

## Glossary

**MICRO** — Prefix meaning one-millionth.

**MICROBENDING LOSS** — A signal loss due to small geometrical irregularities along the core-cladding interface of optical fibers.

**MICROFARAD** — One-millionth of a farad (abbreviated  $\mu\text{f}$ ).

**MICROMICROFARAD** — One-millionth of a microfarad (abbreviated  $\mu\mu\text{f}$ ). Also, a picofarad (pf).

**MICROPHONE CABLE** — A very flexible, usually shielded cable used for audio signals.

**MICROPHONICS** — Noise caused by mechanical movement of a system component. In a single conductor microphone cable, for example, microphonics can be caused by the shield rubbing against the dielectric as the cable is flexed.

**MICROWAVE** — A short (usually less than 30 cm.) electrical wave.

**MID-SPLIT** — A broadband cable system in which the cable bandwidth is divided between transmit and receive frequencies. The bandwidth utilized to send toward the head-end (reverse direction) is approximately 5 MHz to 100 MHz, and the bandwidth utilized to send away from the head-end (forward direction) is approximately 160 MHz to 300 MHz. The guard band between the forward and reverse directions (100 MHz to 160 MHz) provides isolation from interference.

**mil** — A unit of length equal to one-thousandth of an inch.

**MIL** — Military specification.

**MIL-C-17** — A military specification covering many coaxial cables.

**MIL-W-16878** — A military specification covering various wires intended for internal wiring of electric and electronic equipment.

**MIL-W-22759** — A military specification for fluorocarbon insulated copper and copper alloy wire.

**milli** — Prefix meaning one-thousandth.

**MIPS** — Millions of Instructions Per Second. One measure of processing power.

**MODULATION** — Systematic changing of properties, e.g., amplification, frequency, phase of an analog signal to encode and convey (typically digital) information.

**MODULUS OF ELASTICITY** — The ratio of stress (force) to strain (deformation) in a material that is elastically deformed.

**MOISTURE ABSORPTION** — The amount of moisture, in percentage, that a material will absorb under specified conditions.

**MOISTURE RESISTANCE** — The ability of a material to resist absorbing moisture from the air or when immersed in water.

**MOLDED PLUG** — A connector molded on either end of a cord or cable.

**MONO FILAMENT** — A single strand filament as opposed to a braided or twisted filament.

**MONOMER** — The basic chemical unit used in building a polymer.

**MOTOR LEAD WIRE** — Wire which connects to the fragile magnet wire found in coils, transformers, and stator or field windings.

**MPF** — Mine power feeder cables. Usually rated 5, 8, or 15 kV.

**MSHA** — Mine Safety and Health Administration. The Federal enforcement agency for employee safety in mines and mills. Formerly known as MESA, Bureau of mines. MSHA regulations appear in CFR Title 30, Chapter 1.

**MTW** — Machine tool wire. Thermoplastic insulated, 90°C to 105°C, 600 V. A UL cable type.

**MULTICAST** — The ability to broadcast messages to one node or a select group of nodes.

**MULTIDROP** — See Multipoint Circuit.

**MULTIMODE** — Optical fiber which allows more than one mode of light to propagate.

**MULTIPLE-CONDUCTOR CABLE** — A combination of two or more conductors cabled together and insulated from one another and from sheath or armor where used.

**MULTIPLE-CONDUCTOR CONCENTRIC CABLE** — An insulated central conductor with one or more tubular stranded conductors laid over it concentrically and insulated from one another.

**MULTIPLEX** — The use of a common physical channel in order to make two or more logical channels, either by splitting of the frequency band (frequency-division multiplex), or by utilizing this common channel at different points in time (time-division multiplex).

**MULTIPLEXER** — Equipment that permits simultaneous transmission of multiple signals over one physical circuit.

**MULTIPOINT CIRCUIT** — A single line connecting three or more stations.

**MURRAY LOOP TEST** — A method used to localize cable faults.

**MUTUAL CAPACITANCE** — Capacitance between two conductors in a cable.

**MUX** — Multiplex. To transmit two or more signals over a single channel.

**mV** — Millivolt (one-thousandth of a volt).

**MV** — Medium voltage cables. Usually rated 5–35 kV.

**mW** — Milliwatt (one-thousandth of a watt).

**MYLAR** — DuPont's trademark for polyethylene terephthalate (polyester) film.

## N

**NBR** — Butadiene-acrylonitrile copolymer rubber, a material with good oil and chemical resistance.

**NBR/PVC** — A blend of acrylonitrile-butadiene rubber and polyvinyl chloride (PVC). Used for jacketing.

**NBS** — National Bureau of Standards. Now called NIST (National Institute of Standards and Technology).

**N CONNECTOR** — A threaded connector for coax; N is named after Paul Neill.

**NEC** — National Electrical Code.

**NEMA** — National Electrical Manufacturers Association.

**NEOPRENE** — A synthetic rubber with good resistance to oil, chemicals, and flame. Also called polychloroprene.

**NETWORK** — A series of nodes connected by communications channels.