

HF-110/HF-122
Wideband
RF/Pulse
Transformers
.1-500 MHz/.1-700 MHz



DESCRIPTION

The HF series is a line of eight transformers offering all popular configurations in our popular six pin molded epoxy package. These transformers are high reliability devices designed to meet MIL-T-55631.

Typical applications are: Interstage coupling, phase detection and pulse transformation.

GUARANTEED MINIMUM PERFORMANCE DATA SPECIFICATIONS FOR MODEL HF-110

Type: 50 ohm unbalanced
50 ohm balanced

- 1 dB Bandwidth, MHz .1-500
Midband insertion loss dB .5
Amplitude unbalance dB (- 1 dB point) dB 1.0
Phase unbalance (- 1 dB point)^o 5
(deviation from 180^o)^o
VSWR (- 1 dB point) 2.0:1

SPECIFICATIONS FOR MODEL HF-122

Type: 50 ohm unbalanced
200 ohm balanced

- 1 dB Bandwidth, MHz 1-700
Midband insertion loss dB 1.2
Amplitude unbalance dB (- 1 dB point) dB 1.5
Phase unbalance (- 1 dB point)^o 7
(deviation from 180^o)^o
VSWR (- 1 dB point) 1.5:1

NOTE:

- 1 dB bandwidth is measured relative to midband loss.

ABSOLUTE MAXIMUM RATINGS:

Input power 2 w. limited by (I_{DC}² + I_{RF}²)Z ≅ P_{max}.
Temperature range - 54°C to + 100°C

ENVIRONMENTAL CONDITIONS

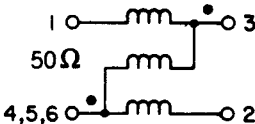
GUARANTEED ENVIRONMENTAL PERFORMANCE:

All units are designed to meet their specifications over - 54°C to + 100°C and after exposure to any or all of the following tests per MIL-STD-202E.

| Exposure | Method | Test Condition |
|------------------------------|--------|----------------|
| Thermal Shock | 107D | B |
| Altitude | 105C | G |
| H.F. Vibration | 204C | D |
| Mechanical Shock | 213B | C |
| Random Vibration | 214 | IIF |
| (15 minutes per axis) | | |
| Solderability | 208C | |
| Terminal Strength | 211A | C |
| Resistance to Soldering Heat | 210A | B |

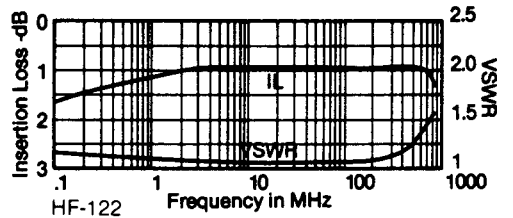
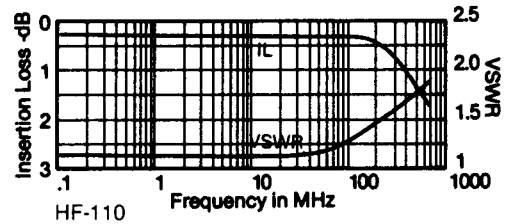
Sealed units, meet the requirements of Method 106D of MIL-STD-202E when exposed to humidity.

FUNCTIONAL SCHEMATIC



Specifications subject to change without notice.

TYPICAL PERFORMANCE



PACKAGE

MATERIAL:

Header: Diallyl Phthalate
Leads: Phosphor Bronze, Grade A, Spring temper

FINISH:

Header: Glossy red Diallyl Phthalate
Leads: Silver plated per QQ-S-365A, Type I, Grade B

