HF-102 Wideband RF/Pulse Transformer .5-1000 MHz

SIRENZA MICRODEVICES



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-102

Type: 50 ohm unbalanced
12.5 ohm unbalanced

−2 dB Bandwidth, MHz	.5-1000
Midband insertion loss dB	.75
VSWR (−2 dB point)	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°C

ENVIRONMENTAL CONDITIONS

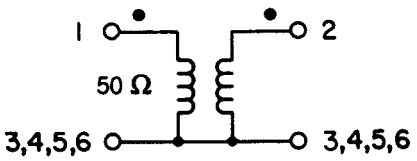
GUARANTEED ENVIRONMENTAL PERFORMANCE:

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.

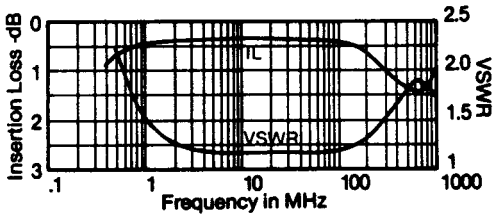
Exposure	Method	Test Condition
Thermal Shock	107D	B
Altitude	105C	G
H.F. Vibration	204C	D
Mechanical Shock	213B	C
Random Vibration (15 minutes per axis)	214	IIF
Solderability	208C	
Terminal Strength	211A	C
Resistance to Soldering Heat	210A	B

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

FUNCTIONAL SCHEMATIC



TYPICAL PERFORMANCE



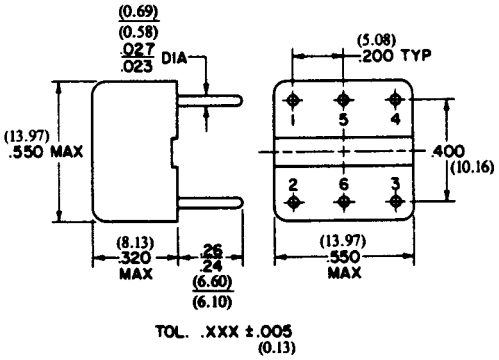
PACKAGE

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



Specifications subject to change without notice.