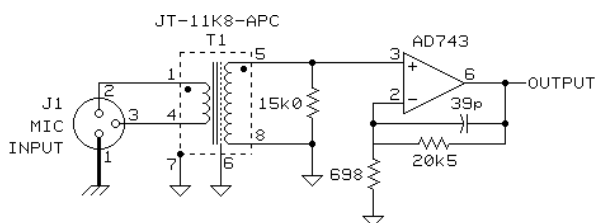


Microphone Input Transformer

1:3.5 STEP-UP FOR LOW-NOISE FET AMPLIFIERS

- High performance at low cost for IC or discrete FET amplifiers
- Wide bandwidth: -3 dB at 1.7 Hz and 80 kHz
- 10.5 dB of step-up voltage gain
- Input impedance of 1.24 k Ω for loading loss of 1.0 dB
- High common-mode rejection: 123 dB at 60 Hz

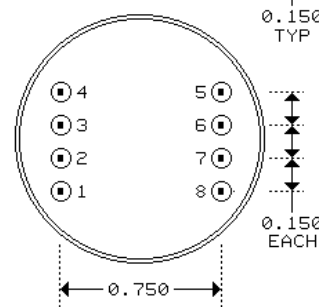
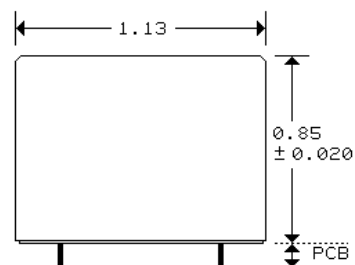
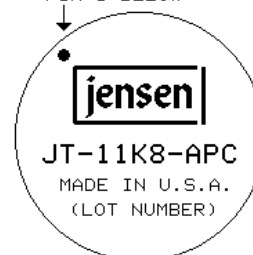
This transformer is designed to optimize performance of low voltage noise, e_N , amplifiers. It is recommended only for use with FET amplifiers with no significant current noise, i_N . The primary is fully balanced and its terminals may be reversed to invert polarity, if required. A 30 dB magnetic shield package is standard.



LOW NOISE MICROPHONE INPUT STAGE
40 dB OVERALL VOLTAGE GAIN

Typical Application

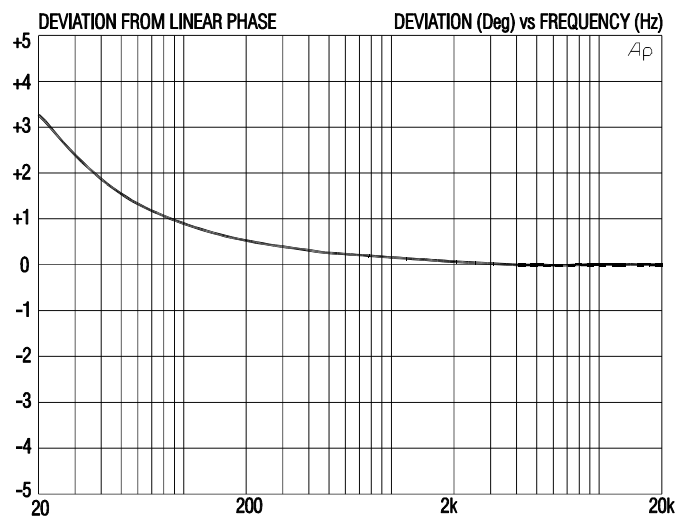
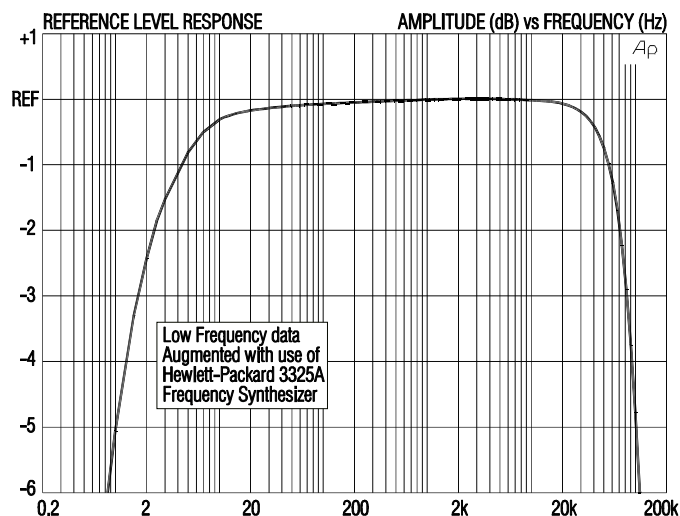
DOT INDICATES
PIN 1 BELOW

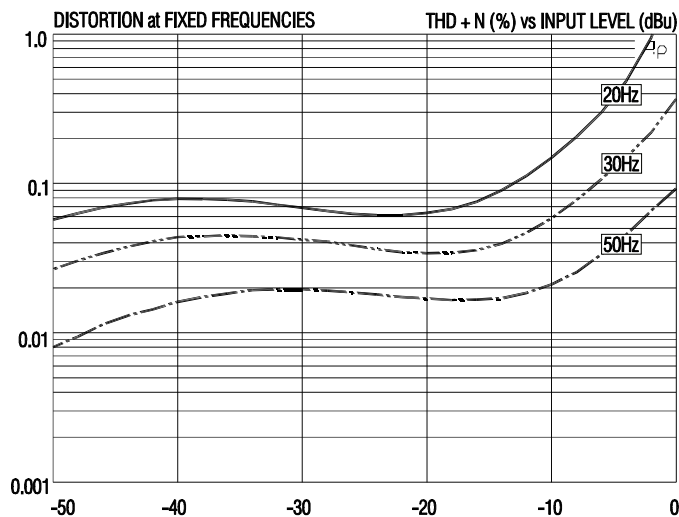
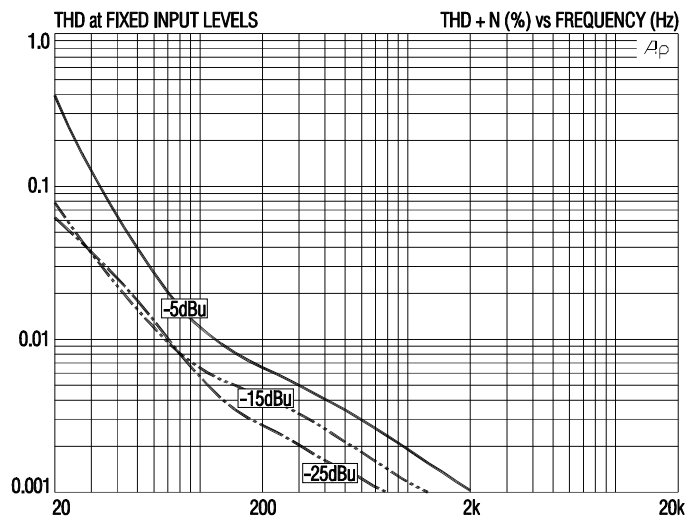


PIN NUMBERS NOT MARKED ON PART

TERMINAL PINS 0.018 x 0.030
PC HOLES 0.040 DIA SUGGESTED

PART SUPPLIED WITH 5 MIL VALOX® INSULATOR
TO ALLOW PC TRACES UNDER TRANSFORMER

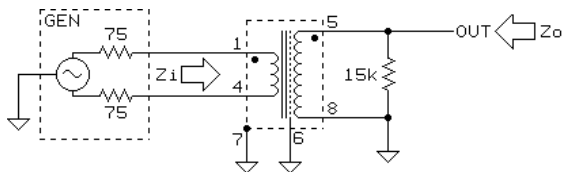




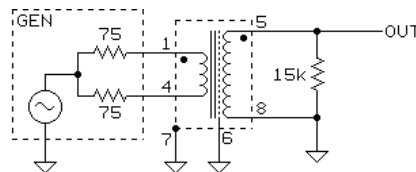
JT-11K8-APC SPECIFICATIONS (all levels are input unless noted, 0 dBu = 0.775 V RMS)

PARAMETER	CONDITIONS	MINIMUM	TYPICAL	MAXIMUM
Input impedance, Z_i	1 kHz, -20 dBu, test circuit 1	1.2 k Ω	1.24 k Ω	1.3 k Ω
Voltage gain	1 kHz, -20 dBu, test circuit 1	10.3 dB	10.5 dB	10.7 dB
Magnitude response, ref 1 kHz	20 Hz, -20 dBu, test circuit 1	-0.50 dB	-0.17 dB	± 0.0 dB
	20 kHz, -20 dBu, test circuit 1	-0.15 dB	-0.06 dB	+0.1 dB
Deviation from linear phase (DLP)	20 Hz to 20 kHz, -20 dBu, test circuit 1		+3.2/-0°	+6/-1°
Distortion (THD)	1 kHz, -30 dBu, test circuit 1		0.002%	
	20 Hz, -30 dBu, test circuit 1		0.07%	0.15%
Maximum 20 Hz input level	1% THD, test circuit 1	-4.0 dBu	-2.0 dBu	
Common-mode rejection ratio (CMRR) 150 Ω balanced source	60 Hz, test circuit 2		123 dB	
	3 kHz, test circuit 2	80 dB	89 dB	
Output impedance, Z_o	1 kHz, test circuit 1		2.05 k Ω	
DC resistances	primary (pin 1 to pin 4)		26.2 Ω	
	secondary (pin 5 to pin 8)		257.5 Ω	
Capacitances @ 1 kHz	primary to shield and case		81 pF	
	secondary to shield and case		82 pF	
Turns ratio		1:3.463	1:3.465	1:3.467
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

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.