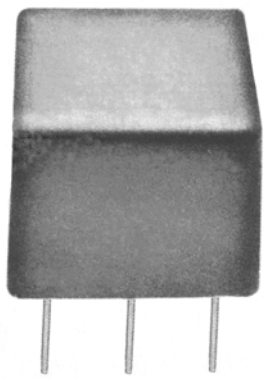
LF-410/LF-422 Wideband RF/Pulse Transformers .01-100 MHz/.01-80 MHz

SIRENZA MICRODEVICES



DESCRIPTION

The LF series offers a variety of transformers 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-410

Type: 50 ohm unbalanced
50 ohm balanced
symm.

−1 dB Bandwidth, MHz	.01-100
Midband insertion loss dB	.5
Amplitude unbalance dB	.5
Phase unbalance (deviation from 180°)°	5
VSWR	2:1

SPECIFICATIONS FOR MODEL LF-422

Type: 50 ohm unbalanced
200 ohm balanced
symm.

−1 dB Bandwidth, MHz	.01-80
Midband insertion loss dB	.75
Amplitude unbalance dB	.5
Phase unbalance (deviation from 180°)°	5
VSWR	1.3:1

NOTE:
−1 dB bandwidth is measured relative to midband loss.

ABSOLUTE MAXIMUM RATINGS:
Input power 2 w. limited by $(I_{DC}2 + I_{RF}2)Z \cong$ Pmax.
Temperature range −54°C to +100°C

ENVIRONMENTAL CONDITIONS

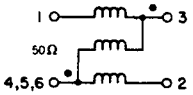
GUARANTEED ENVIRONMENTAL PERFORMANCE:

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.

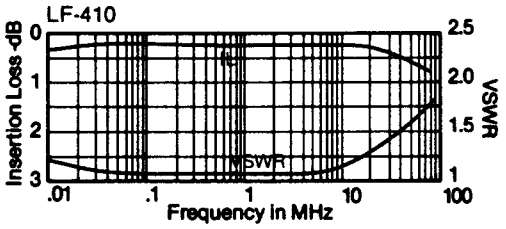
Exposure	Method	Test Condition
Thermal Shock	107D	B
Altitude	105C	G
H.F. Vibration	204C	D
Mechanical Shock	213B	C
Random Vibration (15 minutes per axis)	214	IIF
Solderability	208C	
Terminal Strength	211A	C
Resistance to Soldering Heat	210A	B

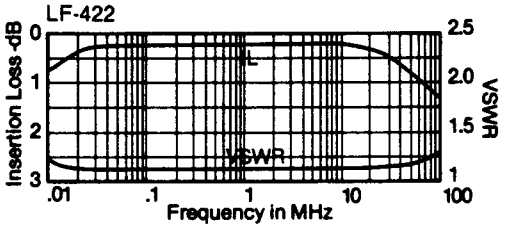
Sealed units, meet the requirements of Method 106D of MIL-STD-202E when exposed to humidity.

FUNCTIONAL SCHEMATIC



TYPICAL PERFORMANCE





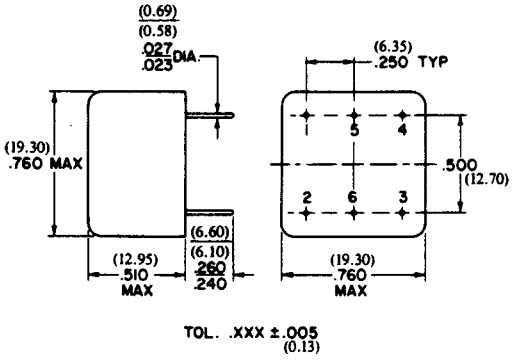
PACKAGE

MATERIAL:

Header: 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



Specifications subject to change without notice.

8.10.04 Rev. A