



RDR2000 – SINGLE-CHANNEL DISPERSION COMPENSATING FBG

KEY FEATURES

- Low insertion loss
- Flexible compensation range
- Ultra-low group delay ripple (GDR)
- Highly accurate slope compensation

APPLICATIONS

- Regional and long haul DWDM networks

DESCRIPTION

The **RDR2000 – Single-Channel Dispersion Compensating Fiber Bragg Grating** delivers a breakthrough solution in dispersion compensation. This standard Single Channel DCG has been designed specifically to harness the performance and flexibility of Redfern's proprietary direct UV-Writing technology, **ROC DirectRite™**.

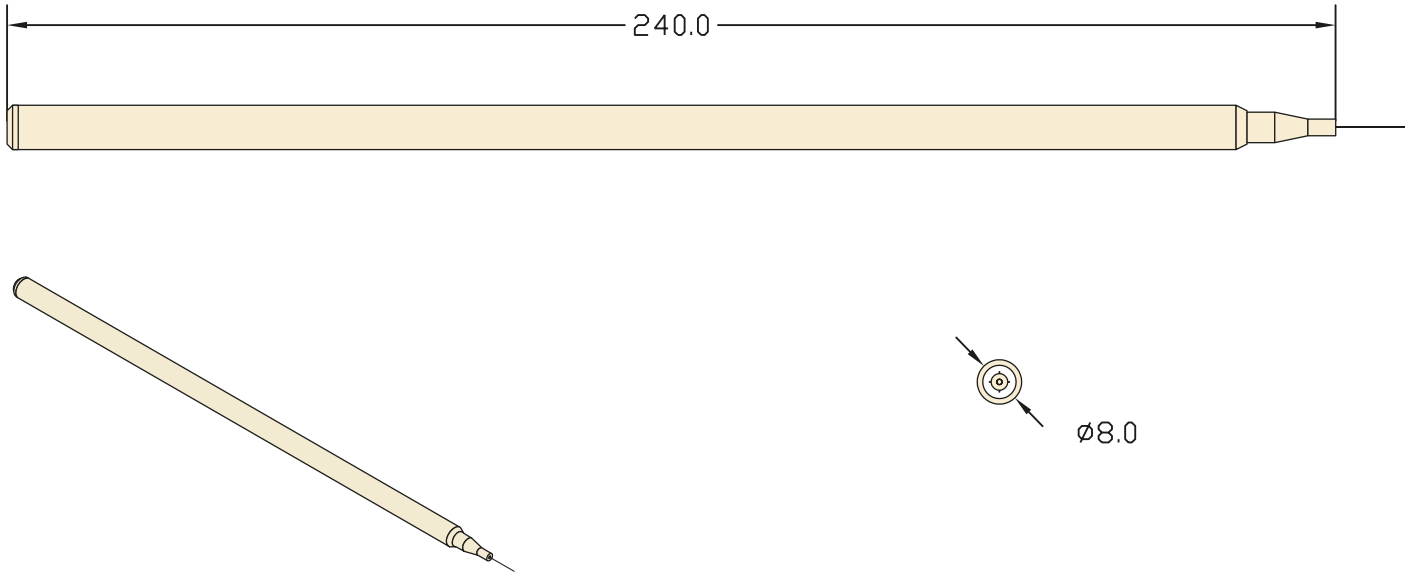


SPECIFICATIONS: RDR2000

Centre wavelength (λ_c)	C-band, ITU-T grid	
Channel spacing	100	(GHz)
Clear channel bandwidth @ -0.5dB	> 0.3	(nm)
Dispersion range	-640 to -1800	(ps/nm)
Dispersion tolerance	± 3	(%)
Group delay ripple (unfiltered)	< ± 10	(ps)
Reflectivity	> 75	(%)
Insertion loss ripple	< 0.25	(dB)
Isolation (adjacent channel)	> 25	(dB)
Isolation (non-adjacent channels)	> 30	(dB)
Polarization-dependent loss	< 0.1	(dB)
Fiber pigtail length	> 0.5	(m)
Operating temperature range	-5 to +70	(°C)
Storage temperature range	-40 to +85	(°C)
Athermal package dimensions	$\varnothing 8 \times 240$	(mm)

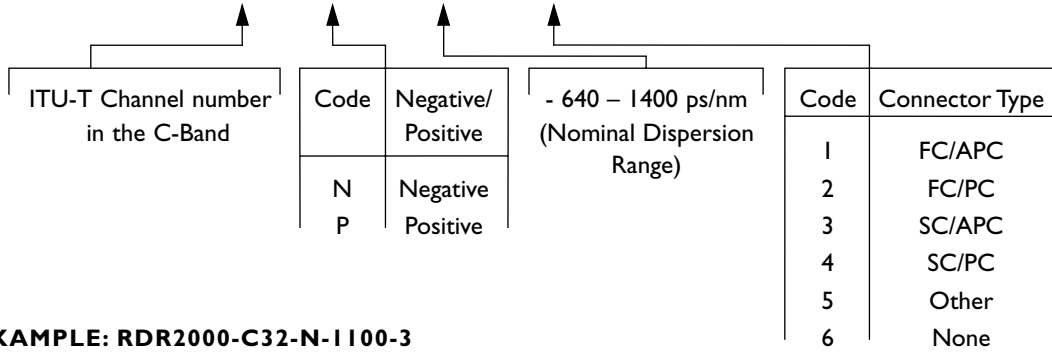
1. Clear channel bandwidth is the actual FBG bandwidth minus the guard band of 0.1nm.
2. Group Delay is measured with the modulation phase shift method (Mod. Freq. 250 MHz) using a wavelength step size of 1pm. GDR is calculated by subtracting the measured group delay from a linear curve fit to the group delay data within the channel bandwidth.

RDR2000 – ATHERMAL PACKAGE DIMENSIONS:



ORDERING INFORMATION:

Part No: **RDR2000**-□□□-□-□□□□-□



EXAMPLE: RDR2000-C32-N-1100-3

SALES REP CONTACT INFORMATION:

Specifications are subject to change without notice. March 2009. No warranty or guarantee is given by ROC that a product will perform to specification unless set out in the conditions of sale of the product or required by law. ROC068/RDR2000_0309

PERFORMANCE, INTEGRITY & EXCELLENCE

REDFERN OPTICAL COMPONENTS: Suite 102 National Innovation Centre, Australian Technology Park, Eveleigh 1430 NSW Australia.
 T: +61 2 9209 4730 F: +61 2 9209 4728 W: www.redferncomponents.com FOR ORDERS CONTACT: sales@redferncomponents.com