Hammond Mfg. Co. Ltd., Electronics Division



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## 1140-LU-F

CHASSIS MOUNT LINE OUTPUT TRANSFORMER

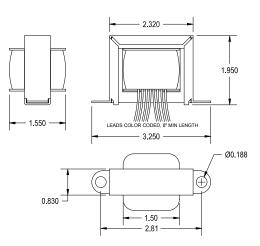
This transformer is designed with quad-filar windings and a 80% Ni core, which gives very low distortion levels and good output levels.

It can drive  $600\Omega$  loads up to +27dbu @ 20Hz. This transformer is best suited for 1:2 step up applications. If a 1:1 ratio is needed, better performance can be obtained from the 1140-LU-G

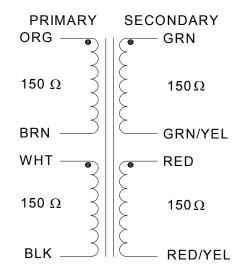
Due to the properties of the Ni core, the drive signal should have no DC component and the source impedance should be as low as possible.

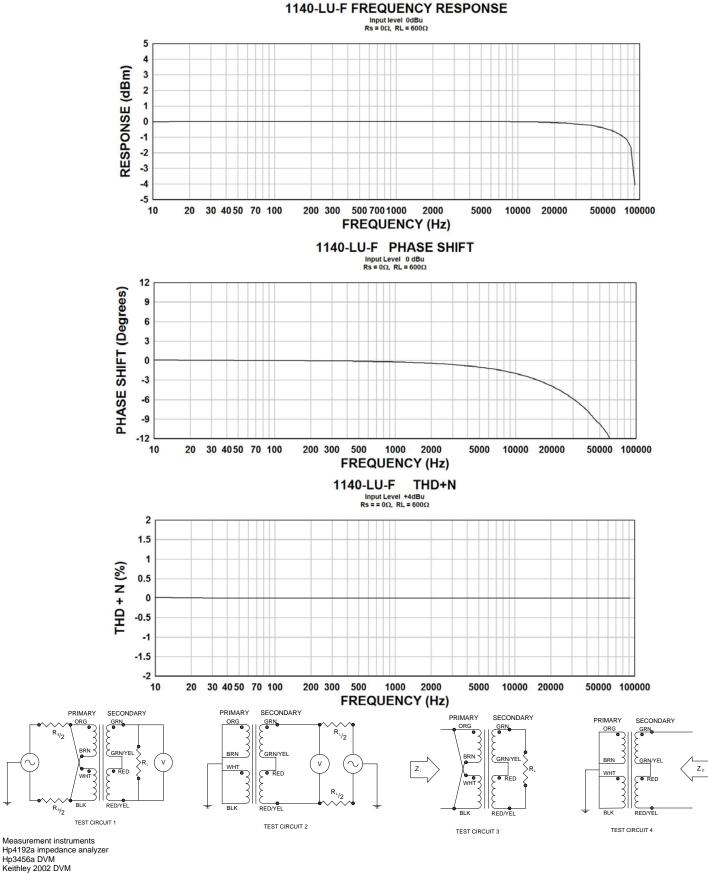
## **ELECTRICAL SPECIFICATIONS**

$\begin{tabular}{ c c c c c } \hline Conditions & Typical \\ \hline Input Impedance & 600 \ \Omega \\ \hline Output Impedance & 600 \ \Omega \\ \hline Output Impedance & 0 \\ \hline Primary Input & 1 \\ Impedance & Test Circuit 3 \\ \hline Secondary Output & 1 \\ Impedance & Test Circuit 4 \\ \hline Maximum input Level & 20 \\ \hline DCR & & & & & & & & & & & & \\ \hline Primary & 20^{\circ}C & 30/30 \ \Omega \\ \hline Secondary & 20^{\circ}C & 30/30 \ \Omega \\ \hline Secondary & 20 \\ \hline Prequency Response & 20 \\ \hline Hz, 0 \\ dbu, & -0.001 \\ \hline Turns ratio & & & & & & & & & & & & \\ \hline Common Mode & & & & & & & & & & & & & & & & & \\ \hline \end{tabular}$			
Output Impedance       600 Ω         Primary Input Impedance       @ 1kHz 0dbu Test Circuit 3       180Ω         Secondary Output Impedance       @ 1kHz 0dbu Test Circuit 4       80Ω         Maximum input Level       @ 20Hz RL = 600Ω       +27 dbu         DCR       020°C       30/30 Ω         Frequency Response       @ 20 Hz, 0 dbu, Test Circuit 3       -0.001db         Turns ratio       1:1       1:1         Common Mode       @ 60 Hz, 0 dbu,       105db	<b>Characteristic</b>	<b>Conditions</b>	Typical
Primary Input Impedance@ 1kHz 0dbu Test Circuit 3180ΩSecondary Output Impedance@ 1kHz 0dbu Test Circuit 480ΩMaximum input Level DCR@ 20Hz RL = 600Ω+27 dbuPrimary Secondary@20°C30/30 ΩSecondary Prequency Response@ 20 Hz, 0 dbu, Test Circuit 3-0.001dbTurns ratio1:1Common Mode@ 60 Hz, 0 dbu, Q 60 Hz, 0 dbu,105db	Input Impedance		600 Ω
Impedance       Test Circuit 3       180Ω         Secondary Output       @ 1kHz 0dbu       80Ω         Impedance       @ 20Hz       +27 dbu         Maximum input Level       @ 20Hz       +27 dbu         DCR        920°C       30/30 Ω         Secondary       @ 20°C       30/30 Ω         Frequency Response       @ 20 Hz, 0 dbu,       -0.001db         Turns ratio       1:1       1:1         Common Mode       @ 60 Hz, 0 dbu,       105db	Output Impedance		600 Ω
ImpedanceTest Circuit 4 $80\Omega$ Maximum input Level@ 20Hz $RL = 600\Omega$ +27 dbuDCRPrimary@ 20°C $30/30 \Omega$ Secondary@ 20°C $30/30 \Omega$ Frequency Response@ 20 Hz, 0 dbu, Test Circuit 3-0.001db@ 20 kHz, 0 dbu, Test Circuit 3+0.007dbTurns ratio1:1Common Mode@ 60 Hz, 0 dbu, 0 0 Hz, 0 dbu,105db			180Ω
Interview         RL = 600Ω         127 dbd           DCR		@ 1kHz 0dbu Test Circuit 4	80Ω
Primary         @20°C         30/30 Ω           Secondary         @20°C         30/30 Ω           Frequency Response         @ 20 Hz, 0 dbu, Test Circuit 3         -0.001db           @ 20 kHz, 0 dbu, Test Circuit 3         +0.007db           Turns ratio         1:1           Common Mode         @ 60 Hz, 0 dbu,         105db	Maximum input Level		+27 dbu
Secondary         @20°C         30/30 Ω           Frequency Response         @ 20 Hz, 0 dbu, Test Circuit 3         -0.001db           @ 20 kHz, 0 dbu, Test Circuit 3         +0.007db           Turns ratio         1:1           Common Mode         @ 60 Hz, 0 dbu,         105db	DCR		
Frequency Response@ 20 Hz, 0 dbu, Test Circuit 3-0.001db@ 20 kHz, 0 dbu, Test Circuit 3+0.007dbTurns ratio1:1Common Mode@ 60 Hz, 0 dbu, 105db	Primary	@20°C	30/30 Ω
Image: Test Circuit 3     Image: Test Circuit 3       Image: Image	Secondary	@20°C	30/30 Ω
Test Circuit 3     Toto of db       Turns ratio     1:1       Common Mode     @ 60 Hz, 0 dbu,     105db	Frequency Response	Test Circuit 3	-0.001db
Common Mode @ 60 Hz, 0 dbu, 105db			+0.007db
	Turns ratio		1:1
Rejection Level Test Circuit 2	Common Mode Rejection Level	@ 60 Hz, 0 dbu, Test Circuit 2	105db
3kHz, 0 dbu, 75db Test Circuit 2			75db
THD @ 1kHz 4 dbu 0.007%	THD		0.007%
@ 20Hz 4 dbu 0.001%			0.001%
Phase Shift @ 20 Hz 0.08°	Phase Shift		0.08°
@ 20 kHz -3.80°		Test Circuit 1	-3.80°
Capacitance Primary to Shield and 30nf	Capacitance	,	30nf
Secondary to Shield 80pf and Case			80pf
Dielectric Strength 250 Vrms	Dielectric Strength		250 Vrms









Keithley 2002 DVM D scope series iii audio analyzer

Hp3456a DVM

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