Compact, Inexpensive Coaxial Terminations for Low Temperature RF Applications.

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We have identified a promising family of radio frequency coaxial connectors (the SSMCX range) manufactured by Molex that have characteristics useful for applications at low temperatures. In the past, we used coaxial terminations manufactured and sold under the Microdot name. However, these are now much more expensive and often prove to be difficult to assemble. We will describe the use and assembly of SSMCX connectors including designs for junction boxes and transmission characteristics of typical arrangements using lossy Cooner coaxial cable and specialty low temperature coaxial cable.