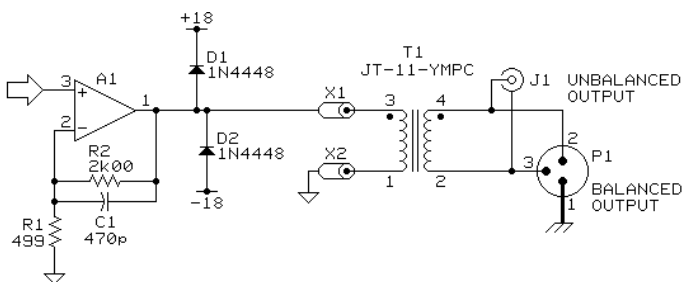


Line Output Transformer

1:1 BIFILAR WINDINGS

- Specially designed for high performance 'consumer' applications
- Very low THD: 0.005% typ at 20 Hz and -10 dBV output level
- Wide bandwidth: -3 dB at 0.05 Hz and over 10 MHz
- Excellent time domain performance: DLP $\pm 0.3^\circ$ typ 20 Hz to 20 kHz
- Insertion loss only 0.2 dB when driving 10 k Ω load

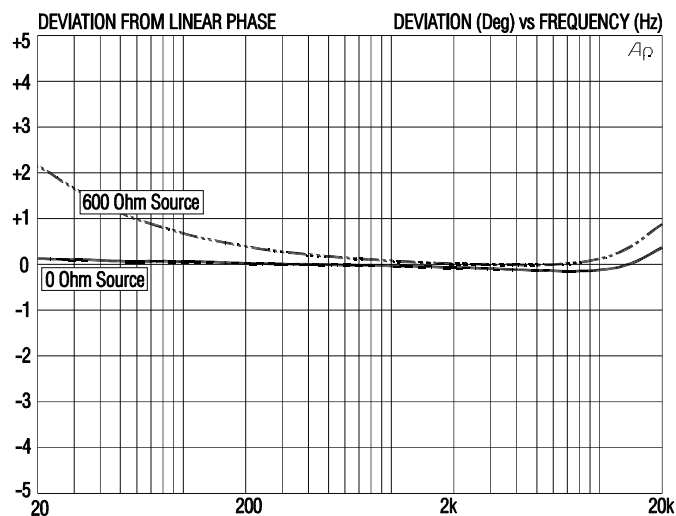
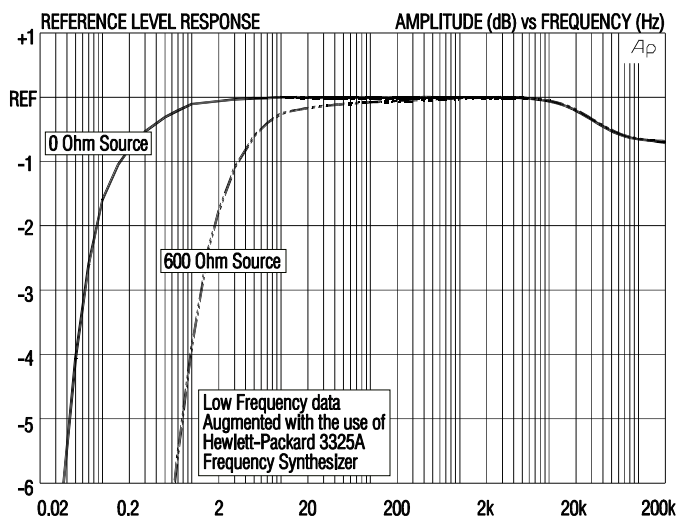
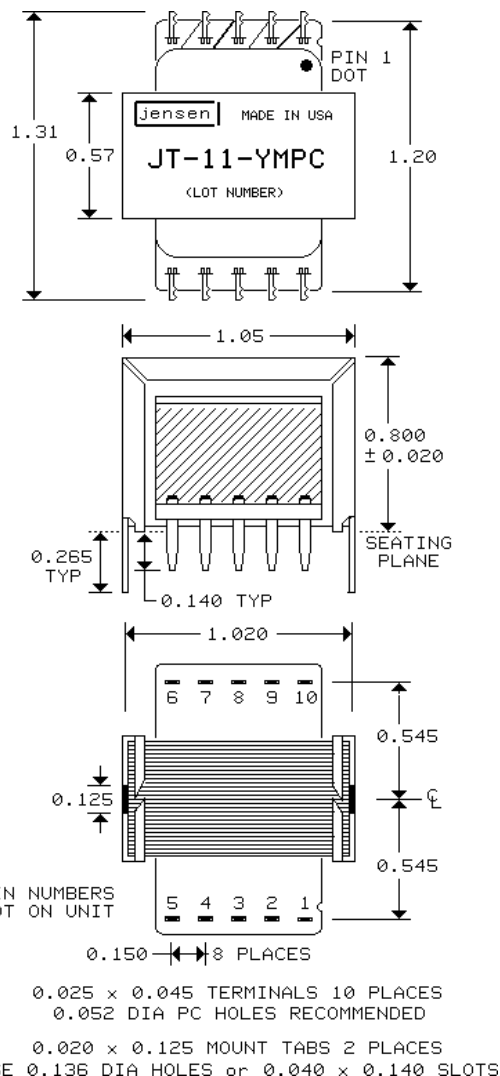
This transformer can eliminate 'ground loop' problems when driving either balanced or unbalanced inputs. When operated at -10 dBV (316 mV RMS) nominal consumer levels, it provides 18 dB of 'headroom' at 20 Hz.

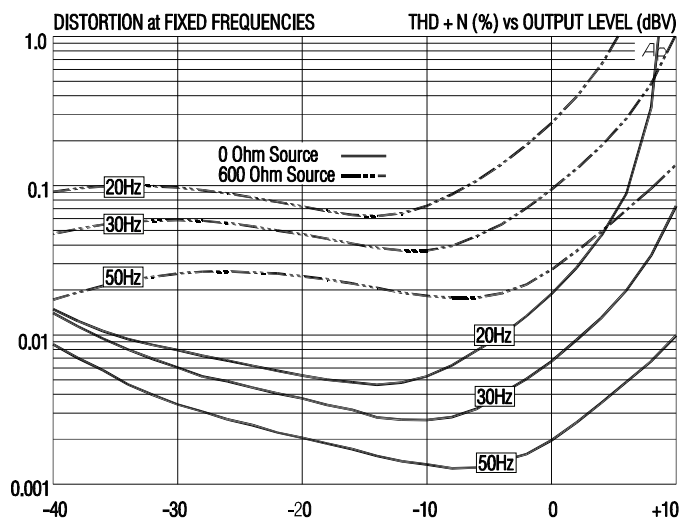
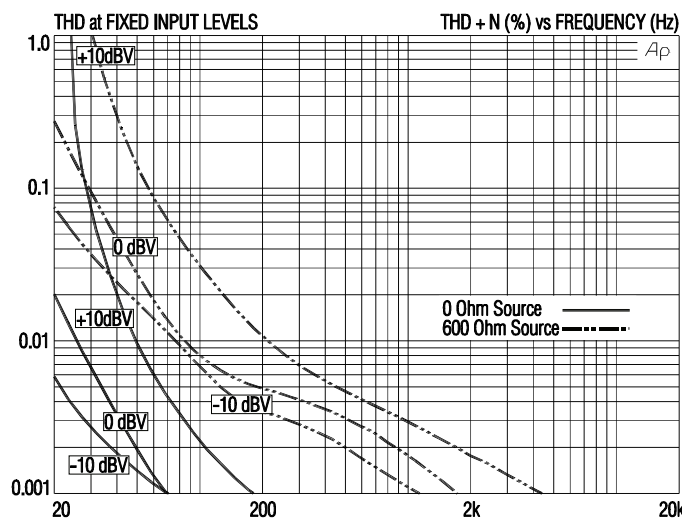


J1 must be insulated from chassis.
J1 and P1 cannot be used at the same time.
X1 and X2 are ferrite beads with $Z > 50 \Omega$ at 3 MHz,
Panasonic EXC-ELDR35 recommended.

LOW-COST UNIVERSAL LINE DRIVER (14 dB gain)
High performance with BALANCED or UNBALANCED loads

Typical Application

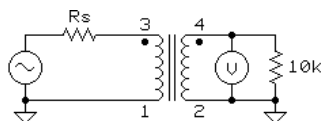




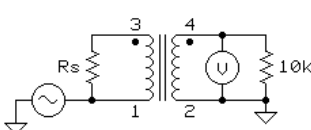
JT-11-YMPC SPECIFICATIONS (all levels are output unless noted, 0 dBV = 1 V RMS = +2.2 dBu)

PARAMETER	CONDITIONS	MINIMUM	TYPICAL	MAXIMUM
Input impedance, Z_i	1 kHz, -10 dBV, test circuit 3	5 k Ω	9.2 k Ω	
Voltage gain	1 kHz, -10 dBV, test circuit 1, $R_s=0 \Omega$		-0.17 dB	-0.3 dB
Magnitude response, ref 1 kHz	20 Hz, -10 dBV, test circuit 1, $R_s=0 \Omega$	-0.1 dB	± 0.0 dB	+0.1 dB
	20 kHz, -10 dBV, test circuit 1, $R_s=0 \Omega$	-0.4 dB	-0.2 dB	+0.0 dB
Deviation from linear phase (DLP)	20 Hz to 20 kHz, -10 dBV, test circuit 1, $R_s=0 \Omega$		$\pm 0.3^\circ$	$\pm 2^\circ$
Bandwidth	LF -3 dB re 1 kHz, test circuit 1, $R_s=0 \Omega$		0.05 Hz	
	HF -3 dB re 1 kHz, test circuit 1, $R_s=0 \Omega$		>10 MHz	
Distortion (THD)	1 kHz, -10 dBV, test circuit 1, $R_s=0 \Omega$		<0.001%	
	20 Hz, -10 dBV, test circuit 1, $R_s=0 \Omega$		0.005 %	0.05 %
Maximum output level	20 Hz, 1% THD, test circuit 1, $R_s=0 \Omega$	+6 dBV	+8 dBV	
Ground noise rejection ratio (similar to CMRR in balanced interface)	60 Hz, test circuit 2, $R_s=0$ or 600 Ω		67 dB	
	3 kHz, test circuit 2, $R_s=0$ or 600 Ω	30 dB	33 dB	
Output impedance, Z_o	20 Hz to 20 kHz, -10 dBV, test circuit 4		178 Ω	
DC resistance	primary (pin 3 to pin 1)		42 Ω	
	secondary (pin 4 to pin 2)		136 Ω	
Capacitance	winding to winding, 1 kHz		12.9 nF	
	winding to frame, 1 kHz		35 pF	
Turns ratio		0.999:1	1.000:1	1.001:1
Temperature range	operation or storage	0° C		70° C
Breakdown voltages 60 Hz, 1 minute test duration (see IMPORTANT NOTE below)	winding to winding	250 V RMS		
	winding to frame	500 V RMS		

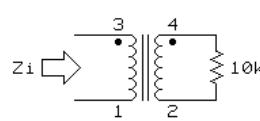
IMPORTANT NOTE: This device is NOT intended for use in life support systems or any application where its failure could cause injury or death. The breakdown voltage specification is intended to insure integrity of internal insulation systems; continuous operation at these voltages is NOT recommended. Consult our applications engineering department if you have special requirements.



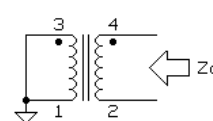
TEST CIRCUIT 1



TEST CIRCUIT 2



TEST CIRCUIT 3



TEST CIRCUIT 4

All minimum and maximum specifications are guaranteed. Unless noted otherwise, all specifications apply at 25°C. Specifications subject to change without notice. All information herein is believed to be accurate and reliable, however no responsibility is assumed for its use nor for any infringements of patents which may result from its use. No license is granted by implication or otherwise under any patent or patent rights of Jensen Transformers, Inc.