

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 $(I_{DC}^2 + I_{RF}^2)Z \cong P_{max}$.
Temperature range - 54°C to + 100°C

ENVIRONMENTAL CONDITIONS

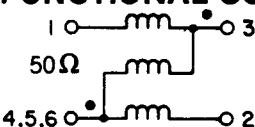
GUARANTEED ENVIRONMENTAL PERFORMANCE:

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.

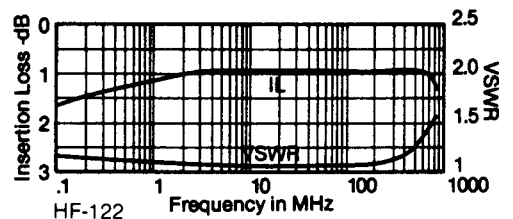
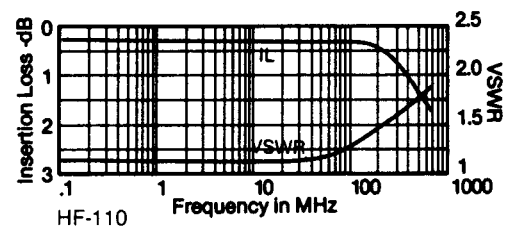
Exposure	Method	Test Condition
Thermal Shock	107D	B
Altitude	105C	G
H.F. Vibration	204C	D
Mechanical Shock	213B	C
Random Vibration (15 minutes per axis)	214	IIF
Solderability	208C	
Terminal Strength	211A	C
Resistance to Soldering Heat	210A	B

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

FUNCTIONAL SCHEMATIC



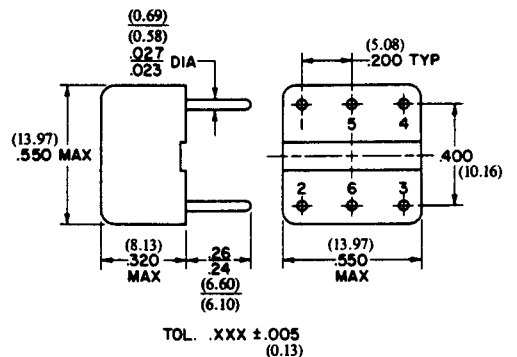
TYPICAL PERFORMANCE



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



Specifications subject to change without notice.