

Farad Unit of capacitance whereby a charge of one coulomb produces a one volt potential difference.

Fatigue Resistance Resistance to metal crystallization which leads to conductors breaking from flexing.

FEP Fluorinated Ethylene Propylene is a "Teflon" fluorocarbon resin and is a registered T.M. of the DuPont Company. This is a melt extrudable fluorocarbon resin.

FIT Alpha registered trademark for shrinkable tubing products.

Filled Cable A telephone cable construction in which the cable core is filled with a material that will prevent moisture from entering or passing through the cable.

Filler (1) A material used in multiconductor cables to occupy large interstices formed by the assembled conductors. (2) An inert substance added to a compound to improve properties or decrease cost.

Flat Cable A cable with two smooth or corrugated but essentially flat surfaces.

Flat Conductor A wire having a rectangular cross section as opposed to round or square conductors.

Flat Conductor Cable A cable with a plurality of flat conductors.

Flame Resistance The ability of a material not to propagate flame once the flame source is removed.

Flammability The measure of the material's ability to support combustion.

Flex Life The measurement of the ability of a conductor or cable to withstand repeated bending.

Flexibility That quality of a cable or cable component which allows for bending under the influence of outside force, as opposed to limpness which is bending due to the cable's own weight.

Foamed Plastics Insulations having a cellular structure.

F.P.A. A trademark of General Cable Corporation for fused polyethylene aluminum. It consists of an 8 mil thick aluminum shield (corrugated or uncorrugated) coated on both sides with an ethylene acrylic copolymer through chemical means. The degree of bonding of polymer to outer cable jacket acid is controlled during processing.

FR-1 A flammability rating established by Underwriters Laboratories for wires and cables that pass a specially designed vertical flame test. This designation has been replaced by VW-1.

Frequency Refers to the number of cycles per second of an AC signal or an RF signal.

Gang Strip Simultaneous stripping all conductors in a flat or ribbon cable.

Gauge A term used to denote the physical size of a wire.

Ground A conducting connection between an electrical circuit and the earth or other

large conducting body to serve as an earth thus making a complete electrical circuit.

Hard Drawn Copper Wire Copper wire that has not been annealed after drawing.

Harness An arrangement of wires and cables, usually with many breakouts, which have been tied together or pulled into a rubber or plastic sheath, used to interconnect electric circuits.

Hash Mark Stripe A non-continuous helical stripe applied to a conductor for identification.

Heat Distortion Distortion of a material due to the effects of heat.

Heat Seal A method for sealing by thermal fusion.

Heat Shock A test to determine stability of a material by sudden exposure to a high temperature for a short period of time.

Helical Stripe A continuous, colored, spiral stripe applied to a conductor for circuit identification.

Henry Unit of inductance such that the induced voltage in volts is numerically equal to the rate of change in current in amperes per second.

Hermetically Sealed A gastight enclosure that has been completely sealed by fusion or other comparable means.

Hertz (Hz) A term replacing cycles-per-second as a unit of frequency.

Hi-Pot A test designed to determine the highest voltage that can be applied to a conductor without electrically breaking down the insulation.

High Voltage Generally, a wire or cable with an operating voltage of over 25,000 volts.

Hook-Up Wire A single insulated conductor used for low current, low voltage (usually under 1000 volts) applications within enclosed electronic equipment.

Hygroscopic Readily absorbing and retaining moisture.

Hypalon DuPont's trade name for their chlorosulfonated polyethylene, an ozone resistant synthetic rubber.

IEEE Abbreviation for Institute of Electrical and Electronics Engineers. The world's largest professional engineering society, founded in 1884. Its efforts are directed toward the advancement of the theory and practice of electrical and electronics engineering, allied branches of engineering and the related arts and sciences.

Impact Strength A test for determining the mechanical punishment a cable can withstand without physical or electrical breakdown by impacting with a given weight, dropped a given distance, in a controlled environment.

Impedance The total opposition that a circuit offers to the flow of alternating current or any other varying current at a particular frequency. It is a combination of resistance R and reactance X, measured in ohms.

Inductance The property of a circuit or circuit element that opposes a change in current flow, thus causing current changes to lag behind voltage changes. It is measured in henrys.

Inductive Coupling Crosstalk resulting from the action of the electromagnetic field of one conductor on the other.

Insulation A material having high resistance to the flow of electric current.

Insulation Resistance (I.R.) That resistance offered by an insulation to an impressed dc voltage, tending to produce a leakage current through the insulation.

Insulation Thickness The wall thickness of the applied insulation

Interaxial Spacing (1) Center to center conductor spacing in paired 'wire or (2) center to center spacing between conductors in a flat cable.

Interconnecting Cable The wiring between modules, between units, or the larger portions of a system.

Interstices Voids or valleys between individual strands in a conductor or between insulated conductors in a multiconductor cable.

IPCEA Abbreviation for Insulated Power Cable Engineers Association.

Irradiation In insulations, the exposure of the material to high energy emissions for the purpose of favorably altering the molecular structure by crosslinking.

ISA Abbreviation for Instrument Society of America. A general organization comprised of representatives of more specialized organizations (including, but not limited to) the American Gas Association, ASME, ASTM, The Electrochemical Society, IEEE, etc. whose primary goal is to disseminate and standardize technology across their spectrum of disciplines.

ISO Abbreviation for International Standards Organization. An organization similar to the ISA, but concerned with standardization, etc. on an international basis.

Jacket An outer covering, usually non-metallic, mainly used for protection against the environment.

Jumper Cable A short flat cable interconnecting two wiring boards or devices.

Lacquer A liquid resin or compound applied to textile braid to prevent fraying, moisture absorption, etc.

Laminated Tape A tape consisting of two or more layers of different materials bonded together.

Lay The length measured along the axis of a wire or cable required for a single strand (In stranded wire) or conductor (in cable) to make one complete turn about the axis of the conductor or cable.

Leakage Current The undesirable flow of current through or over the surface of an insulation.