

SRC Series PPKTP (Periodically Poled KTP)

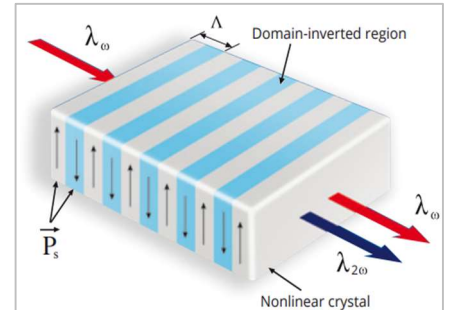
PPKTP (Periodically Poled KTP) is a popular nonlinear material.

PPKTP material is widely recognized for these features:

- Supports all nonlinear applications within KTP transparency range
- It doesn't have the phase matching limitations of bulk KTP
- 3* larger effective nonlinear coefficient compared to bulk KTP

Advantage:

- Highest nonlinear coefficient
- Free of walk-off
- Large quantities for OEM mass-production as well as small quantities for R&D
- Broad phase-matching range
- Type 0 or type II interaction



We provide the following products:

- 1) Single PPKTP element
- 2) PPKTP for SHG: Second Harmonic Generation (SHG) is a nonlinear optical process whereby the pumping wavelength generates a new wavelength that is half of the input wavelength or double frequency.
- 3) PPKTP DFG: Difference Frequency Generation (DFG), generation of light with a frequency that is the difference between two other frequencies.
- 4) PPKTP SFG: Sum Frequency Generation (SFG) is a non-linear optical process. This phenomenon is based on the annihilation of two input photons at angular frequencies ω_1 and ω_2 while, simultaneously, one photon at frequency ω_3 is generated.
- 5) PPKTP OPO: we provide the following types of PPKTP OPO:
 - Standard DBAR coated for pump/signal wavelengths
 - Monolithic single pass and double pass
 - Confocal monolithic with convex/concave faces

Typical Specifications:

Transparency Range	350-4000nm
Length	Up to 30mm
Standard Aperture*	1*2
Operation Temperature	Near room temperature / per request
Coating Options	Extra/intra cavity, AR/AR, AR/HR
Damage Threshold	600MW/cm ² at 1064nm, for 10ns pulses

*Custom apertures are available upon request