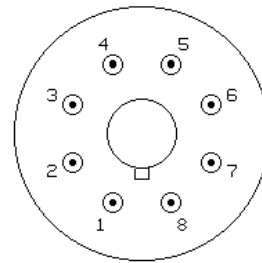
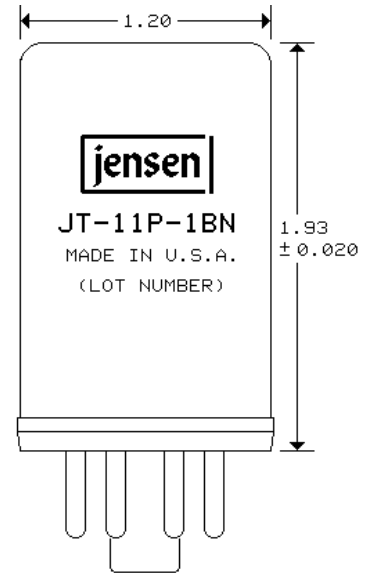


'Plug-In' Line Input Transformer
1:1 FOR ALTEC EQUIPMENT

- Ideal for balancing unbalanced equipment inputs
- Wide bandwidth: -3 dB at 0.25 Hz and 80 kHz
- Recommended for levels up to +19 dBu at 20 Hz
- Additional can provides 60 dB typical magnetic shielding
- High common-mode rejection: 107 dB at 60 Hz

This transformer is our JT-11P-1 in a second mu-metal can and octal plug for several Altec equipment models. A built-in RC damping network optimizes time domain performance for general use with load impedances of 15 kΩ or more. ***This part is recommended for plug-in applications in new designs.***



BOTTOM VIEW

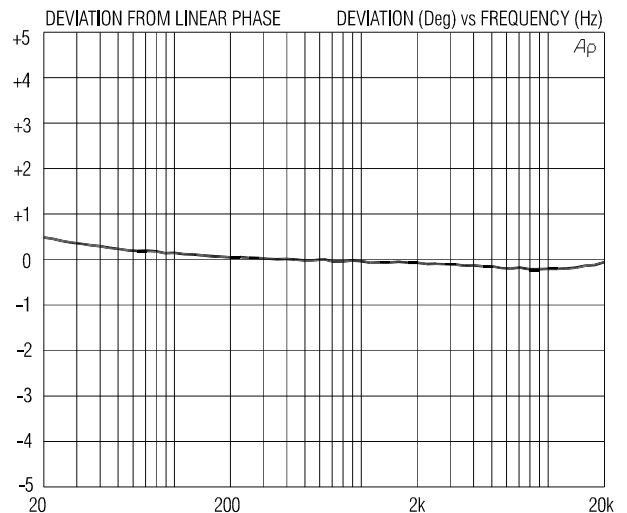
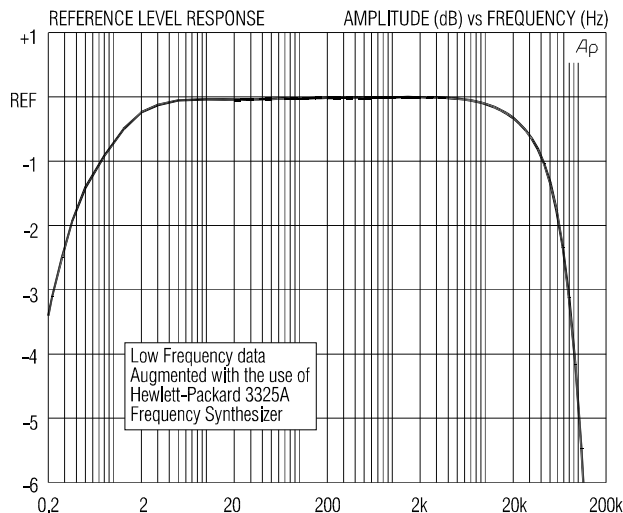
FITS STANDARD OCTAL SOCKET
(0.090 DIA PINS, 0.700 DIA CIRCLE)

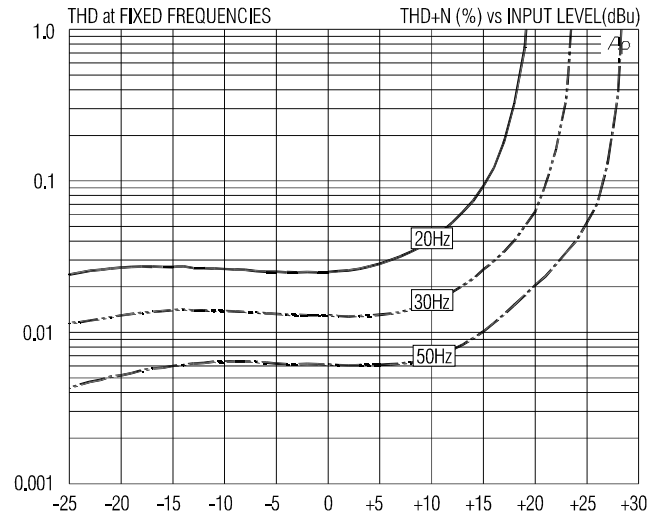
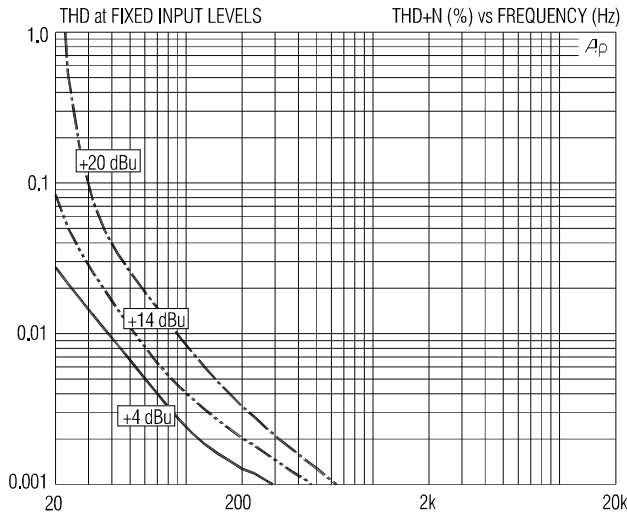
Circuit diagram of the transformer balanced input stage. It shows a transformer with primary terminals 1, 2, 3, 4, 5, 6, 7, and 8. Terminals 1 and 2 are labeled "BALANCED LINE INPUT". Terminal 7 is connected to a load resistor R_L^* and an amplifier. Terminal 8 is grounded. Terminals 3, 4, and 5 are shown as unconnected. The transformer is labeled "JT-11P-1BN".

* R_L must be 15 kΩ or greater for specified performance.
Internal RC network is 13k0 ±1% and 620 pF ±2.5%.
Pins ③, ④ and ⑤ have no internal connections.

TRANSFORMER BALANCED INPUT STAGE

Typical Application

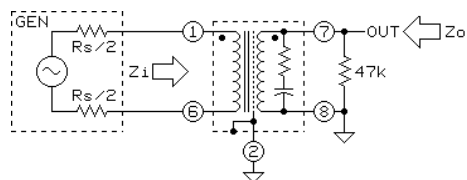




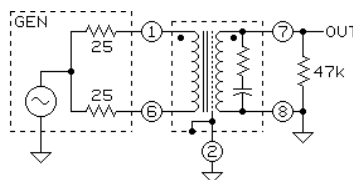
JT-11P-1BN SPECIFICATIONS (all levels are input unless noted)

PARAMETER	CONDITIONS	MINIMUM	TYPICAL	MAXIMUM
Input impedance, Z_i	1 kHz, +4 dBu, test circuit 1	44 k Ω	46.5 k Ω	49 k Ω
Voltage gain	1 kHz, 0 dBu, test circuit 1	-0.7 dB	-0.5 dB	-0.3 dB
Magnitude response, ref 1 kHz	20 Hz, +4 dBu, test circuit 1, $R_s=600 \Omega$	-0.15 dB	-0.04 dB	0.0 dB
	20 kHz, +4 dBu, test circuit 1, $R_s=600 \Omega$	-0.50 dB	-0.32 dB	0.0 dB
Deviation from linear phase (DLP)	20 Hz to 20 kHz, +4 dBu, test circuit 1, $R_s=600 \Omega$		+0.5/-0.2°	$\pm 2.0^\circ$
Distortion (THD)	1 kHz, +4 dBu, test circuit 1, $R_s=600 \Omega$		<0.001%	
	20 Hz, +4 dBu, test circuit 1, $R_s=600 \Omega$		0.028%	0.10%
Maximum 20 Hz input level	1% THD, test circuit 1, $R_s=600 \Omega$	+17 dBu	+19 dBu	
Common-mode rejection ratio (CMRR) 50 Ω balanced source	60 Hz, test circuit 2		107 dB	
	3 kHz, test circuit 2	65 dB	73 dB	
Common-mode rejection ratio (CMRR) 600 Ω unbalanced source	60 Hz, test circuit 3		100 dB	
	3 kHz, test circuit 3		68 dB	
Output impedance, Z_o	1 kHz, test circuit 1, $R_s=50 \Omega$		2.86 k Ω	
DC resistances	primary (pin 1 to pin 6)		1.45 k Ω	
	secondary (pin 7 to pin 8)		1.55 k Ω	
Capacitances @ 1 kHz	primary to shield and case		98 pF	
	secondary to shield and case		110 pF	
Turns ratio		0.999:1	1.000:1	1.001:1
Temperature range	operation or storage	0° C		70° C
Breakdown voltage (see IMPORTANT NOTE below)	primary or secondary to shield and case, 60 Hz, 1 minute test duration	250 V RMS		

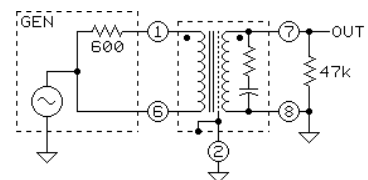
IMPORTANT NOTE: This device is NOT intended for use in life support systems or any application where its failure could cause injury or death. The breakdown voltage specification is intended to insure integrity of internal insulation systems; continuous operation at these voltages is NOT recommended.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



TEST CIRCUIT 1



TEST CIRCUIT 2



TEST CIRCUIT 3

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.