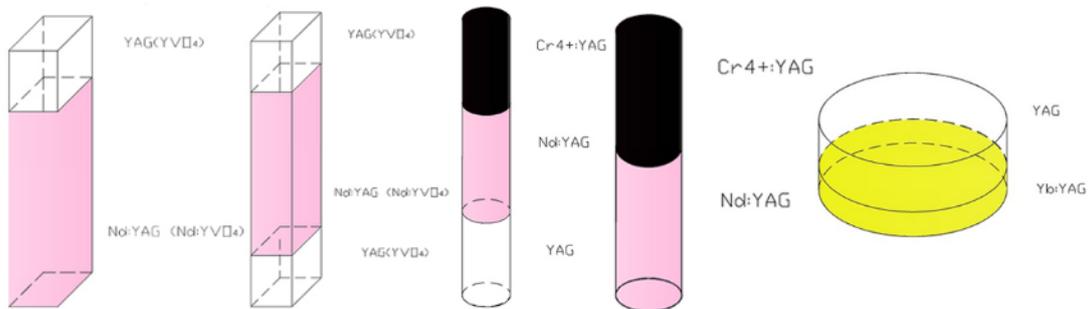


Bonding Crystal

Bonding (Diffusion bonded) crystals consist of one laser crystal and one or two undoped material. They are combined by optical contact method and further bonded under high temperature. Diffusion Bonded Crystal helps to decrease thermal lens effect considerably.

HG Optronics.,Inc. supply various standard assembly types as follows

| Material | Doping concentration(atm) or Optical Density(cm-1) | Aperture (mm) | Length of laser crystal(mm) |
|---|--|---------------|-----------------------------|
| YVO ₄ + Nd:YVO ₄ + YVO ₄ | 0.1%-3% | 1×1-20×20 | 0.15-30 |
| | | Φ2-15 | |
| YAG+Nd:YAG+ YAG | 0.1%-2.5% | 1×1-20×20 | 0.125-200 |
| | | Φ2-15 | |
| YAG+Nd:YAG+ Cr ⁴⁺ :YAG | 0.1%-2.5% / 0.6~7 | 1×1-20×20 | 0.125-200 |
| | | Φ2-15 | |
| YAG+Nd:Ce:YAG+ Cr ⁴⁺ :YAG | 0.6~7 | 1×1-20×20 | 0.125-200 |
| | | Φ2-10 | |
| YAG+Yb:YAG+ Cr ⁴⁺ :YAG | 1%-45% / 0.6~7 | 1×1-20×20 | 0.125-200 |
| | | Φ2-10 | |



Other assembly type are also available, please contact us for more information.