

VALQUA Semiconductor Industry Products

ARMOR® CRYSTAL

High Performance Elastomer FKM O-Ring

❖ Product & Benefits

ARMOR® CRYSTAL is a very high purity FKM material for improved adhesion to metals and radical resistance compared to the conventional FKM. It may be used for dry etching/ashing and CVD equipment for Semiconductor and LCD equipment.

❖ Featured Benefits

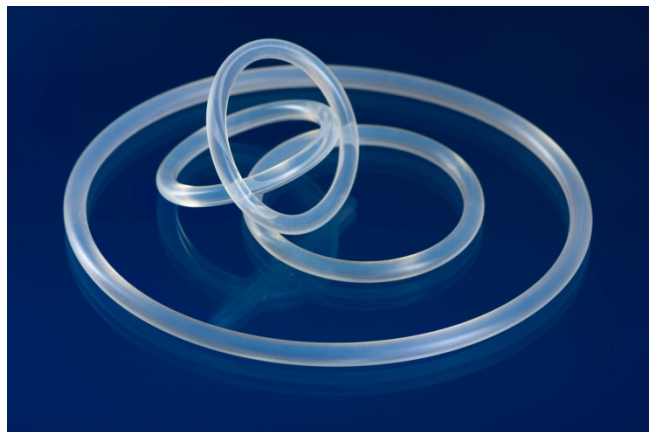
- Improved Radical Resistance Compared to Conventional FKM
- Low Adhesion to Metal Surfaces
- Highly Pure with Very Low Inorganic Components Content

❖ Applications

- Plasma Enhanced CVD Equipment
- Dry Etch Equipment
- Plasma Ashing Equipment
- Seals for Plasma Equipment

❖ Contact Us

Valqua America, Inc.
4655 Old Ironsides Dr #380
Santa Clara, CA 95054
www.valqua-america.com



❖ Typical Properties

Color	Transparent /Clear
Hardness (Shore A)	60
Tensile Strength (MPa)	17
Elongation (%)	580
Modulus 100% Elongation (MPa)	1.7
Maximum Temperature (°C)	160
Compression Set (%)	43

*Compression Set: 25% compression at 200°C for 72 hours
Values above are actual measurements, not standards*

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Additional information

ARMOR® CRYSTAL



❖ Mechanical Properties

Customer Evaluation Conditions

Equipment: CVD

Location: Slit Valve (AS568A-254)

Gas: TEOS+O₂+C₂F₆+TMP

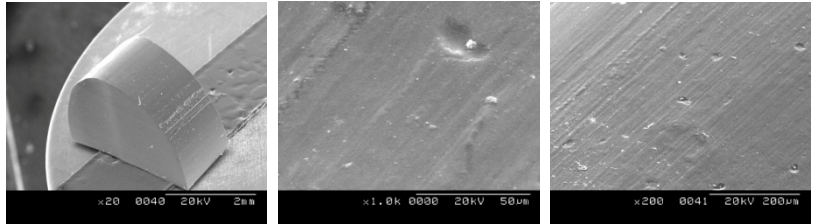
Plasma Power: RF450W

Temperature: 70~80C

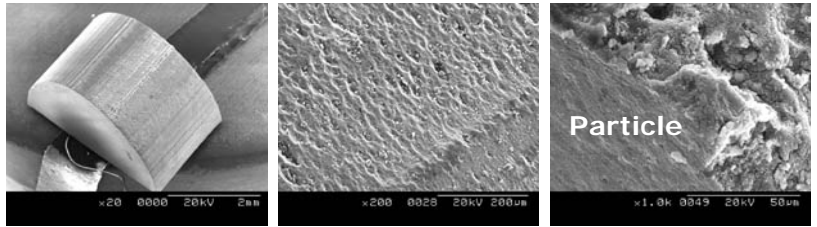
Wafer count:

ARMOR CRYSTAL 141,000

General fluoro rubber 1,700



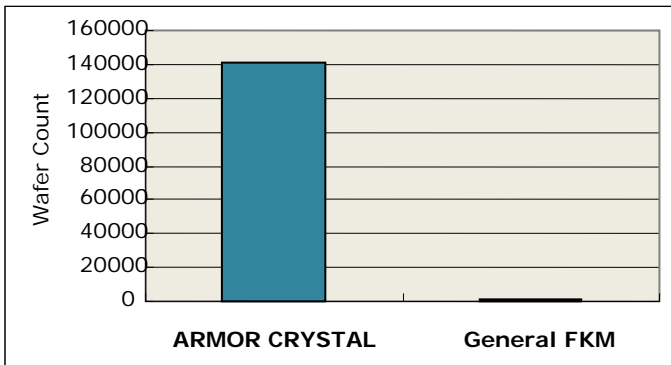
ARMOR CRYSTAL



General Fluoro Elastomer

❖ Cost Advantage

Wafer Count



Annual Cost

