

3M™ Diamond Pad Conditioner C Series C250

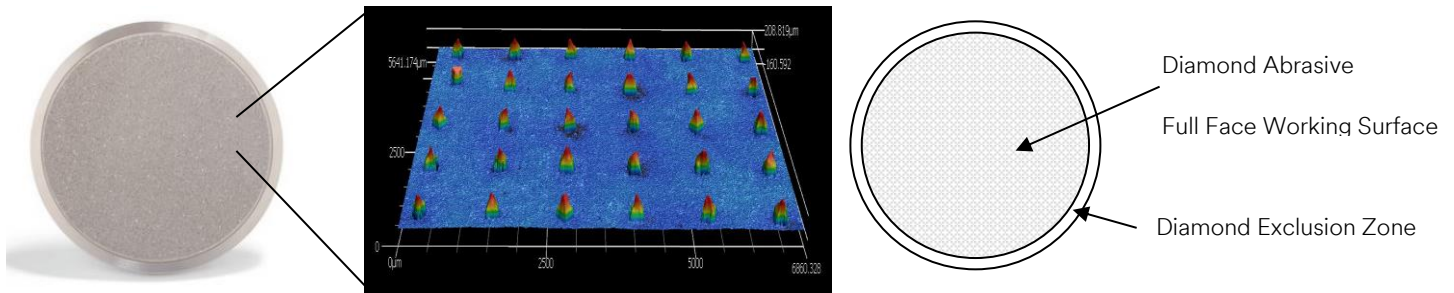
Product Description

3M™ Diamond Pad Conditioner C Series C250 is a highly engineered chemical mechanical planarization (CMP) pad conditioner that delivers reliable performance for critical semiconductor CMP applications. It utilizes sintered abrasive technology for excellent diamond retention, with controlled diamond placement, protrusion, and orientation. 3M™ Diamond Pad Conditioner is designed with CMP control, consistency, cost of ownership and customization in mind, and benefits from collaboration with 3M’s global technical capability and manufacturing capacity.

Key Features and Benefits

- Diamonds secured with both chemical and mechanical bonds for excellent diamond retention.
- Controlled diamond protrusion and disk flatness.
- Aligned diamonds with controlled diamond spacing and orientation.
- Optimized for extended pad and disk life.
- Helps to reduce the number of maintenance downtimes, increasing the potential for lower cost of ownership.
- Various product designs with modified diamond pitch could help achieve target performance to shorten qualification cycle time and effort.

3M™ Diamond Pad Conditioner C Series C250



Product Construction/Material Description

Note: The following technical information and data should be considered representative or typical only and should not be used for specification purposes.

3M™ Diamond Pad Conditioner C Series C250-A	
Property	Value
Carrier Substrate	304SS
Carrier Size (Diameter)	4.25 in
Abrasive Material	Nickel Based alloy with patterned diamond
Abrasive Working Surface	Full Face

3M™ Diamond Pad Conditioner C Series C250-S	
Property	Value
Carrier Substrate	410SS
Carrier Size (Diameter)	4 in
Abrasive Material	Nickel Based alloy with patterned diamond
Abrasive Working Surface	Full Face

3M™ Diamond Pad Conditioner C Series C250

Typical Physical Properties and Performance Characteristics

Note: The following technical information and data should be considered representative or typical only and should not be used for specification purposes. Final product specifications and testing methods will be outlined in the product's Certificate of Analysis (COA) that is shipped with the commercialized product.

Property	Value
Diamond Size (nominal size, μm)	250
Flatness (μm)	≤ 75
Coplanarity (counts)	15,000~27,000
Tip Orientation Consistency (%)	65~100

Applications

Universal CMP disk for various process steps and CMP pads

Storage and Shelf Life

The shelf life of 3M™ Diamond Pad Conditioner C Series C250 is 2 years from the date of manufacture when stored in the original packaging materials and stored at 21°C (70°F) and 50% relative humidity.

Certificate of Analysis (COA)

The 3M Certificate of Analysis (COA) for this product is established when the product is manufactured and deemed commercially available from 3M. The COA contains the 3M test methods, specifications limits and test results for the product's performance attributes that the product will be supplied against. Contact your local 3M representative for this product's COA.

3M™ Diamond Pad Conditioner C Series C250

Safety Data Sheet: Consult Safety Data Sheet before use.

Regulatory: For regulatory information about this product, contact your 3M representative.

Technical Information: The technical information, recommendations and other statements contained in this document are based upon tests or experience that 3M believes are reliable, but the accuracy or completeness of such information is not guaranteed.

Product Use: Many factors beyond 3M's control and uniquely within user's control can affect the use and performance of a 3M product in a particular application. Given the variety of factors that can affect the use and performance of a 3M product, user is solely responsible for evaluating the 3M product and determining whether it is fit for a particular purpose and suitable for user's method of application.

Warranty, Limited Remedy, and Disclaimer: Unless an additional warranty is specifically stated on the applicable 3M product packaging or product literature, 3M warrants that each 3M product meets the applicable 3M product specification on the Certificate of Analysis, which is established when the product is manufactured and deemed commercially available and is provided at the time 3M ships the product. **3M MAKES NO OTHER WARRANTIES OR CONDITIONS, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OR CONDITION OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY IMPLIED WARRANTY OR CONDITION ARISING OUT OF A COURSE OF DEALING, CUSTOM OR USAGE OR TRADE.** If the 3M product does not conform to this warranty, then the sole and exclusive remedy is, at 3M's option, replacement of the 3M product or refund of the purchase price.

Limitation of Liability: Except where prohibited by law, 3M will not be liable for any loss or damage arising from the 3M product, whether direct, indirect, special, incidental or consequential, regardless of the legal theory asserted, including warranty, contract, negligence or strict liability.

Disclaimer: For industrial use only. Not intended, labeled or packaged for consumer sale or use.



Electronics Materials Solutions Division
3M Center, Building 224-3N-11
St. Paul, MN 55144-1000
1-800-251-8634 phone
651-778-4244 fax
www.3M.com/electronics

3M is a trademark of 3M Company.
Please recycle.
©3M 2023. All rights reserved.
60-5005-0426-5