Five basic types of conformal coating:

Acrylic
Epoxy
Urethane
Paraxylylene
Silicone-based

Acrylic

Pros:

Acrylic coatings are solvent based and easily repaired.
Usually low cost and are tough, hard, and transparent.
Good pot life, low moisture absorption and short drying times
Available in areosol packages
Do not shrink during cure
Temperature Range -59C to 132C

Limitations:

Low resistance to either abrasion or to chemicals

Epoxy

Pros:

Hard, usually opaque, and good moisture resistance. Epoxy is usually available as a two-component thermosetting mixture.
Excellent chemical and abrasion resistance,

Limitations:

Epoxies can cause stress on components during thermal extremes.
Epoxy is fairly easy to apply but impossible to remove without damaging the components.
Temperature Range -60C to 200C

Urethane

Pros:

Urethane coatings are tough, hard and exhibit excellent resistance to solvents.
Excellent abrasion resistance
Low moisture permeability,
Good low-temperature flexibility
Temperature Range -59C to 132C

Limitations:

Limited high-temperature capability
Shrinkage during cure can cause stress on boards
Inability to be repaired.

Paraxylylene (Parylene)

Pros:

Paraxylylene coatings are uniform and yield excellent pin coverage.
Excellent moisture, chemical, solvent protection
Excellent dielectric properties
Listed on the QPL for MIL-I-46058
Meets the requirements of IPC-CC-830
Superior thermal stability
Excellent UV stability
Ultra-thin coatings add minimal mass to delicate components

Limitations:

High cost
Sensitive to contaminants
Require vacuum application
Removal: Abrasion, incision and removal, excimer laser removal, heat softening, micro abrasion, and plasma etching

Silicone

Pros:

Range of properties
tough, abrasion-resistant
soft, elastomeric (stress-relieving) materials
Sustain high temperature environments
Easy to apply, processing versatility
Low toxicity
Good resistance to moisture (vapor), abrasion and humidity
Useful over a wide temperature range.
Excellent adhesion to previously applied coatings allows for the build-up of a thicker film to improve dielectric strength.
Temperature Range -60C to 205C.
Easy reparability
Low toxicity

Limitations:

Dielectric strength is less than other types of coatings
Moisture permeable for condensed water