

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

VARIL



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.

LIMITED WARRANTY

Varil Company, Inc. warrants its products against defects in parts and workmanship for a period of one year.

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 (IDC2 + 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.

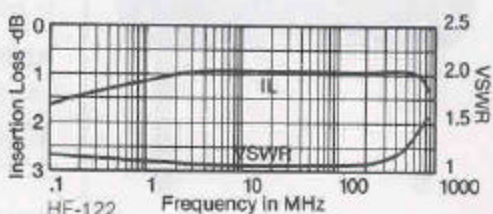
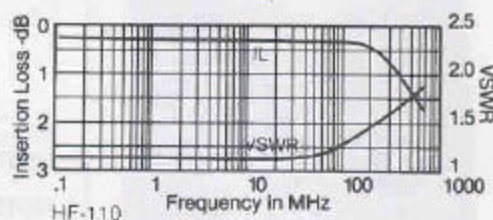
Exposure	Method	Test Condition
Thermal Shock	107D	B
Altitude	105C	G
H.F. Vibration	204C	D
Mechanical Shock	213B	C
Random Vibration (15 minutes per axis)	214	IIF
Solderability	208C	
Terminal Strength	211A	C
Resistance to Soldering Heat	210A	B

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

