

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)° 5  
(deviation from 180°)  
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)° 7  
(deviation from 180°)  
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  $(I_{DC2} + I_{RF2})Z \cong P_{max}$ .  
Temperature range - 54°C to + 100°C

**ENVIRONMENTAL CONDITIONS**

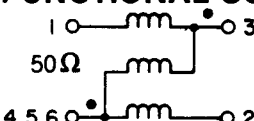
**GUARANTEED ENVIRONMENTAL PERFORMANCE:**

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.

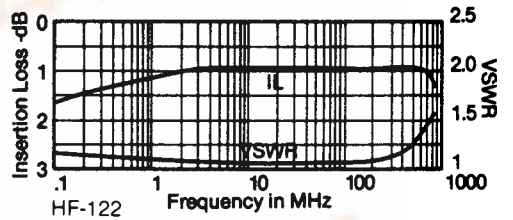
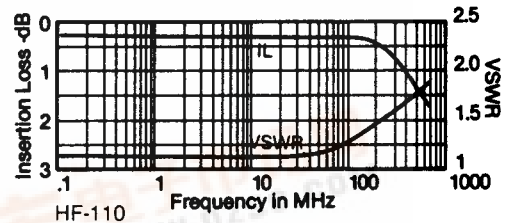
Exposure	Method	Test Condition
Thermal Shock	107D	B
Altitude	105C	G
H.F. Vibration	204C	D
Mechanical Shock	213B	C
Random Vibration (15 minutes per axis)	214	IIF
Solderability	208C	
Terminal Strength	211A	C
Resistance to Soldering Heat	210A	B

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

**FUNCTIONAL SCHEMATIC**



**TYPICAL PERFORMANCE**



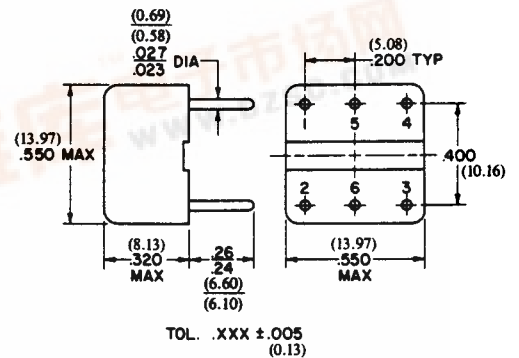
**PACKAGE**

**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



TOL. .XXX ± .005  
(0.13)



Specifications subject to change without notice.