

## Glossary

**POLYAMIDE** — The chemical name for Nylon.

**POLYBUTADIENE** — A type of synthetic rubber often blended with other synthetic rubbers to improve their properties.

**POLYESTER** — Polyethylene terephthalate, used extensively as a moisture resistant cable core wrap. Mylar is DuPont's trademark for polyester.

**POLYETHYLENE** — A thermoplastic material having excellent electrical properties.

**POLYHALOCARBON** — A general name for polymers containing halogen atoms. The halogens are fluorine, chlorine, bromine and iodine.

**POLYIMIDE** — A relatively high temperature plastic developed for use as a dielectric or jacketing material. Kapton is DuPont's trademark for polyimide.

**POLYMER** — A substance made of many repeating chemical units or molecules. The term polymer is often used in place of plastic, rubber, or elastomer.

**POLYMER OPTICAL FIBER** — One of the media projected to become the heart of an automotive LAN. The POF media would become the communications backbone of the vehicle.

**POLYOLEFINS** — A family of plastics including cross-linked polyethylene and various ethylene copolymers.

**POLYPROPYLENE** — A thermoplastic similar to polyethylene but stiffer and having a higher temperature softening point.

**POLYURETHANE** — Broad class of polymers noted for good abrasion and solvent resistance. Can be in solid or cellular form.

**POLYVINYL CHLORIDE (PVC)** — A general purpose thermoplastic used for wire and cable insulations and jackets.

**POROSITY** — Multiple voids in an insulation crosssection.

**PORT** — A point of access into a computer, a network, or other electronic device; the physical or electrical interface through which one gains access; the interface between a process and a communications or transmission facility.

**P.O.S.** — Abbreviation for point-of-sale.

**POSITION CODING** — Identification of conductors by their location, possible only when conductors are located in assigned positions with relation to each other throughout the entire length of a cable.

**POSJ** — All rubber, parallel, light duty ripcord for use on lamps and small appliances, 300 V, 60°C.

**POTTING** — Sealing by filling with a substance to exclude moisture.

**POWER** — The amount of work per unit of time. Usually expressed in watts, and equal to  $I^2R$ .

**POWER CABLES** — Cables of various sizes, constructions, and insulations, single or multiconductor, designed to distribute primary power to various types of equipment.

**POWER FACTOR** — The cosine of the phase difference between current and applied voltage.

**POWER LOSS** — The difference between the total power delivered to a circuit, cable, or device, and power delivered by that device to a load.

**POWER RATIO** — The ratio of the power appearing at the load to the input power. Expressed in db, it is equal to  $10 \log_{10} (P_2/P_1)$  where  $P_1$  is input power and  $P_2$  is the power at the load.

**PPE** — Polypropylene ethylene.

**PREBOND** — Stranded wire which has been fused, topcoat tinned, or overcoat tinned.

**PREMOLDED SPLICE** — A joint made of premolded components assembled in the field.

**PRIMARY** — The transformer winding which receives the energy from a supply current.

**PRIMARY INSULATION** — The first layer of nonconductive material applied over a conductor, whose prime function is to act as electrical insulation.

**PRINTING WIRING** — A printed circuit intended to provide point-to-point electrical connections.

**PRODUCTION TESTS** — Tests made on components or subassemblies during production for the purpose of quality control.

**PROPAGATION DELAY** — The time it takes a signal, composed of electromagnetic energy to travel from one point to another over a transmission channel; usually most noticeable in communicating with satellites; normally, the speed-of-light delay.

**PROPAGATION TIME** — Time required for a wave to travel between two points on a transmission line.

**PROPAGATION VELOCITY** — The velocity of the propagation of a wave along a transmission path.

**PROTECTIVE COVERING** — A field-applied material to provide environmental protection over a splice or housing, or both.

**PROXIMITY EFFECT** — Nonuniform current distribution over the crosssection of a conductor caused by the variation of the current in a neighboring conductor.

**PT** — Thermostat cable with solid conductor, individual insulation, twisted together.

**PTFE** — Polytetrafluoroethylene. One type of Teflon. Sometimes abbreviated TFE.

**PTT** — Post Telephone and Telegraph Authority. The government agency that functions as the communications common carrier and administrator in many areas of the world.

**PULLING EYE** — A device used to pull cable into or from a duct.

**PULSE** — A current or voltage which changes abruptly from one value to another and back to the original value in a finite length of time.

**PULSE CABLE** — A type of coaxial cable constructed to transmit repeated high-voltage pulses without degradation.

**PVC** — Polyvinyl chloride. A common insulating and jacketing material used on cables.

**PVC-I** — A MIL-C-17 coax jacket type. A black polyvinyl chloride with excellent weathering and abrasion properties, but is a contaminating type and will cause cable attenuation to increase with age. Can be used for direct burial.

**PVC-II** — A MIL-C-17 coax jacket type. A grey polyvinyl chloride material which is semi-noncontaminating.

**PVC-IIA** — A MIL-C-17 coax jacket type. A black or grey polyvinyl chloride material which is noncontaminating. It has good weathering and abrasion-resistant properties and can be used for direct burial.

**PVDF** — Polyvinylidene fluoride. Atochem's trademark for this material is Kynar.

**PYROMETER** — See Thermocouple.

