

# 902 MACHINABLE ALUMINA SILICATE

## Super Machinability - Versatile - Low Cost

RESCOR 902 MACHINABLE CERAMIC is a high purity, high temperature ceramic with excellent electrical and mechanical properties.

A fine grained ceramic that is readily machinable on conventional shop equipment with standard cutting tools.

Can be turned, drilled, shaped, etc. to produce sharp, detailed parts with close tolerances.

No more long lead times for custom made parts.

902 is the ideal, general purpose ceramic for use to 2100°F.

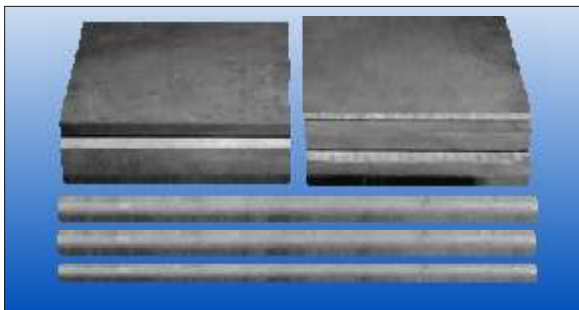
Provides excellent electronic, mechanical and thermal properties.

RESCOR 902 is inert to oxidizing and reducing atmospheres. Resistant to most acids, chemicals, solvents and has excellent thermal shock resistance.

Contains no organics to out-gas or contaminate critical vacuum or furnace atmospheres.

Usable as supplied to 1100°F. A simple heat treatment at 1900°F, after machining, hardens and extends the temperature capability up to 2100°F.

Use 902 Alumina Silicate for electrical insulators, furnace components, brazing, soldering, welding fixtures, thick and thin film applications, R.F. heating fixtures, prototype ceramic components, etc.



Stock Sizes Available for Fast Deliveries



Easily Machined to Highly Detailed Parts

### Precision Components - Tooling - Fixturing

|  |        |   |                  |
|--|--------|---|------------------|
| Melting point °F                                       | 3200   | Dielectric Strength (Volts/mil)           | 100              |
| Continuous Service Temp. °F                            | 2100   | Volume Resistivity (ohm-cm)               | 10 <sup>14</sup> |
| Compression Strength (psi)                             | 38,000 | Loss Factor (1 Mhz)                       | 0.04             |
| Flexural Strength (psi)                                | 14,000 | Dielectric Constant (1 Mhz)               | 5.3              |
| Thermal Expansion (x 10 <sup>-6</sup> / °F)            | 1.8    | Density (# / Ft <sup>3</sup> )            | 120              |
| Thermal Conductivity (BTU in / Hr °F ft <sup>2</sup> ) | 7.5    | Properties are shown for Heat Treated 902 |                  |
| Typical Tolerances are -0.005" to +0.030"              |        |   |                  |

| Cat. No | Plates Stock Sizes | Cat. No | Plates Stock Sizes | Cat. No | Rod Stock Sizes |
|---------|--------------------|---------|--------------------|---------|-----------------|
| 902-1   | 1/4" x 6" x 6"     | 902-10  | 1" x 6" x 6"       | 902-14  | 1/4" x 6"       |
| 902-1A  | 1/4" x 4" x 9.5"   | 902-12  | 2" x 4" x 9.5"     | 902-15  | 1/2" x 9.5"     |
| 902-3   | 1/2" x 4" x 9.5"   | 902-13  | 2" x 6" x 6"       | 902-16  | 3/4" x 9.5"     |
| 902-4   | 1/2" x 6" x 6"     | 902-22  | 1.5" x 6" x 6"     | 902-17  | 1" x 9.5"       |
| 902-6   | 3/4" x 4" x 9.5"   | 902-23  | 1.5" x 4" x 9.5"   | 902-18  | 1.5" x 9.5"     |
| 902-7   | 3/4" x 6" x 6"     | 902-25  | 1/4" x 9.5" x 9.5" | 902-19  | 2" x 9.5"       |
| 902-9   | 1" x 4" x 9.5"     | 902-26  | 1/2" x 9.5" x 9.5" | 902-19A | 2.5" x 9.5"     |
| 902-Kit | TRIAL KIT          | 902-27  | 1" x 9.5" x 9.5"   | 902-20  | 3" x 9.5"       |
|         |                    |         |                    | 902-50  | 3.5" x 9.5"     |
|         |                    |         |                    | 902-24  | 4" x 9.5"       |

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**COTRONICS** CORPORATION

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