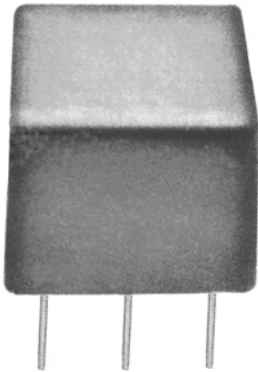




LF-452/LF-454  
Wideband  
RF/Pulse  
Transformers  
.01-10 MHz/.01-5 MHz



**DESCRIPTION**

The LF series offers a variety of transformer configurations over the 10 KHz to 100 MHz frequency range.

Typical applications are: Interstage coupling, voltage/current transformation, and pulse transformation.

The transformer circuitry is packaged in an epoxy housing. All models are designed to meet MIL-T-55631 and are recommended for use over the -54°C to +100°C temperature range.

**GUARANTEED MINIMUM PERFORMANCE DATA**

**SPECIFICATIONS FOR MODEL LF-452**

Type: 50 ohm unbalanced  
800 ohm balanced  
DC isolated

- 1 dB Bandwidth, MHz	.01-10
Midband insertion loss dB	.75
Amplitude unbalance dB	.75
Phase unbalance (deviation from 180°)	15
VSWR	2:1

**SPECIFICATIONS FOR MODEL LF-454**

Type: 50 ohm unbalanced  
1800 ohm balanced  
DC isolated

- 1 dB Bandwidth, MHz	.01-5
Midband insertion loss dB	1.0
Amplitude unbalance dB	.6
Phase unbalance (deviation from 180°)	5
VSWR	2.5:1

**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**

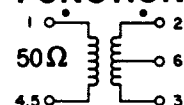
**GUARANTEED ENVIRONMENTAL PERFORMANCE:**

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

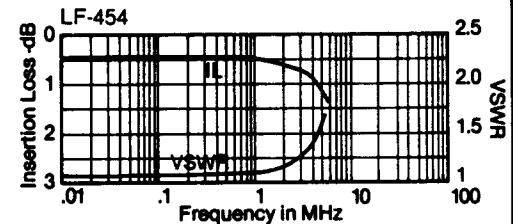
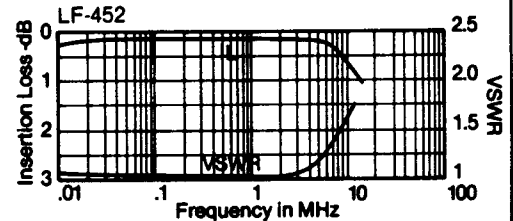
Sealed units, meet the requirements of Method 106D of MIL-STD-202E when exposed to humidity.

**FUNCTIONAL SCHEMATIC**



Specifications subject to change without notice.

**TYPICAL PERFORMANCE**



**PACKAGE**

**MATERIAL:**

Header: Epoxy  
Leads: Phosphor Bronze, Grade A, Spring temper

**FINISH:**

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

