



## Product Data Sheet & General Processing Conditions

**RTP 2299 X 115088 G**  
**Polyetheretherketone (PEEK)**  
**Glass Fiber**  
**Carbon Nanotube**  
**ESD Protection**

### PROPERTIES & AVERAGE VALUES OF INJECTION MOLDED SPECIMENS

| PERMANENCE                                   | English               | SI Metric     | ASTM TEST |
|----------------------------------------------|-----------------------|---------------|-----------|
| Primary Additive                             | 35 %                  | 35 %          |           |
| Specific Gravity                             | 1.59                  | 1.59          | D 792     |
| Molding Shrinkage<br>1/8 in (3.2 mm) section | 0.0020 - 0.0030 in/in | 0.20 - 0.30 % | D 955     |

### MECHANICAL

|                                                            |                            |           |        |
|------------------------------------------------------------|----------------------------|-----------|--------|
| Impact Strength, Izod<br>unnotched 1/8 in (3.2 mm) section | 16.0 ft-lbs/in             | 854 J/m   | D 4812 |
| Tensile Strength                                           | 27000 psi                  | 186 MPa   | D 638  |
| Tensile Elongation                                         | 2.5 %                      | 2.5 %     | D 638  |
| Tensile Modulus                                            | 1.86 x 10 <sup>6</sup> psi | 12825 MPa | D 638  |
| Flexural Strength                                          | 44000 psi                  | 303 MPa   | D 790  |
| Flexural Modulus                                           | 1.86 x 10 <sup>6</sup> psi | 12825 MPa | D 790  |

### ELECTRICAL

|                     |                  |                  |                    |
|---------------------|------------------|------------------|--------------------|
| Volume Resistivity  | 1E1 - 1E3 ohm.cm | 1E1 - 1E3 ohm.cm | D 257              |
| Surface Resistivity | 1E5 - 1E7 ohm/sq | 1E5 - 1E7 ohm/sq | D 257              |
| Surface Resistance  | 1E4 - 1E6 ohm    | 1E4 - 1E6 ohm    | ESD STM11.11       |
| Static Decay        | < 2.00 s         | < 2.00 s         | FTMS101C<br>4046.1 |

### PROPERTY NOTES

Data herein is typical and not to be construed as specifications.

Unless otherwise specified, all data listed is for natural or black colored materials. Pigments can affect properties.

### GENERAL PROCESSING FOR INJECTION MOLDING

|                    | English           | SI Metric      |
|--------------------|-------------------|----------------|
| Injection Pressure | 12000 - 18000 psi | 83 - 124 MPa   |
| Melt Temperature   | 660 - 750 °F      | 349 - 399 °C   |
| Mold Temperature   | 325 - 425 °F      | 163 - 218 °C   |
| Drying             | 3 hrs @ 300 °F    | 3 hrs @ 149 °C |
| Moisture Content   | 0.10 %            | 0.10 %         |
| Dew Point          | -20 °F            | -29 °C         |

### PROCESSING NOTES

Desiccant Type Dryer Required.