Microwave Coaxial Cables that Deliver Low Loss and Superior Bandwidth

Temp-Flex LLC announced today the availability of microwave coaxial cables designed for high-bandwidth applications using proprietary processes. Temp-Flex low loss and ultra-low loss cables deliver faster speed and electrical performance in military and aerospace, defense, automatic test equipment and medical applications.

“Our flexible microwave and RF coaxial cables are engineered to meet or exceed the stringent requirements for a range of rugged industrial and military applications,” states Jeet Sanyal, engineering manager, Temp-Flex. “Customers trust Temp-Flex standard and enhanced coaxial cable solutions to deliver the reliability and performance they need – and faster, more competitive lead-times.”

Temp-Flex microwave coaxial cables are available with either a solid core fluoropolymer resin dielectric (low loss) or an air enhanced design with a fluoropolymer resin layer applied over dual monofilaments (ultra-low loss) around the center conductor for increased signal speed. High purity fluoropolymer resin offers a low dissipation factor and ensures a lower rate of energy loss. Highly consistent manufacturing processes are used to maintain tight mechanical tolerances yielding extremely stable electrical performance.

Additional benefits of Temp-Flex low and ultra-low loss microwave coaxial cable include:

• Phase stability

• Tight impedance tolerance 50 Ohms ± 1 Ohm

• Tight time delay tolerance

• FEP alternative to PTFE and ePTFE

• Bandwidth potential up to 110GHz

• Stability under dynamic conditions

Designed for superior monitoring and control of radar, military vehicles, satellite, space, missile, RF ablation and test and measurement equipment, Temp-Flex coaxial cable solutions are insulated with a fluoropolymer dielectric. A helically wrapped silver-plated copper flat wire shield and braid are applied to all cable sizes to achieve superior shielding effectiveness. The standard solid core (low loss) construction coaxial cable delivers 70 percent velocity of propagation (VOP), while the air enhanced dual monofilament design (ultra-low loss) achieves 85 to 88 percent velocity of propagation and improved insertion loss at high frequencies.

Precision cable assemblies are manufactured at Molex RF facilities. Stop by our booth at IMS 2012 to see our 2.92 mm assembly using 0.047 monofilament low loss cable and supporting performance data. For more information about the Temp-Flex microwave coaxial cables, please visit www.tempflex.com [1] To receive information about other Temp-Flex and Molex products and industry solutions, please sign up for our e-nouncement newsletter.

www.tempflex.com [1]

Posted by Sara Cohen, Editorial Intern

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Links:
[1] http://www.tempflex.com