

Mode Field Adapter (MFA)

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Product Overview

Mode field adapter for high-power laser and fiber-amplifier systems, used to transition between SMA and LMA fibers while minimizing signal loss.

Features	Applications
High transfer efficiency; High power; High stability and reliability; Custom configuration available	High-power lasers; Fiber amplifiers

Technical Specifications

For configuration selection and quotation, use the Component Finder at www.kernsoptic.com/contacts. Final special configurations are subject to engineering review.

SMA Fiber	LMA Fiber	Forward IL	Backward IL
6/125	10/125	0.3 dB	0.3 dB
10/125	20/125	0.4 dB	0.5 dB
10/125	25/250	0.5 dB	0.7 dB
10/125	20/400	0.5 dB	0.7 dB
20/250	30/250	0.2 dB	0.2 dB

Shared Specifications

Parameter	Specification	Unit
Port Configuration	1x1	-
Signal Wavelength	1030-1080 or 1450-1600	nm
Total Processing Power	As specified	-
Polarization Extinction Ratio (PM fiber)	>=18	dB
Polarization Dependent Loss (SM fiber)	<=0.15	dB
Return Loss	>=45	dB
Operating Temperature	-5 to +70	°C
Storage Temperature	-40 to +85	°C

Package Dimensions

Package	Dimensions
D1-D7	Standard KernsTech package family
Custom	Dimensions confirmed during engineering review

The master catalog specifies D1-D7 or custom package selection. Final package is confirmed during engineering review.