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A Fabrinet Company

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## DPM Crystals

Diode-Pumped Solid State (DPSS) lasers are the ideal laser tools for applications such as pointing light shows, machining, material processing, spectroscopy, wafer inspection and medical diagnostics. Casix's Diode-Pump Microchip (DPM) crystal assemblies combine Nd: YVO<sub>4</sub> and KTP and act as the laser core for green DPSS lasers. Applications for DPMs include green laser pointers, laser displays, DPSS green lasers and surveying laser systems.

### Suggested applications

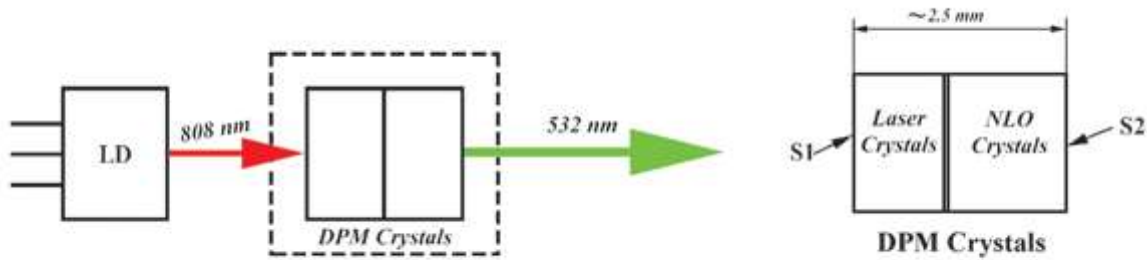
- Pump power for the low power DPM crystals is less than 300mW and the generated green output power can reach 10mW.
- Pump power for the middle power DPM crystals is less then 500mW and the generated green output power can reach 60mW.
- Pump power for the high power DPM crystals is less then 600mW and the generated green output power can reach 100mW. Heat deposit mechanics are needed.

### Capabilities

Additional YVO<sub>4</sub> crystal and coating specifications are available upon request.

**ATTRIBUTE      COMMERCIAL      HIGH PRECISION**

<b>Parallelism</b>	10 arc seconds	5 arc seconds
<b>Output Wavelength</b>	532nm	532nm
<b>Mode</b>	TEM00	TEM00
<b>Pump Power</b>	200mW; 300mW	200mW; 300mW
<b>Output Power</b>	>2.5mW; >20mW	>5mW; >30mW



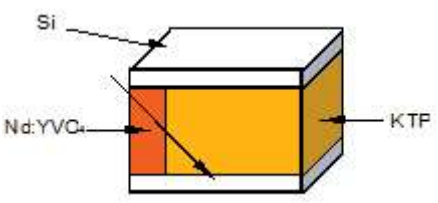
## High Performance Diode-pumped Microchip Crystal (Green DPM)

### Application

- Mini-Projector
- Display Laser
- DPSS Green Lasers
- Surveying Laser system
- Defence Laser System

### Feature

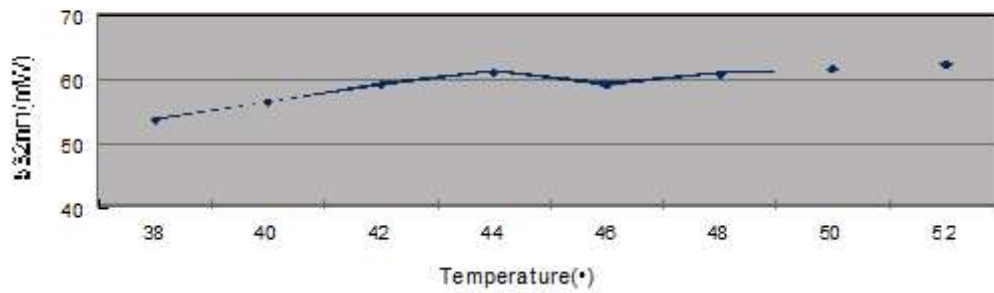
- Output Power 532nm (mW): >40
- Conversion Efficiency: >20%
- Dimension: 2x2.5x2.5mm
- Polarization Ratio: >10:1
- Operating Temperature at crystal surface(•): 35-50
- Output Beam Quality: TEM00



### Data Curve

- Output Power VS Temperature at 300mW Pumping Power
- Output Power VS Temperature at 300mW pumping Power

Output Power VS Temperature at 300mW Pumping Power



## Advantage

- High Conversion Efficiency
- High Extinction Rate
- Wider Temperature Range

## Product Categories

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- [Glass Optics](#)
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## Crystal Products

### Laser Crystals

**Nd: YVO4 Crystal**

**Nd: GdVO4 Crystal**

**DPM Crystal**

**Nd: YAG Crystal**

**CR4: YAG Crystal**

### Non-Linear Optical Crystals

### Birefringent Crystals

### IR Crystals

