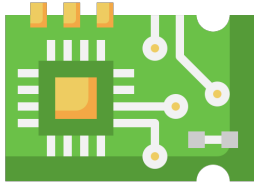


Fluorinated Poly-Para-Xylylene

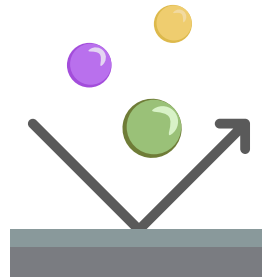
Conformal coatings are applied to printed circuit boards (PCBs) to protect them from environmental stress such as salt, corrosion, humidity, and moisture, mitigate tin whiskers, and provide a barrier to electrically insulate components. A wide variety of conformal coating types are available, each with their own strengths and weaknesses.

Commonly referred to as parylene F, fluorinated poly-para-xylylenes are applied at very high temperatures with a vacuum-coating process. Therefore, they cost significantly more compared to other technologies. They offer a number of beneficial qualities, including low dielectric constant and great thermal stability.

Strengths



Excellent Uniformity
Regardless of Part Geometry -
no Pinholes, Fillets, or Bridging



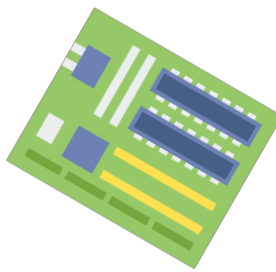
Chemical Inertness/Barrier
Properties Insoluble in Organic
Solvents, Acids, or Bases, with
Very Low Permeability Rates



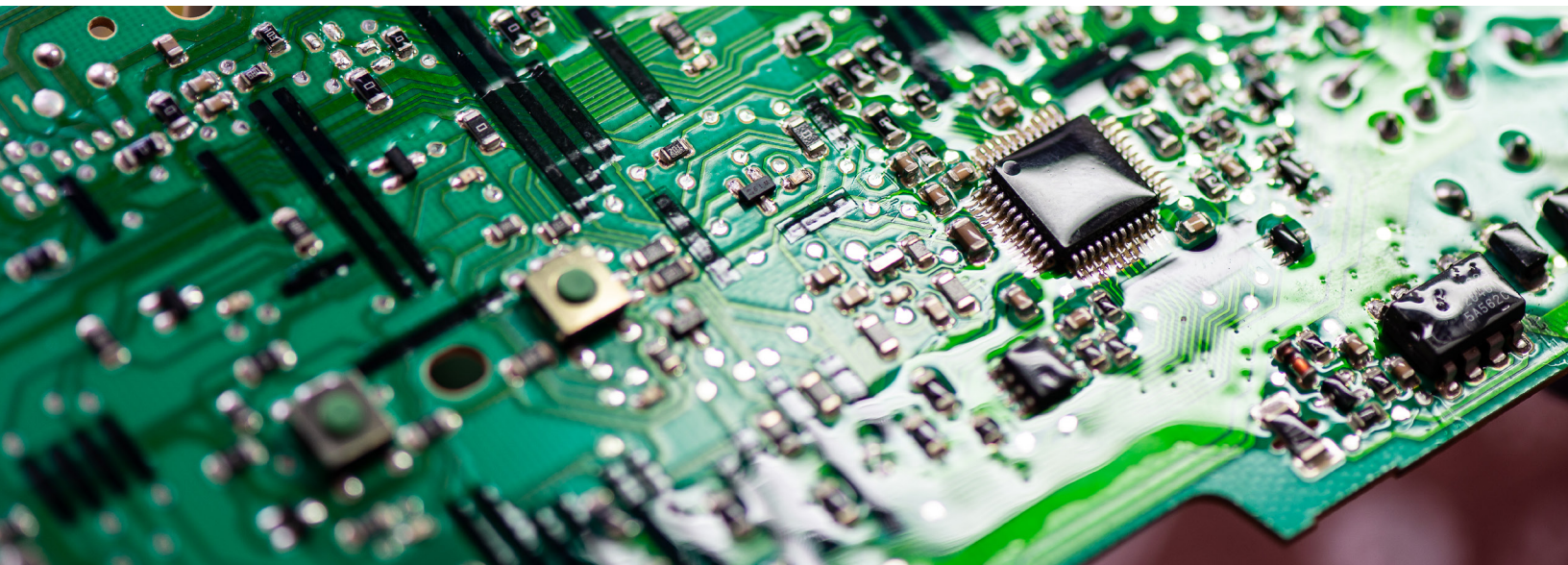
High Temperature Stability
(450°C [842°F]) and
Increased UV Stability



Low Environmental
Impact Process



Low Dielectric Constant



Weaknesses of Cure Type

Vapor Deposition Polymerization

- ▲ Parts are processed by batches in a vacuum chamber, not an in-line process
- ▲ Masking required for no-coat areas
- ▲ Coating removal and rework generally requires specific equipment, abrasion/micro-blasting most common technique
- ▲ The coating is deposited at a rate slower than the conventional poly-para-xylylenes
- ▲ Requires special deposition equipment different than that for the C, D, and N poly-para-xylylene varieties



Electronic Coating Technologies provides expertise in protective materials and application services within the electronic technology sectors. Service and solutions are provided for the aerospace and military, automotive, consumer and industrial, power and renewable energy, and medical industries.

www.electroniccoating.com