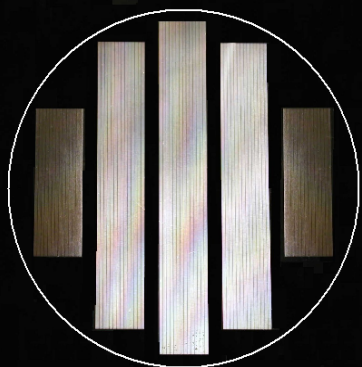


Periodically Poled Lithium Niobate



DESCRIPTION

Periodically Poled Lithium Niobate chips offer a cost effective method for visible and mid-infrared frequency generation. A multi-step lithographic and electric field poling process effects a permanent change in the non-linear properties of Lithium Niobate. Using quasi-phase matching, with a selection of periods, crystal widths and lengths, PPLN offers users an alternative to dedicated frequency conversion crystals.

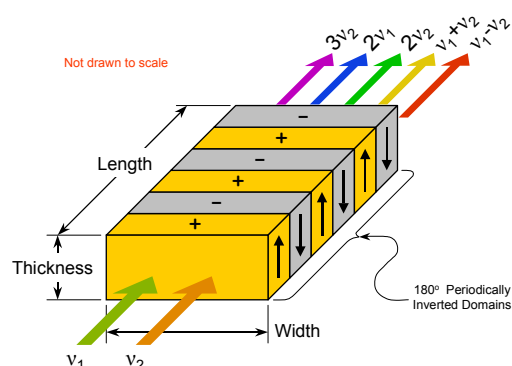
APPLICATIONS

- Infrared Jamming
- Visible Light Generation
- Wavelength Conversion
- Remote Sensing

FEATURES

- Difference and Sum Frequency Generation
- Broad-Range, Precise Frequency Conversion
- High Conversion Efficiency from Low Peak-Power Laser Sources
- Offers Pathway to Compact Designs for Portable Systems
- Single and Multiple Gratings Available

Harmonic Generation Examples



SPECIFICATIONS

Chip Thickness (standard)	0.5mm and 1mm *
Chip Width (standard)	5mm and 10mm **
Chip Length (standard)	10, 20, 40 & 50mm **
Single Grating Periods	16.9, 19.0, 21.5, 28.2, 29.0, 29.3, 29.6, 29.8, 29.95, 30.0, 30.2, 31.0, 31.3, 31.65 μ m, plus custom periods
Multiple Grating Periods	Many multiple grating designs available
Optical Coatings	Anti-reflective or High-reflective coating
End Surfaces	Optically polished to target specifications
Damage Threshold (typical)	300 MW/cm ² @ 1064nm, 10ns pulse
*	Will soon be offering thicker sizes
**	Other widths and lengths available upon request

10/02



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