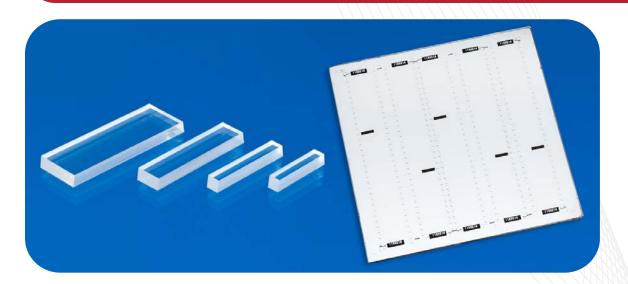# ColorChip

1XN PLC Optical Splitter Product Lines

Colorchip's Optical Splitter product lines have gained worldwide recognition to be the best in their class. They are based on Ion-Exchange, Waveguides-in-Glass technology designed, developed and manufactured at ColorChip.

The Ion-Exchange technology provides superior performance, reliable and cost effective solutions.

Our Optical Splitters provide low insertion loss, low Polarization Dependent Loss(PDL), superb channel uniformity, ultra wide wavelength uniformity and robust design complying with Telcordia GR-1209 and GR-1221 requirements.

PLC Splitters Chips are available in two grades:

- "Premium" Grade – providing the best performance with extremely low insertion loss and superior uniformity
- "A" Grade- an overall excellent performance splitter.

Splitter chips are provided in chip or 4'' wafer format.

Splitter chips and modules can be designed per specific customer requirements.

Splitter modules are available upon request.

Features:

- Low Insertion Loss
- Operating Wavelength 1250nm-1650nm
- Low PDL
- Excellent Channel Uniformity
- Telcordia Compliance Tested

Wafer Format:

- Lid & Chip Configuration
- Dicing Marks
- Optimized Dicing Material

Applications:

- FTTX Networks
- Analog and Digital PON
- CATV Networks

PLC Optical Splitter Product Line Specifications

	1 x 4	1 x 8	1 x 16	1 x 32	1 x 64
Premium Grade					
Maximum Insertion Loss (dB)	6.7	9.8	13.0	16.0	19.6
Uniformity (dB)	< 0.6	< 0.7	< 0.7	< 1.0	< 1.4
A Grade					
Maximum Insertion Loss (dB)	7.0	10.0	13.2	16.2	19.8
Uniformity (dB)	< 0.6	< 0.8	< 1.0	< 1.2	< 1.5
General Operating Specifications					
Operating Wavelength (nm)	1250 - 1650				
Maximum PDL[1] (dB)	< 0.15		< 0.2		< 0.25
Return Loss (dB)	> 55				
Operating Temperature (ºC)	-40 to +85				
Storage Temperature (ºC)	-40 to +85				

[1] Measured at room temperature in 1310nm and 1550nm

PLC Chip Dimensions

Description	1 x 4	1 x 8	1 x 16	1 x 32	1 x 64
Chip Dimensions (nm) (L x W x H)	9.8 x 2.25 x 2.35	11.9x2.25x2.35	16.5x2.52x2.35	21.5x5x2.35	26.35x9x2.35

Ordering Information FF-G-NNN

PLC Format (FF)	Grade (G)	Number of Output Ports (NNN)
70 Chips	1 "Premium"	104 - 1X4
75 Wafers	2 "A"	108 - 1X8
		116 - 1X16
		132 - 1X32
		164 - 1X64

To place and order or obtain further information please contact: info@color-chip.com

About Color-Chip

ColorChip is a pioneer and a world leading innovator in the fields of Integrated Optical Components and Sub-Systems. Today, ColorChip enables reliable, scalable and robust High Speed Networking and Communications solutions. Through our two lines of business, we deliver industry leading Optical High-Speed Transceivers to the Datacom/Telecom Markets and Passive Optical Splitters to the FTTx markets.