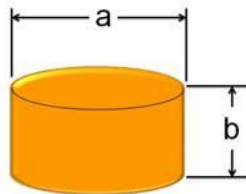
© 2014 ALPHA

ALPHA[®] TRUEHEIGHT[™] SPACER BLOCK

TAPE & REEL PACKAGING / SPACER BLOCK DISC-SOLDERABLE SURFACE

PRODUCT INFORMATION

Part Dimensions



| Part Type mm | Part Type inch | a | | b | |
|-----------------|-------------------|------|-------|------|-------|
| | | mm | inch | mm | inch |
| DS-D076H030 | DS-D030H012 | 0.76 | 0.030 | 0.30 | 0.012 |
| DS-D076H038 | DS-D030H015 | 0.76 | 0.030 | 0.38 | 0.015 |

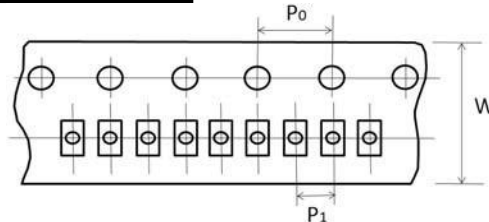
Tolerances on the part dimensions: $\pm 0.05\text{mm}$ for Dim. a; $\pm 0.010\text{mm}$ for Dim. b
Contact your local sales representative for other available sizes

TECHNICAL DATA

Alloy Information

All TrueHeight Spacer Blocks are constructed of copper with nickel/gold finish.

Tape and Reel Packaging Information



| Part Type mm | Tape Dimensions | | | | | |
|-----------------|-----------------|-------|----------------|-------|----------------|-------|
| | W | | P ₀ | | P ₁ | |
| | mm | inch | mm | inch | mm | inch |
| DS-D076H030 | 8 | 0.315 | 4 | 0.157 | 2 | 0.079 |
| DS-D076H038 | 8 | 0.315 | 4 | 0.157 | 2 | 0.079 |

ITEM NUMBER LIST

| Part Type mm | Item Number 7" Reel / 5,000pcs |
|-----------------|--------------------------------------|
| DS-D076H030 | 161952 |
| DS-D076H038 | 162362 |

PACKAGING & STORAGE

The parts are packaged in ESD safe reels. When properly stored, a shelf life of 2 years is guaranteed.