# **3M™ Diamond Pad Conditioner A165**

### Introduction

Highly engineered pad conditioners deliver reliable performance for critical semiconductor CMP applications. Utilizes Sintered Abrasive Technology for superior diamond retention, with controlled diamond placement and protrusion.

### **Features and Benefits**

- Helps to reduce the number of maintenance shutdowns, increasing the potential for lower cost of ownership
- · Optimized for extended pad and disk life
- Diamonds secured with both chemical and mechanical bonds for superior retention



### 3M Stock #:

| 60-0200-1250-0 | 60-0200-1585-9 |
|----------------|----------------|
|----------------|----------------|

## **General Description**

| Product Type           | Diamond Pad Conditioner          | Diamond Pad Conditioner          |
|------------------------|----------------------------------|----------------------------------|
| Product ID             | 3M™ Diamond Pad Conditioner A165 | 3M™ Diamond Pad Conditioner A165 |
| Manufacturer           | 3M Company                       | 3M Company                       |
| Manufacturing Location | Cottage Grove, Minnesota, USA    | Cottage Grove, Minnesota, USA    |

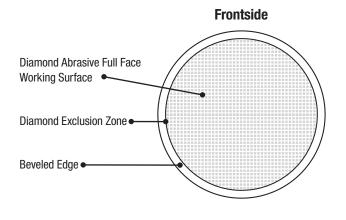
### **Pad Conditioner Construction**

| Carrier (substrate material)          | 304 SS                                    | 304 SS                                    |
|---------------------------------------|---|---|
| Carrier Format                        | Disk, with bevel edge, snap-on connection | Disk, with bevel edge                     |
| Carrier Size (diameter, nominal size) | 4.25 in                                   | 4.25 in                                   |
| Abrasive Material                     | Nickel based alloy with patterned diamond | Nickel based alloy with patterned diamond |
| Abrasive Working Surface              | Full face                                 | Full face                                 |

### **Design Parameters**

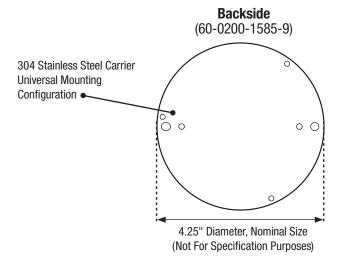
| Diamond Size (nominal size) | 251 μm             | 251 μm             |
|-----------------------------|--------------------|--------------------|
| Diamond Type                | Type 4, semi-sharp | Type 4, semi-sharp |
| Diamond Pattern Type        | Square array       | Square array       |
| Flatness                    | <100 µm            | <100 μm            |
| Aggressiveness Value (BL)   | 15-19              | 15-19              |

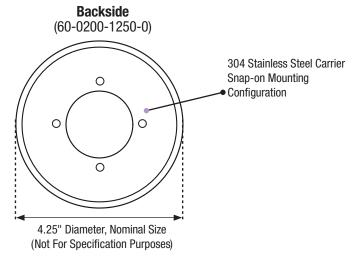




#### **Diamond Pad Conditioner Construction**

| Carrier Material                         | 304 SS                                    |
|--|---|
| Carrier Size<br>(diameter, nominal size) | 4.25 in                                   |
| Abrasive Material                        | Nickel based alloy with patterned diamond |
| Abrasive Working Surface                 | Full face                                 |
| Diamond Size (nominal size)              | 251 μm                                    |
| Diamond Type                             | Type 4, semi-sharp                        |





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 knowledge and 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 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 OF 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.



#### **Electronics Materials Solutions Division**

3M Center, Building 225-3S-06 St. Paul, MN 55144-1000 1-800-251-8634 phone 651-778-4244 fax www.3M.com/electronics

