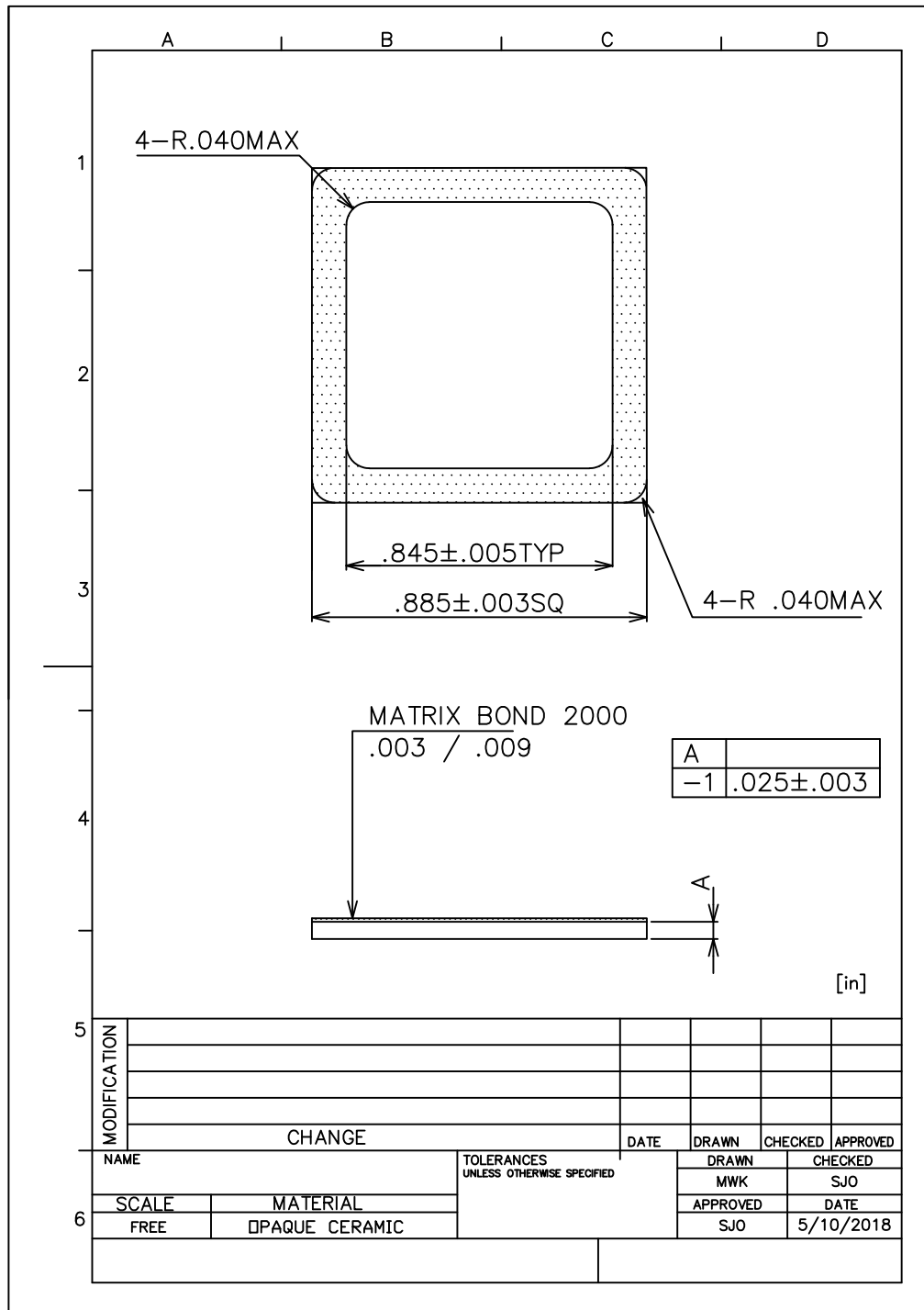


SSM P/N CR-88503



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Product Name: **MatriX Bond™ 2000**

Product Description:

MatriX Bond 2000 is a solid latent cure adhesive for ceramics, metals, and may also be used with some plastics with proper surface treatments. It is formulated for high speed, automated sealers where assemblies can see as low as 5 minute sealing cycles, or low temperature clip and bake. Standard colors are available in black, white and natural (amber).

Product Storage and Handling:

Matrix Bond 2000 comes pre-applied on customer specified or furnished parts. Upon receipt, the parts can be stored at room temperature for up to six months for most applications. Parts may also be stored refrigerated or frozen for up to one year. Care should be taken to allow any cold storage parts to reach room temperature and be condensation free before opening the package. Care should also be taken not to bump or drop cold parts. This may lead to the adhesive chipping or flaking off the part. Note that MatriX Materials does not warrant against chipped or flaked adhesive on parts that have been frozen or refrigerated.

Product Use:

With a wide variety of materials, shapes, sizes and device environmental requirements, adhesive applications frequently required optimized processing to ensure good seals and yields. The following sealing conditions are recommended as a generic starting point for your process development for your specific application. It is highly recommended that you run an optimization design of experiments for your assembly requirements. MatriX Materials technical service group is ready to help you with your optimization experiments if you require help.

Cure Temp: The recommended range is
120°-175°C (250°-350°F)

Cure Time: 60 minutes @ 120°C (250°F)
5 minutes @ 175°C (350°F)

Pressure: Pressure will vary widely depending on your application.
The recommended starting pressure for this adhesive is ½
Lbs per square inch of bond area.

Ventilation: Use this product with adequate ventilation during cure. Do not get in eyes or on skin. Avoid breathing any vapors. Wash thoroughly with soap and water after handling.
Caution: Epoxy resins may cause eye and skin irritation or allergic dermatitis. (See MSDS Sheet)

Typical Cured Properties:

Shore D Harness @ 25°C (77°F)	85	
Tg (by DSC)	130°C	(266°F)
Shear Modulus @ 25°C (77°F)	616 MPa	(89.4 ksi)

Electrical Properties - tested per ASTM D149, D150:

Dielectric Constant	3.50 @ 1 KHz
Dissipation Factor	0.085 @ 1 KHz
Dielectric Strength	> 280 volts/mil

Compressive Properties per ASTM D695

Compressive Strength @ 25°C (77°F)	75.5 MPa	(10,950 psi)
Compressive Modulus @ 25°C (77°F)	2,145 MPa	(311 ksi)

Typical Use Properties:

Max Spike Temperature (Up to 3 minutes exposure)	290°C (554°F) Note: Some discoloring may occur.
Max long term use temperature	170°C (350°F)
Thermal Cycling (-65°C to 150°C) (Liquid to liquid with 1 minute dwell) Ceramic to Ceramic	> 20 cycles

Disclaimer: The information supplied in this document is for guidance only and should not be construed as a warranty. All implied warranties are expressly disclaimed, including without limitation any warranty of merchantability and fitness for use. All data is subject to change.

Users should review the Materials Safety Data Sheet (MSDS) to determine possible health hazards, appropriate engineering controls and precautions to be observed in using the material.
