

# KRYTAR DIRECTIONAL COUPLER

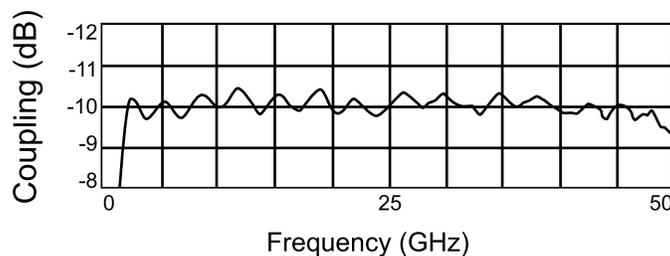
## 2 – 50 GHz



**As coaxial systems reach higher frequencies, it becomes critical to sample and level signals over broad instantaneous bandwidths.**

Krytar Model 102050010 is a 10-dB stripline directional coupler that uses a patented, nonuniform tapered line. The coupler is designed with offset coupled striplines used in a three layer construction, with coupled lines etched on opposite sides of a thin center board that is in turn sandwiched between two dielectric boards of equal thickness.

The design was accomplished with Krytar's proprietary CAD program and features State-of-the-art flat Microwave performance. The coupler's frequency sensitivity or coupling flatness is  $\pm 0.6$  dB, 2-26.5 GHz and  $\pm 0.8$  dB, 2-50 GHz. Note that coupling is measured with respect to the output (See Figure 1 for a plot of coupling characteristics of the model 102050010). The frequency response is measured with a Vector Analyzer. Connectors are 2.4 mm Female.



(Figure 1) Coupling characteristics of Krytar Model 102050010

Model 102050010 offers low insertion loss of 2.0 dB Maximum even at 50 GHz. Directivity is 13 dB, 2-26.5 GHz and 10 dB, 26.5-50 GHz. VSWR is 1.5:1, 2-26.5 GHz and 1.8:1, 26.5-50 GHz. Krytar offers the same coupler design with a 13 dB coupling value which delivers an even lower insertion loss of 1.8 dB Maximum.

Krytar is currently engineering a 1.0-65 GHz, 10 dB directional coupler. Please call for an update on status or check Krytar Website [www.krytar.com](http://www.krytar.com) from time to time to check progress. Applications include Power monitoring in broadband EW systems, test setups and signal leveling in test systems and signal generators.

Krytar offers a standard line of Broadband Directional Couplers with various frequency bandwidths from 0.5 to 50 GHz.

Data sheets with complete electrical specifications and dimensions are available at Krytar Website [www.krytar.com](http://www.krytar.com).

July 2009



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