

# VALQUA Semiconductor Industry Products

## ULTIC ARMOR™

High Performance FKM

### ❖ Product & Benefits

**ULTIC ARMOR™** is a high performance FKM applicable to both static and dynamic applications. It may be used for CVD, Etch and Ashing processes. The ULTIC ARMOR™ is also available as a specifically engineered bonded gate.

### ❖ Featured Benefits

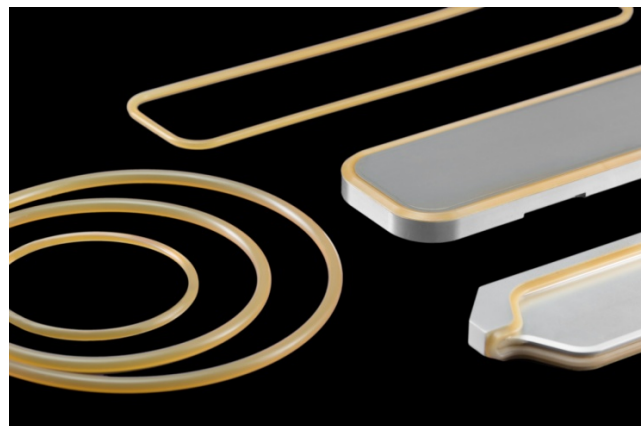
- A Highly Pure FKM with Improved Radical Resistance
- Low Adhesion to Metal for Gate Seals
- Excellent Compression Set for Static or Dynamic Locations

### ❖ Applications

- All CVD Applications
- Dry Etch Equipment
- Plasma Ashing Equipment

### ❖ Contact Us

Valqua America, Inc.  
4655 Old Ironsides Dr #380  
Santa Clara, CA 95054  
[www.valqua-america.com](http://www.valqua-america.com)



### ❖ Typical Properties

Color	Transparent Amber
Hardness (Shore A)	70
Tensile Strength (MPa)	13.9
Elongation (%)	220
Modulus 100% Elongation (MPa)	2.9
Maximum Temperature (°C)	200
Compression Set (%)	27

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

All trademarks and registered trademarks noted in this file are the exclusive property of Nippon Valqua Industries, Ltd. unless otherwise specified. Although these data are created based on the data and the information (Internal master file No.: VMF104-019) as of April 2019, VALQUA, LTD. may change these data without notice for the reason of improvement in functional of a product, standard revision and others. Please note the following point in use of these data. (1) An operating temperature, pressure range, durability, etc. indicated in this catalogue do not assume each operation conditions but show the application possibility based on our company data, an actual result, etc. Therefore, please use these data after checking the aptitude in actual use environment. (2) The data contained within this catalogue can only be taken as a guide. (3) A standard, a value, etc. are the purposes made legible, and may be performing an extract, recombination, arrangement, conversion, etc. of a value. (4) Although the maximum attention was paid in this data creation, VALQUA, LTD. will not accept responsibility for any loss incurred through error or omission. Please contact your distributor or VALQUA group if you have any questions.



Valqua America, Inc.  
Tel : +1-408-986-1425  
Email : [info@valqua-america.com](mailto:info@valqua-america.com)

# Additional information

# ULTIC ARMOR™

VALQUA AMERICA, INC.

## ❖ Performance Properties

### Customer Evaluation Conditions

**Equipment:** CVD

**Location:** Exhaust valve (AS568A-274)

**Gas:**  $\text{SiH}_4 + \text{O}_2 + \text{He} + \text{Ar} / \text{NF}_3 + \text{Ar}$

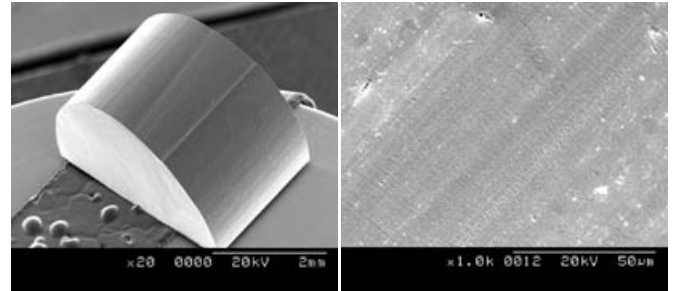
**Plasma power:** RF3200W/Microwave 3200W

**Temperature:** 120 °C

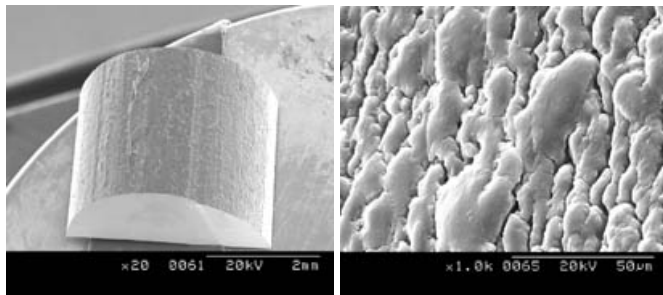
**Wafer Count:** ULTIC ARMOR 4,800

Black FFKM A 3,200

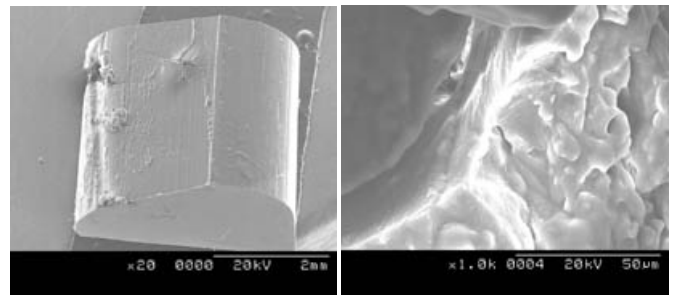
White FFKM K 4,000



ULTIC ARMOR



Black FFKM A



White FFKM K