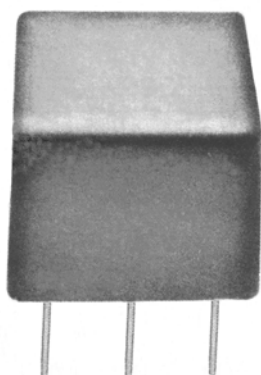




LF-452/LF-454
Wideband
RF/Pulse
Transformers
.01-10 MHz/.01-5 MHz



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 $+100^{\circ}\text{C}$ 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 $\leq P_{max}$.
Temperature range -54°C to $+100^{\circ}\text{C}$

ENVIRONMENTAL CONDITIONS

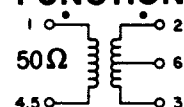
GUARANTEED ENVIRONMENTAL PERFORMANCE:

All units are designed to meet their specifications over -54°C to $+100^{\circ}\text{C}$ 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

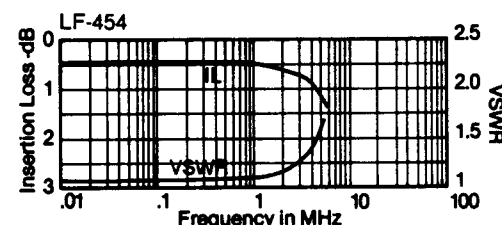
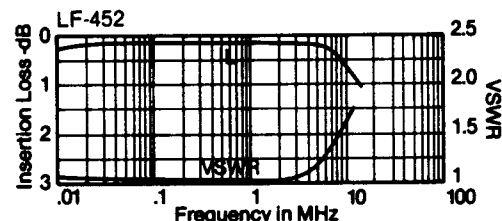
Sealed units, meet the requirements of Method 106D of MIL-STD-202E when exposed to humidity.

FUNCTIONAL SCHEMATIC



Specifications subject to change without notice.

TYPICAL PERFORMANCE



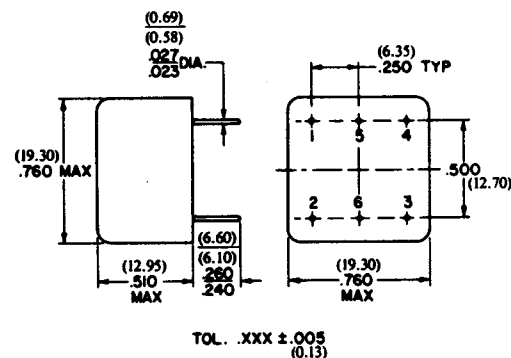
PACKAGE

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



TOL. .XXX $\pm$.005
(0.13)