

## ONYX® 4" DC / IC Target | MAG.II

### US Specifications

#### Construction

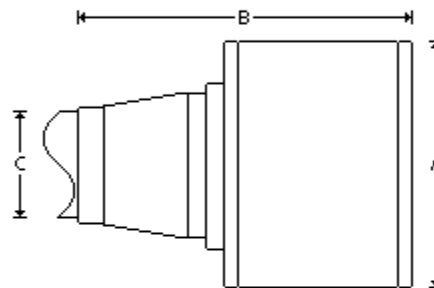
Anode	304 Stainless Steel
Cathode Body	OFHC Copper
Insulator	PTFE / CTFE

#### Cooling Requirements

Flow Rate at Maximum Power	1 GPM
Maximum Input Pressure, Open Drain	60 psi
Maximum Input Temperature	68 °F

#### Dimensions

A	6.420"
B	7.223"
C	1.000"



#### General

Magnetic Enhancement	Permanent (NdFeB) Encapsulated
Maximum Temperature	212 °F
Source to Substrate Distance	2.000" - 12.000"
Weight, Approximate Without Options	29 lb

#### Maximum Sputtering Power \*

Cathode Voltage	100 - 1500 Volts
Direct Cooled Mode, DC	3.5 kW
Direct Cooled Mode, RF	1 kW
Discharge Current	0.1 - 7 Amps
Indirect Cooled Mode, DC	1.2 kW
Indirect Cooled Mode, RF	300 Watts
Operating Pressure	0.5 - 50 mTorr

**Mounting, Standard**

Power Cable, DC	RG393
Power Cable, RF	1675A
Power Connector, DC	Type UHF Connector, External Threads
Power Connector, RF	Type HN Connector, External Threads
Stem, Outer Dimension Tubing	1.000"
Water, Outer Dimension Tubing	0.375"

**Target**

Cooling	Direct / Indirect
Diameter	4.000" / 5.490"
Form	Circular / Planar
Thickness, Magnetic	0.125" Ni
Thickness, Non-Magnetic	0.250" / 0.500"

**Specifications Disclaimer**

- All Angstrom Sciences NdFeB magnets are totally encapsulated and protected from degradation by water.
- All sources are available in external configurations.
- Magnetic material calculations are optimized with Nickel targets.
- \* 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.
- Thickness will vary depending upon coercivity of target material.
- Typical performance. Results may vary with process parameters such as pressure, flow rate, target material, and substrate rotation, etc.

Please contact us for specifications regarding your application.

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