

ALPHA[®] ULTRA-CORE[™] PREFORMS

Internal Flux Cored Solder Washers

DESCRIPTION

ALPHA ULTRA-CORE Solder Preform Washer provides a unique ability to deliver a precise amount of solder volume and flux, thus ensuring the construction of a solder joint with a high degree of reflow consistency and net solder shape, thickness and performance.

Alpha has a range of flux cored solder washers for various electronic and non-electronic assembly applications. The range includes no-clean, activated rosin fluxes in a variety of solder alloys and countless sizes. Alpha provides flux cored solder washers with the highest performance for automated soldering processes, including surface mount reflow, induction soldering and laser soldering. Within our extensive range, you will find an Alpha flux cored solder washer that meets your specific needs.

READ ENTIRE TECHNICAL DATA SHEET BEFORE USING THIS PRODUCT

FEATURES & BENEFITS

Features

- A wide range of sizes (outer diameter, inner diameter and thickness)
- Various flux activity levels to address varying soldering applications
- Available in a variety of alloys to meet specific application requirements, including lowtemperature alloys
- Packaged in bulk. Available in standard tape and reel packaging

Benefits

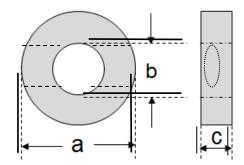
- Precise solder volume control to address reliability issues in PCB assembly applications such as hole-fill
- Maintenance-free implementation into automated feeder systems due to the cored flux capability
- Excellent control of post-reflow solder shape and volume
- Precise flux activity level and flux volume appropriate for surfaces to be soldered
- Stand-alone soldering capability without need for a flux carrier such as solder paste or liquid flux
- Ability to solder temperature-sensitive components







PRODUCT INFORMATION



DIM.	Tolerance for size a < 5mm	
a & b	±0.05mm [0.002"] ±10% of thickness	
С		

Standard	Alloy Designation		Melting or Solidus / Liquidus Temp °C
J-STD-006B	Pb-free	SAC305	217 to 221
	Sn-Pb	63Sn37Pb	183
		Sn62Pb36Ag2	179
		60Sn40Pb	183 to 188
Proprietary	Low Silver	SACX [®] Plus 0307	217 to 228

Note: Contact your local Alpha Sales Office to discuss other alloy, size and packaging options.

APPLICATION GUIDELINES

ALPHA ULTRA-CORE Solder Preform Washer provides an ideal method of not only delivering the precise solder volume and flux needed for various assembly applications but can eliminate secondary assembly processes.

The flux cored washer can be placed over connector pins or lugs during a standard surface mount PCB assembly process to provide ample hole-fill and fillet formation to through-hole components. They are also an effective solder attachment method for assembling electronic and non-electronic components. A wide range of solder alloys and fluxes provide the ability to assemble just about any metallic assembly and provide a hermetic seal at the same time. Moreover, flux cored solder washers can be used to make cable terminations to components or connectors.





Since the flux is in the washer core a completely automated preform assembly process can be integrated without concern. The flux cored solder washers allow for a maintenance-free preform delivery system such as vibratory bowl feeders, various gravity feeders, and even tape and reel. The non-tacky pick surface optimizes pick and place capability by eliminating the possibility of residual flux buildup on the feeder equipment and vacuum pick up nozzle.

For a complete list of available fluxes, contact your Alpha Sales Representative





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 or <u>link here</u>.



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 at MacdermidAlpha.com/assembly-solutions/knowledge-base.

STORAGE

The parts are packaged in bulk or optional ESD safe tape and reel. The shelf life of the product varies by alloy. Consult the <u>Alpha Storage Recommendations for Solder Preforms</u> technical bulletin for more information on storage and shelf life recommendations.

CONTACT INFORMATION

To confirm this document is the most recent version, please contact Assembly@MacDermidAlpha.com

www.macdermidalpha.com

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

DISCLAIMER: All statements, technical information and recommendations contained herein are based on tests we believe to be reliable, but the accuracy or completeness thereof is not guaranteed. No statement or recommendation shall constitute a representation unless set forth in an agreement signed by officers of seller and manufacturer. NO WARRANTY OF MERCHANTABILITY, WARRANTY IS FITNESS FOR A PARTICULAR PURPOSE OR ANY IMPLIED WARRANTY IMPLIED WARRANTY IN the time sold. The sole obligation of seller and manufacturer under this warranties, express, implied, or statutory. Products are warranted to be free from defects in material and workmanship at the time sold. The sole obligation of seller and manufacturer under this warranty shall be to replace any noncompliant product at the time sold. Under no circumstances shall manufacturer or seller be liable for any loss, damage or expense, direct, indirect, incidental or consequential, arising out of the inability to use the product. Notwithstanding the foregoing, if products are supplied in response to a customer request that specifies operating parameters beyond those stated above, or if products are used under conditions exceeding said parameters, the customer by acceptance or use thereof assumes all risk of product failure and of all direct, indirect, incidental and consequential damages that may result from use of the products under such conditions, and agrees to exonerate, indemnify, defend and hold harmless MacDermid, Incorporated and its affiliates thereform. No suggestion for product use nor anything contained herein shall be construed as a recommendation to use any product in a manufacturer assume no responsibility or liability or any such infringement.

© 2019 MacDermid, Inc. and its group of companies. All rights reserved. "(R)" and "TM" are registered trademarks or trademarks of MacDermid, Inc. and its group of companies in the United States and/or other countries.

