

ERBIUM AMPLIFIER COMPONENTS

TAP/ISOLATOR/PUMP COUPLER

DiCon's Tap/Isolator/Pump Coupler integrates a thin film optical tap with a single or dual stage isolator and 980 or 1480 pump coupler for use in fiber amplifiers. The Tap/Isolator/Pump Coupler provides lower insertion loss, in a smaller package at a lower cost than conventional approaches using separate, discrete components.



FEATURES

- Lower signal insertion loss, compared to separate, discrete components
- Single stage or dual stage isolator option
- Available with 980 nm or 1480 nm pump coupler
- Various tap ratios available
- Tested to Telcordia GR-1221

APPLICATIONS

Tap/Isolator/Pump Couplers minimize insertion loss in amplifiers where an optical tap and a 980 or 1480 pump/isolator are used in series. Based on thin film technology, they can be used in either single-pump or multi-pump applications without the need to splice together separate components.



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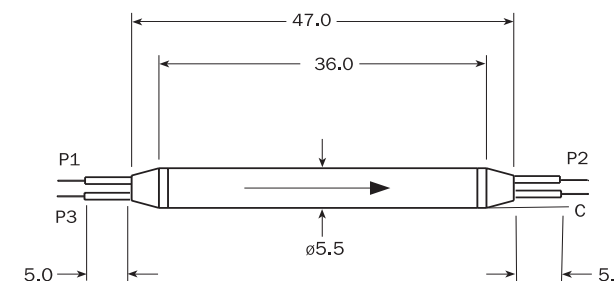
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SPECIFICATIONS^{1,2}

Parameter	Single Stage	Dual Stage
Power isolation C - P1; 23°C	27 dB min.	50 dB min.
Power isolation C - P1; Top	22 dB min.	40 dB min.
Signal passband	1530 - 1565 nm	
Signal insertion loss P1 - C	1.1 dB max. for 1480 pump 1.4 dB max. for 980 pump	
Signal flatness P1 - C	0.1 dB max.	
Tap insertion loss P1 - P3	16.6 dB min., 17.8 dB max.	
Pump insertion loss C - P2	0.5 dB max.	
Pump isolation C - P2	12 dB min.	
Tap ripple P1 - P3	0.05 dB max.	
Signal PDL P1 - C	0.1 dB min., 0.15 dB max.	
Tap PDL P1 - P3	0.1 dB min., 0.15 dB max.	
PMD P1 - C	0.06 ps max.	
Directivity	55 dB min	
Back-reflection	-55 dB max.	
Optical power	300 mW min.	
Operating temperature	0°C to +65°C	
Storage temperature	-40°C to +85°C	

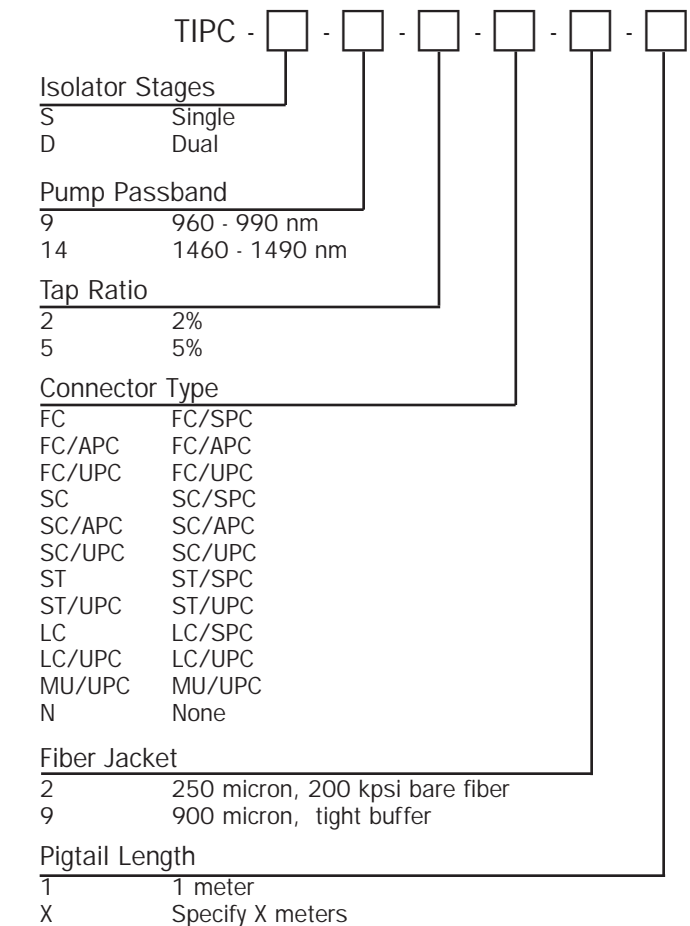
1. All specifications referenced without connectors.
2. Signal L passband available upon request.

HOUSING DIMENSIONS¹



Units: mm
1. Optional 42 mm housing lengths by request.

ORDERING INFORMATION¹



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