

7mm COAXIAL CRYOGENIC NOISE TERMINATIONS

MT7118J – DC TO 18 GHz

Features

- *Accurate Noise Temperature At Specified Calibration Frequencies*
- *Low VSWR Across The Full Frequency Range*
- *Liquid Nitrogen Cooled*
- *Metrology Grade Calibration For Solid State Noise Generators*
- *Low Noise Figure/Temperature Measurements*



MT7118J

Description

The MT7118J cryogenic termination is a liquid nitrogen cooled noise source that provides accurately known noise temperatures at specified calibration frequencies and low VSWR over the full frequency range. This precision instrument is used for performing accurate noise temperature measurements in 7mm applications such as certification of the noise performance of low noise earth stations. It is also used for general purpose, low noise figure/temperature measurements, and calibration of solid state noise generators.

The MT7118J comes with a linear power supply that operates on the line voltages of 120 VAC/60 Hz or 240 VAC/50 Hz, while supplying 48 VDC to the device power input.

The MT7118J can be packaged with an extensive complement of options and accessories, including calibrated adapters to other coaxial connector series and waveguide, and user specified calibration frequencies.

The MT7118J can be optimized for VSWR and input noise temperature over other bandwidths, or with additional

calibration points. For calibration at additional or other frequencies see Maury data sheet **4E-020**, which covers the Maury *MT7250 series Noise Calibration Swept Data Module*; a software application that works with Microsoft® Excel® 2003 (or later) to provide an Effective Noise Temperature Calculator and an Effective Noise Temperature Interpolator. Please contact our sales department for additional information.

Maury also produces an extensive line of precision hot, cold and ambient terminations in both coaxial and waveguide configurations. Please contact our Sales Department for application assistance and an accurate solution to your requirements.

Pressurizing System

Maury cryogenic terminations require helium gas pressurization at 2 PSI. The optional MT152A pressurizing system provides the valves, gages, and hardware necessary to connect an external helium gas supply to Maury cryogenic terminations (helium gas supply is not provided).

