

## ONYX® 4" High Power RF, Standard Magnetics

### Metric Specifications

#### Construction

Anode	304 Stainless Steel
Cathode Body	OFHC Copper
Insulator	PTFE / CTFE

#### Cooling Requirements

Flow Rate at Maximum Power	0.05 LPS
Maximum Input Pressure, Open Drain	4 BAR
Maximum Input Temperature	20 °C

#### Dimensions

A	Consult Factory	
B	Consult Factory	
C	19.1 mm	

#### General

Magnetic Enhancement	Permanent (NdFeB) Encapsulated
Maximum Temperature	100 °C
Source to Substrate Distance	50.8 mm - 304.8 mm
Weight, Approximate Without Options	Consult Factory

#### Maximum Sputtering Power \*

Cathode Voltage	100 - 1500 Volts
Discharge Current	0.1 - 4 Amps
Indirect Cooled Mode, DC	2 kW
Indirect Cooled Mode, RF	1.2 kW
Operating Pressure	1 - 50 mTorr

**Mounting, Standard**

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Power Cable, DC	Dual 1675A
Power Cable, RF	Dual 1675A
Power Connector, DC	Dual HN Connector, External Threads
Power Connector, RF	Dual HN Connector, External Threads
Stem, Outer Dimension Tubing	19.1 mm
Water, Outer Dimension Tubing	6.4 mm

**Target**

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Cooling	Indirect
Diameter	101.6 mm
Form	Circular / Planar
Thickness	1.6 mm - 9.6 mm

**Specifications Disclaimer**

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- All Angstrom Sciences NdFeB magnets are totally encapsulated and protected from degradation by water.
  - All sources are available in external configurations.
  - \* Maximum power for cathode only, a target material's properties, such as, thermal and electrical conductivity may limit the maximum process power level.
  - Some custom-engineered and specialty magnetrons may not meet standard specifications.
  - Specifications are subject to change without notice.
  - Typical performance. Results may vary with process parameters such as pressure, flow rate, target material, and substrate rotation, etc.
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Please contact us for specifications regarding your application.

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