

Model 1900

Impedance Matching Transformer



FEATURES

- ◆ Selectable ratio
- ◆ Very low noise
- ◆ Single-ended inputs and outputs

APPLICATIONS

- ◆ Matching devices with low source impedances to measuring instruments with medium to high input impedances
- ◆ High T_c superconductor impedance measurements
- ◆ Increasing sensitivity of Model 5113 Preamplifier

DESCRIPTION

The model 1900 low-noise impedance matching transformer is a versatile device for matching sources with impedances in the range from less than 50 Ω to greater than 500 Ω to measuring instruments with high input impedance and offers two turns ratios of 1:100 or 1:1000. The frequency response depends on both the turns ratio and the source impedance, but under optimum conditions will be essentially flat from below 0.1 Hz to above 2 kHz.

The unit is supplied with a special low-noise coaxial cable fitted with two BNC plugs to connect its output to the following instrument.

Specifications

General

Precision signal transformer with adjustable turns ratio mounted in a mu-metal case. Signal input and output connections via BNC connectors

Voltage Gain 1:100 or 1:1000
 selected by front-panel BNC connector

Frequency Response See Figure 1

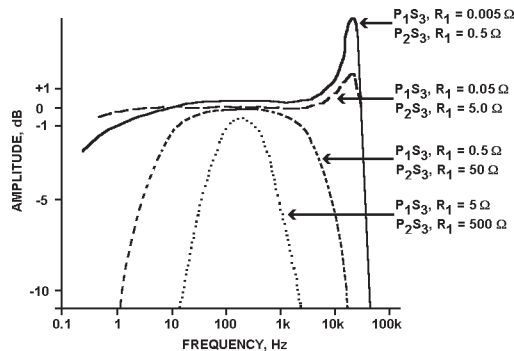


Figure 1, Typical Frequency Response

Noise See Figure 2
 Mounting Free-standing fully shielded metal case

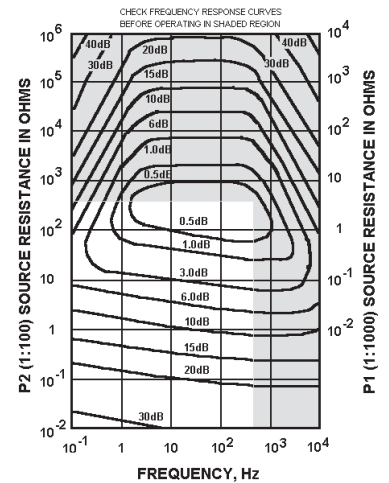


Figure 2, Typical Noise Figure Contours

General

Dimensions (excluding connectors)
 3" wide x 5.8" deep x 3" high
 (76 mm wide x 147 mm deep x 76 mm high)

Shipping Weight 5lbs (2.3 kg)