Brimrose Corporation of America
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Fiber Collimators / Focusers

Brimrose offers a complete line of high performance collimators and focusers designed to collimate or focus light exiting from a fiber to a specified beam diameter or spot size. By utilizing diffraction limited lenses the spot size of a few microns can be achieved. We design and manufacture matched pairs of collimators and focusers to couple light in and out of the desired devices.

Fiber optic collimators are available for any wavelength for 180 nm to 2100 nm, utilizing multimode, single mode, or polarization maintaining (PM) fibers. Our PM devices maintain polarization extinction ratio better than 20dB. The back reflections of 60 dB or better is available. All our fibers and grin lenses are antireflection coated in house for maximum performance.
Brimrose introduces the latest in development of high performance fiber collimators. The outcome is a very small insertion loss, excellent return loss, and small beam divergence.

We look forward to apply our collimators to your device applications.

Features

- Low insertion loss
- Minimized return loss
- Miniature size
- Light weight
- Low price
- Optical path epoxy free and solder package

Applications

- Fiber optic sensors
- Measurement systems
- Optical devices
- Signal processing
- Laboratory testing

Environment Test

- Temperature cycling test -40°C to +80°C for 14 days, rate 1°C/min dwell, 1 hour at extremes
- High temperature bake:80°C for 2,000 hours
- Vibration test: 3 axes 20g's at 20-2000Hz
- Shock test: 3 axes, 100 g's, 11ms
- Max. tensile test: 5N force for 10 sec.

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Model #: COL-1460-P-0.4-40-3-3-1-20
Model #: COL-1480-S-0.4-40-3-3-1-20

Specifications		
Parameter	1460	1480
Operating temp. °C	0° to +40°	
Typ. Insertion loss	1.0 dB	1.0 dB
Max. Insertion loss	1.5 dB	1.5 dB
Return loss	>40	>40
Beam Divergence	<0.25 degree	
Acceptance angle	<0.15 degree	
Bean Diameter mm	~0.42	
Spectral Width nm	>±30	
Storage Temperature °C	-10 to +60	

Package Dimensions in mm