# 3M™ Diamond Pad Conditioner E221

### 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





60-0200-0853-2	60-0200-0872-2	60-0200-0892-0	60-0200-0895-3

### **General Description**

Product Type	Diamond Pad Conditioner	Diamond Pad Conditioner	Diamond Pad Conditioner	Diamond Pad Conditioner
Product ID	3M™ Diamond Pad Conditioner Ring E221	3M™ Diamond Pad Conditioner Ring E221	3M™ Diamond Pad Conditioner Ring E221R (Refurbished)	3M <sup>™</sup> Diamond Pad Conditioner Ring E221R ( <b>Refurbished</b> )
Manufacturer	3M Company	3M Company	3M Company	3M Company
Manufacturing Location	Cottage Grove, Minnesota, USA	Cottage Grove, Minnesota, USA	Cottage Grove, Minnesota, USA	Cottage Grove, Minnesota, USA

### **Pad Conditioner Construction**

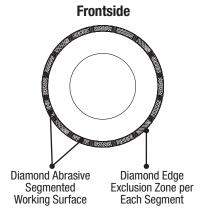
Carrier (substrate material)	304 SS	304 SS	304 SS	304 SS
Carrier Format	Ring	Ring	Ring	Ring
Carrier Size (diameter, nominal size)	260 mm	360 mm	260 mm	360 mm
Abrasive Material	Nickel based alloy with patterned diamond			
Abrasive Working Surface	Segmented	Segmented	Segmented	Segmented

## **Design Parameters**

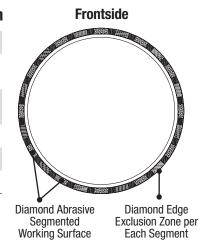
Diamond Size (nominal size)	251 μm	251 μm	251 μm	251 μm
Diamond Type	Type 4, semi-sharp	Type 4, semi-sharp	Type 4, semi-sharp	Type 4, semi-sharp
Diamond Pattern Type	Square array	Square array	Square array	Square array
Flatness	<100 μm	<100 μm	<100 μm	<100 μm
Aggressiveness Value (BL)	65-75	_	65-75	_

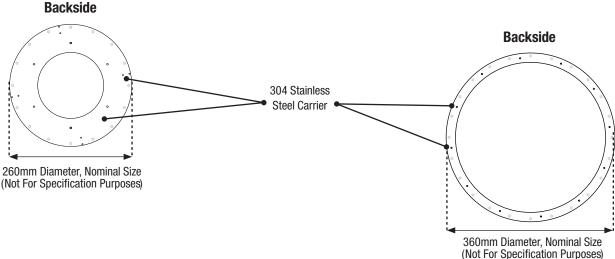


### 3M™ Diamond Pad Conditioner E221



# Diamond Pad Conditioner Construction Carrier Material 304 SS Carrier Size (diameter, nominal size) 260 mm, 360 mm Abrasive Material Nickel based alloy with patterned diamond Abrasive Working Surface Segmented Diamond Size (nominal size) 251 µm Diamond Type Type 4, semi-sharp





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