

**FA602 - November 13, 2019**

Item # FA602 was discontinued on November 13, 2019. For informational purposes, this is a copy of the website content at that time and is valid only for the stated product.

**FIBER OPTIC SACRIFICIAL INTERFACES, SINGLE MODE**

- ▶ Provides Protection for Fiber-Coupled Instruments
- ▶ Operating Wavelength Range Between 633 - 1550 nm
- ▶ FC/PC Input and Output Connectors



**FA602**  
 633 - 780 nm  
 ≤2.0 dB Insertion Loss



**FA901**  
 980 - 1550 nm  
 ≤1.0 dB Insertion Loss

**OVERVIEW**

**Features**

- Protects External Fiber Connectors and End Faces of Fiber-Coupled Instruments
- Item Number and Wavelength Range Engraved on Housing
- FC/PC Input and Output Connector

Thorlabs' Single Mode Fiber Optic Sacrificial Interfaces protect external fiber connectors and end faces of fiber-coupled instruments from damage caused by unclean connections or repeated use. Since their primary purpose is to act as an expendable intermediary component, these sacrificial interfaces are designed to minimize insertion loss and not add additional attenuation into the system; see the table to the right for details. Using these interfaces can help prevent unwanted instrument recalibrations and repairs due to damaged input connectors, resulting in reduced instrument downtime. Once a sacrificial interface is damaged, it should be properly disposed of and replaced to ensure full protection for end faces and fiber connectors.

| Item #   | FA901   | FA602   |
|--|---|---|
| Fiber Connector                                      | FC/PC   |   |
| Key Size   | Universal (Female 2.2 mm Wide-Key Input, Male 2.0 mm Narrow-Key Output)                           |   |
| Insertion Loss (Typical)                             | ≤1.0 dB   | ≤2.0 dB   |
| Operating Wavelength Range                           | 980 - 1550 nm   | 633 - 780 nm  |
| Insertion Loss <sup>a,b</sup><br>(Click for Details) | <br>Raw Data | <br>Raw Data |
| Transmission (Typical)                               | ≥79.4%  | ≥63.1%  |
| Return Loss  | ≥40 dB  |   |
| Maximum Input Power                                  | 300 mW  |   |
| Polarization Dependent Loss (PDL)                    | ≤0.1 dB   |   |
| Operating Temperature                                | -40 to 85 °C  |   |
| Fiber <sup>c</sup>                                   | SM980-5.8-125   | SM600   |

<sup>a,b</sup> The shaded region in this plot indicates the operating wavelength range that we specify for each sacrificial interface. Performance outside of this range is not guaranteed.

These sacrificial interfaces have a 2.2 mm wide key female FC/PC input connector, making them compatible with both narrow key and wide key male connectors. The output connector is a 2.0 mm narrow key male FC/PC connector. The sacrificial interfaces are made with polarization-insensitive doped fiber; the specific fiber type used for each is listed in the table. Each interface includes two protective dust caps.

- b. The insertion loss was measured by using a detector in freespace, therefore additional losses can be expected if used as the intermediary element between two fiber-coupled components.
- c. This fiber was used to obtain the specifications in this table. It was also used as the internal fiber.

**Limited  
STOCK**

These items will be retired without replacement when stock is depleted. If you require this part for line production, please contact our OEM Team.

### Fiber Optic Sacrificial Interface

| Part Number | Description   | Price   | Availability |
|-------------|---|---------|--------------|
| FA901       | Fiber Optic Sacrificial Interface / Attenuator, 980 - 1550 nm, $\leq 1.0$ dB, FC/PC | \$53.70 | Today        |
| FA602       | Fiber Optic Sacrificial Interface / Attenuator, 633 - 780 nm, $\leq 2.0$ dB, FC/PC  | \$48.80 | Lead Time    |



# Typical FA602 Insertion Loss

