

RAMAN AMPLIFIER COMPONENTS

RAMAN 14xx/1550 PUMP COUPLER

DiCon's Raman 14xx/1550 Pump Coupler uses an innovative design for high power capabilities up to 2.0 Watts. Constructed using a thin film filter mounted between a pair of GRIN lens collimators, the Raman 14xx/1550 Pump Coupler multiplexes high power 14xx Raman lasers with a 1550 transmission signal. DiCon's Raman 14xx/1550 Pump Coupler



is housed in a compact, environmentally stable package that offers superior resistance to humidity and temperature and is suitable for easy integration within a Raman gain module.

FEATURES

- High power capabilities up to 2.0 Watts
- Demonstrated long term high power reliability
- Tested to Telcordia GR-1221

APPLICATIONS

Raman 14xx/1550 Pump Couplers are used to couple a high power 14xx Raman pump lasers with 1550 nm transmission signals in Raman or erbium doped fiber amplifiers.



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SPECIFICATIONS¹

Insertion loss C - P1	0.5 dB typ., 0.7 dB max.
Insertion loss C - P2	0.5 dB typ., 0.6 dB max.
Isolation C - P1	30 dB
Isolation C - P2	10 dB min., 12 dB typ.
Directivity	55 dB min.
Back-reflection	-50 dB max.
PDL	0.05 dB typ., 0.1 dB max.
Optical power	2.0 W max.
Thermal stability	0.005 dB/°C max.
Fiber type	9/125 Corning SMF-28
Operating temperature	-5°C to +70°C
Storage temperature	-40°C to +85°C

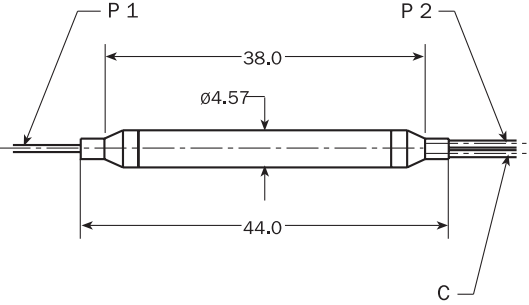
1. All specifications referenced without connectors.

ORDERING INFORMATION

RCC - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/>	
Transmission Band C - P1 ^{1,2}	
14	1410.0 - 1490.0 nm
15	1530.0 - 1565.0 nm
15/16	1530.0 - 1610.0 nm
Reflection Band C - P2 ^{1,2}	
14	1410.0 - 1490.0 nm
15	1530.0 - 1565.0 nm
15/16	1530.0 - 1610.0 nm
Connector Type	
FC	FC/SPC
FC/APC	FC/APC
FC/UPC	FC/UPC
SC	SC/SPC
SC/APC	SC/APC
SC/UPC	SC/UPC
ST	ST/SPC
ST/UPC	ST/UPC
LC	LC/SPC
LC/UPC	LC/UPC
MU/UPC	MU/UPC
N	None
Fiber Jacket	
2	250 micron, 200 kpsi bare fiber
9	900 micron, tight buffer
Pigtail Length	
1	1 meter
X	Specify X meters

1. All wavelengths referenced to vacuum.
2. Transmission and reflection bands must be different.
Other transmission and reflection bands available upon request.

HOUSING DIMENSIONS¹



Units: mm
1. Optional 38 or 40 mm housing lengths by request.

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