

# SYRON® 7000/7100

## High Performance Laminates

SYRON® PEEK based laminates are for use in various harsh environments. These laminates are available without (7000) or with (7100) glass reinforcement to improve dimensional stability, tensile strength and impact resistance.

Various metal claddings are available : Copper (rolled/reverse treated very low profile ED / ED), Aluminum, Nickel,... and others being evaluated. The metal layer can also be comprised between 2 layers of PEEK.

These laminates are adhesiveless, resulting in thinner and more robust laminates.

PEEK is a high performance thermoplastic material with a proven track record in various critical industries (Avionics, Oil & Gas down hole, Medical, Automotive,...) to replace metal parts, to act as an insulator or as a protection layer (corrosion, lubrication,...).

Being made from PEEK, SYRON laminates provide stable performance in extreme high/low temperatures (melt temperature 343°C), in cyclic as well as in continuous operation conditions. PEEK also offers excellent chemical and radiation resistance.

Note : for Printed Circuit Board applications requiring IPC grade laminates, please check out our XT/duroid® laminates.



### Sales Sheet



#### FEATURES AND BENEFITS:

##### PEEK Based Metal Clad Laminates

- Ideal for Harsh Thermal and Chemical Environment Applications

##### Available with Various Metal Claddings

- Flexible Material Selection to Match the Application Needs

##### Available Unsupported (7000) and Woven Glass Reinforced (7100)

- Woven Glass Reinforcement Provides Dimensional Stability

##### Outstanding Thermal and Chemical Resistance

- Performs Well in Extreme Cold/ Hot Temperature Applications and in Chemical Aggressive Environments

##### Halogen Free and Inherently Flame Retardant

- Safe and Environmental Friendly Various Multilayer Constructions Possible

#### TYPICAL APPLICATIONS:

- Lightning Strike Protection (e.g. in Avionics, Windmills)
- Corrosion Protection Layer (e.g. in Down Hole Oil & Gas Applications and Aerospace)
- Battery Packaging
- Shielding and Insulation (e.g. Avionics, Medical, Electrical Components)
- High Temperature Resistant RFID Tags
- Sensors (Fuel, High Temperature)

Standard Thicknesses (Excludes Metal Cladding)	Dimensions	Metal Cladding	Glass Reinforcement
<p>SYRON 7000: 1 mil (25µm) up to 10 mil (250µm) with 1 mil (25µm) increments</p> <p>SYRON 7100: 2 mil (50µm) up to 10 mil (250µm) with 1 mil (25µm) increments</p>	<p><b>Rolls:</b> Maximum width: 24" (610mm) Maximum length depends on the construction</p> <p><b>Panels:</b> Standard sizes: 24" x 18", 12" x 18", 12" x 9" Other size available upon request</p>	<p><b>Copper:</b> Electrodeposited -0.5 oz (18µm), 1 oz (35µm), 2 oz 70µm) Reverse Treat Very Low Profile - 0.5 oz (18µm), 1 oz (35µm) Rolled - 0.5 oz (18µm), 1 oz (35µm)</p> <p><b>Aluminum:</b> 9µm and 30µm</p> <p>Unclad laminates (with or without reinforcement) are also available</p> <p>For laminates with metal inner layers and/or asymmetric metal cladding, other thicknesses or nickel, stainless steel and other metal claddings, please contact Rogers Corporation</p>	<p>Building blocks comprise 1 layer of glass reinforcement per 2 mil (50µm), 3 mil (75µm), 4 mil (100µm) or 5 mil (125µm)</p>

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