

For Antenna elements or Reflector XYRON™ DG series(PPS/PPE) vs PPS

Strength : light weight, Low Dk/Df, Plating, Moldability

| | | | | | XYRON™ DG040 | XYRON™ DG141 | XYRON™ DG235 | PPS/GF |
|-----------------------|-----------------------------|----------|-------------------|-------------------------------|-----------------|-----------------|-----------------|-----------|
| Filler contents(wt%) | | | | | 40 | 40 | 30 | 40 |
| Mechanical Properties | Specific Gravity | - | ISO 1183 | 23°C | 1.52 | 1.52 | 1.52 | 1.52 |
| | Moisture Absorption | wt% | ISO 62 | Immersion 23°C water for 24Hr | 0.04 | 0.06 | 0.05 | 0.02 |
| | Tensile Strength | MPa | ISO 527-2 | 23°C/50% RH | 66 | 88 | 122 | 165 |
| | Weld Strength | MPa | AsahiKasei Method | 23°C/50% RH | 24 | 15 | 30 | 49 |
| | Flexural Modulus | MPa | ISO 178 | 23°C/50% RH | 10.0 | 12.8 | 10.2 | 14.7 |
| | Charpy Impact Strength | kJ/m2 | ISO 179 | 23°C/50% RH | 2 | 3 | 5 | 9 |
| Electrical Properties | Dielectric Constant | - | IEC 60250 | 1GHz | 3.8 | 3.7 | 3.6 | 4.4 |
| | Dissipation Factor | - | IEC 60250 | 1GHz | 0.008 | 0.005 | 0.004 | 0.005 |
| Electrical Properties | Mold Shrinkage(MD/TD) | % | AsahiKasei Method | 23°C/50% RH | 0.34/0.38 | 0.31/0.54 | 0.29/0.69 | 0.30/0.67 |
| | Mold Shrinkage anisotropy | - | AsahiKasei Method | 23°C/50% RH | 1.1 | 1.7 | 2.4 | 2.2 |
| | CLTE(MD/TD) | X10.5/°C | ISO 11359 | -30~65°C | 2.2/3.1 | 2.1/4.2 | 1.7/5.4 | 1.5/5.4 |
| | CLTE anisotropy | - | - | - | 1.4 | 2.0 | 3.2 | 3.6 |
| Other Properties | Heat Deflection Temperature | °C | ISO 75-1 | 1.8MPa | 188 | 239 | 247 | >260 |
| | Plating | | | | + | + | + | 0 |
| | Moldability (Flash) | | | | + | + | + | - |

Data shown are typical values obtained by proper testing methods and should not be used for specification purpose. Please use these data for selecting the most appropriate grade suitable for specific usage. These data may be changed because of improvement in properties