Polarization-Maintaining Combiner Specifications

MM Input Fibers	Ytterbium-Doped for 1 μm Applications			Erbium/Ytterbium-Doped for 1.5 μm Applications	
Number of input fibers	6	6	18	6	6
Numerical aperture	.165	.22	.165	.165	.22
Core diameter	105 ± 3 μm	105 ± 3 μm	105 ± 3 μm	105 ± 3 μm	105 ± 3 μm
Cladding diameter	125 ± 2.5 μm	125 ± 2.5 μm	125 ± 2.5 μm	125 ± 2.5 μm	125 ± 2.5 μm
Coating outer diameter	250 ± 15 μm	250 ± 15 μm	250 ± 15 μm	250 ± 15 μm	250 ± 15 μm
Pigtail fiber length	1 meter	1 meter	1 meter	1 meter	1 meter
Signal Input Fiber					
One signal fiber type	PM 980	PM 980	PM 980	PM 1550	PM 1550
Numerical aperture	0.13 ± .015	0.13 ± .015	0.13 ± .015	0.13 ± .015	0.13 ± .015
Cladding diameter	125 ± 2.5 μm	125 ± 2.5 μm	125 ± 2.5 μm	125 ± 2.5 μm	200 ± 2.5 μm
Coating outer diameter	250 ± 15 μm	250 ± 15 μm	250 ± 15 μm	250 ± 15 μm	300 ± 15 μm
Pigtail fiber length	1 meter	1 meter	1 meter	1 meter	1 meter
Undoped PM Output Fiber					
Numerical aperture	.45 ± .03	.45 ± .03	.45 ± .03	.45 ± .03	.45 ± .03
MFD @ operating wavelength (1060 or 1550 nm)	7.0 μm	7.0 μm	7.0 μm	10.2 μm	10.2 μm
Cladding diameter	125 ± 2.5 μm	200 ± 2.5 μm	200 ± 2.5 μm	125 ± 2.5 μm	125 ± 2.5 μm
Coating outer diameter	250 ± 15 μm	300 ± 15 μm	300 ± 15 μm	250 ± 15 μm	250 ± 15 μm
Pigtail fiber length	1 meter	1 meter	1 meter	1 meter	1 meter
Performance					
Multimode transmission (*1)	>90%	>90%	>90%	>90%	>90%
PM transmission	>80%	>80%	>80%	>80%	>80%
Extinction ratio @ operating wavelength (*2)	>20 dB	>20 dB	>20 dB	>20 dB	>20 dB
Optical return loss (multimode)	40 dB	40 dB	40 dB	40 dB	40 dB
Maximum total input power (*3)	35 Watts	(*3)	100 Watts	35 Watts	(*3)
Operating temperature	0 to +70°C	0 to +70°C	0 to +70°C	0 to +70°C	0 to +70°C
Compatibility					
Recommended for use with these OFS cladding pumped fibers	Yb PM 125	Yb PM 200	Yb PM 200	ErYb PM 125	Contact for availability
Order by Part Number	**TFB1353**	**TFB23B3**	**TFB43B3**	**TFB1346**	**TFB2346**

Available Only By Special Arrangement

(*1) Tested by multimode input light with 70% and 99% of power confined with NA of 0.09 and 0.15 , respectively.

(*2) Axis orientation can be maintained by special request.

(*3) These values are based on testing to date with 5W/leg conditions. Device capability is higher but has not yet been formally tested.