



**Manufacturer:**  
3M™

**Product Name:**  
3M™ 865X Final Polish Lapping Film Disc - 5 inch

**Manufacturer Part Number:**  
865X-503N

▶ [Click here for more details on the 3M™ 865X Final Polish Lapping Film Disc - 5 inch](#)



Technical Data | November 2023

## 3M™ Lapping Film 865X

### Product Description

3M™ Lapping Film 865X is constructed with precision coated SiO<sub>2</sub> minerals on a 3mil polyester film. This lapping film is used for the final step in fiber optic connector polishing. This slurry-free, long-life product produces high quality connectors and controlled fiber heights that can meet Telcordia or similar standards for fiber optic connector polishing. 3M™ Lapping Film 865X may be used with most polishing machines and fixtures.

### Applications

3M™ Lapping Film 865X is used as the final polishing step for fiber optic connector finishing and may be used for lapping and polishing small electronic, optical or miscellaneous parts where silica slurry is used.

### Key Features

- Long life
- Clean end faces
- Minimal cleaning required
- Slurry not required (typically used with water)
- Produces excellent surface finish
- Efficient polishing can help reduce overall process time
- Precise polishing can help produce higher yields
- Compatible with most industry standard polishing machines
- Consistent fiber heights
- Easy to identify working side

### 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.

Product ID (Plain back)	Product ID (PSA back)	Mineral	Color
865X	n/a	SiO <sub>2</sub>	White

### Converted Forms

- Sheets, discs and rolls.

### Backing

- Polyester film, nominal thickness 3 mil.

### Number of Uses

The number of uses is dependent on equipment, connectors and process parameters specific to your application.

**Contact the professionals at Fiber Optic Center for a quote or to get more details.**

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*Product specifications and data are subject to change without notice.*



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### 3M™ Lapping Film 865X

#### Cleaning

The film should be wiped clean between uses with deionized (DI) water and a clean tissue. Connectors and fixtures should also be cleaned to minimize scratching.

#### Process Conditions Chart

These recommendations provide typical starting points. Actual process may vary depending on equipment used and finish requirements.

3M™ Lapping Film 865X Process Conditions After 3M's 1um or 0.5um DL						
Machine	Connector	Pad	Time (sec)	Speed	Force/Conn	Lubricant
Domaille	SC	70d	30-60	140	0.4-0.5 lbs	Deionized or Distilled water
	LC	80d	30-60	100	0.2-0.3 lbs	Deionized or Distilled water
SII-OFL 12	SC	65d	60-90	n/a	point 1	Deionized or Distilled water
	LC	70d	60-90	n/a	point 2	Deionized or Distilled water
SII-OFL 15	SC	70d	45-60	210	200-250 gms	Deionized or Distilled water
	LC	80d	45-60	220	150-200 gms	Deionized or Distilled water
Seikoh Giken SPFG550	SC	70d	45-90	n/a	n/a	Deionized or Distilled water
	LC	80d	45-90	n/a	n/a	Deionized or Distilled water
Nanometer	SC	65d	50-100	n/a	0.35 psi	Deionized or Distilled water
	LC	70-80d	50-100	n/a	0.35 psi	Deionized or Distilled water
Generic Conditions	SC	65-70d	60	Medium	200-250 gms	Deionized or Distilled water
	LC	80-90d	60	Slower	150-200 gms	Deionized or Distilled water

#### Storage and Shelf Life

The shelf life of 3M™ Lapping Film 865X is 5 years from the date of manufacture when stored in the original packaging materials and stored at 10°C - 30° C (50°F - 86°F) and 30-60% 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 references to the 3M specifications, test methods names, and test results for the product's performance attributes that the product will be supplied against.

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## 3M™ Lapping Film 865X

**Safety Data Sheet:** Consult Safety Data Sheet before use.

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