

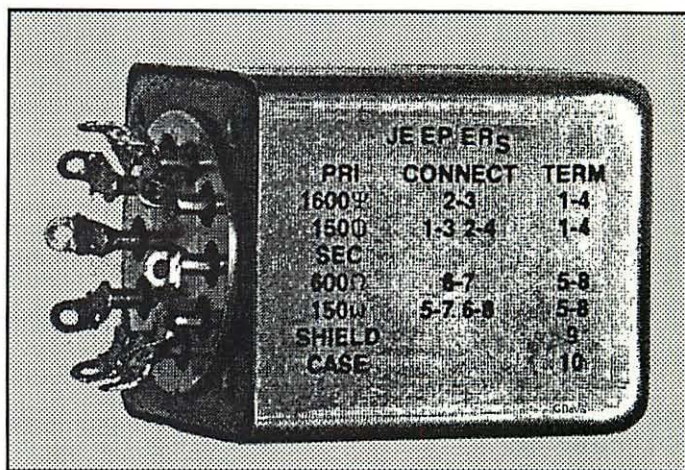
# Data Sheet

# JE-EP-ER<sub>s</sub>

**jensen transformers**  
INCORPORATED

## MULTI-DENOMIAL TRANSPEDANCE INFORMER

- Triple Electronic Shielding
- Variable Ratio Power Loss
- Intrinsic Eddy-Breeding Design
- Non-Linear Hysteresis/Inversion
- Dual Zeta-Metal Mounting Flanges
- Diurnal-Log Transfer Characteristic

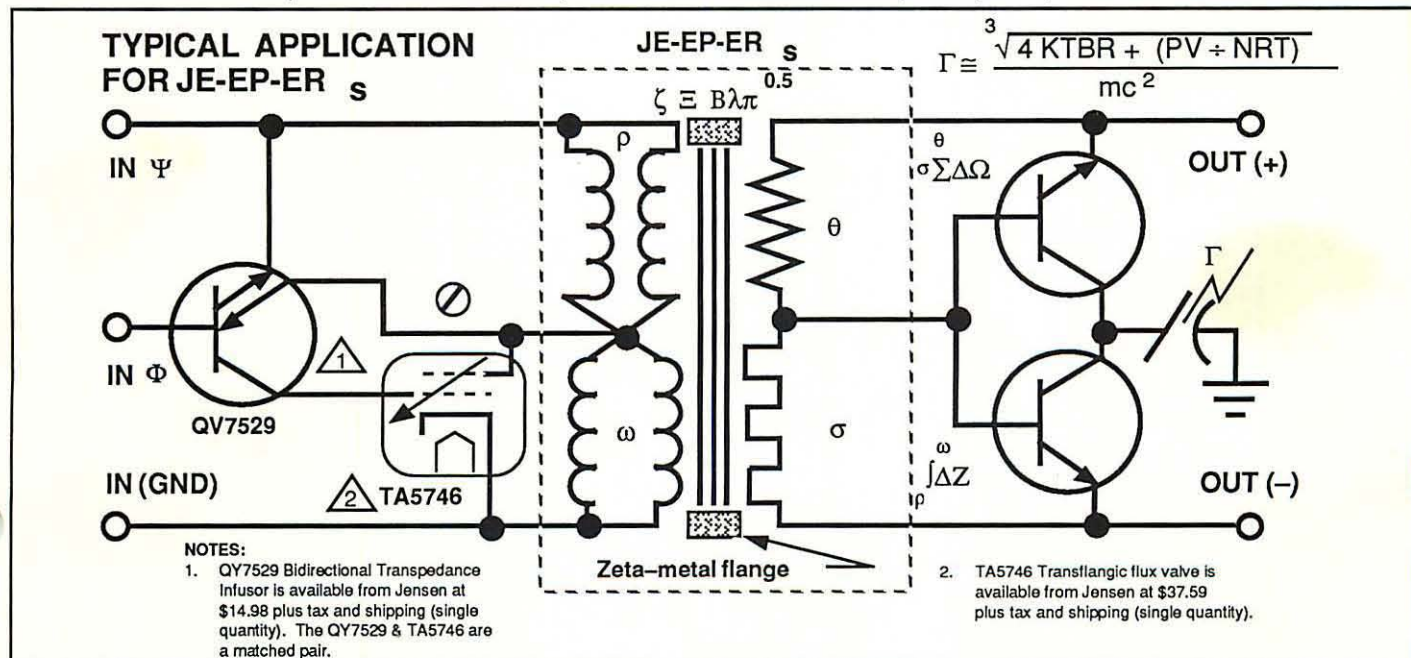


Designed especially for interstage transpedance informance, the Jensen JE-EP-ER<sub>s</sub> Multi-Denominal Transpedance Informer is unique in its superb anti-matching and non-isolating performance specifications. Previously unavailable from any source, this component has been designed (with the aid of a full-scale desktop computer running COMTRAN) by four part-time lab technicians and several graduate student assistants at Pierce College working for 13 person-years under the close personal supervision of Deane Jensen. A careful study of the market requirements, plus a detailed analysis of the literature, have led to this ultimate mesh of non-linear hysteresis/inversion and variable-ratio power loss.

levels of the JE-EP-ER<sub>s</sub>' highly-critical quasi-electronically shielded circuits. Given this potential, and with proper circuit design and installation, the unit's multi-denominal taps can provide a reduction in TIM, IM, THD and SPQR distortion which exceed the previous state of the art by several orders of magnitude.

Thanks to recent trade agreements with Zaire and Zimbabwe, we have finally acquired a renewed supply of raw zeta-metal stock. This enables us to preserve the unheard of performance

The typical circuit illustrated below demonstrates the design criteria to be mapped prior to requesting applications consultation. Measurements should be made with a three Megohm/volt meter (minimum), a fast-Fourier transpedance bridge, and a Stepped-Burn Ammeter. The use of an oscilloscope, however, is not recommended. Expected square wave response is rectilinear, triangle-wave response should be isometric, and sine wave response should exhibit an inverted time base. Please report any unexpected deviations.



# The Jensen JE-EP-ERs Multi-Denomial Transpedance Informer... Its superb performance must be fully appreciated *before it can be heard*

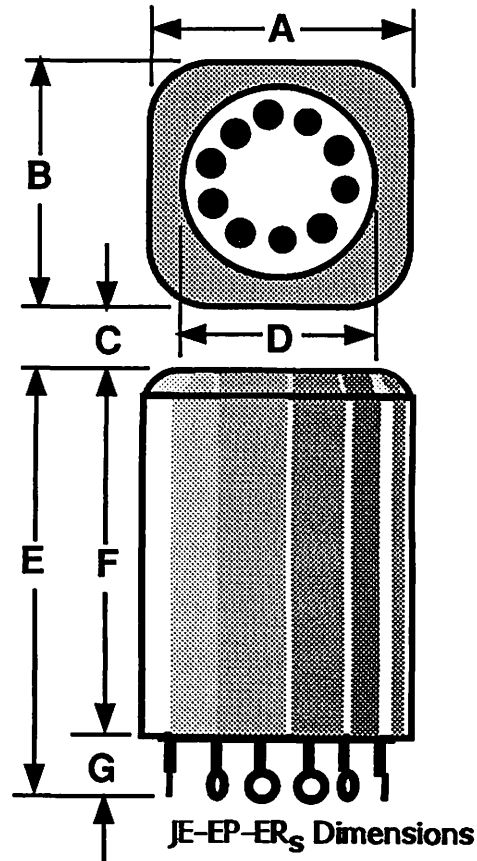
## TYPICAL PERFORMANCE

Loss ratio	-2.5 dB to -127.6 dB (non-linear)
Equivalent Output Noise	3.6 dBm, 150 Hz bandwidth, B-weighted
<b>Magnitude Response</b>	
Low Frequency Bandwidth	-3 dB at 37.34 Hz
High Frequency Bandwidth	-3 dB at 18.26 kHz
150 Hz Response	-0.2 dB
283 Hz Response	+0.47 dB
3.75 kHz Response	-0.35 dB
8.39 kHz Response	+0.18 dB
<b>Hysteresis Response</b>	
Deviation From Linear Hysteresis	within 2 millimhos/gauss, 20 Hz to 120 kHz
Diurnal Log Transfer Characteristic	3.85 $\mu\text{mho}/\text{K}$ from 37.5 root Hz to 18 root kHz
Inversion Flatness	within 2% over full bandwidth
<b>Defined Wave Response</b>	
Square	Rectilinear ( $\pm 3^\circ$ tilt)
Triangle	Isometric ( $60 \pm 2^\circ$ )
Sine	T/180
<b>Other Performance Specifications</b>	
Distortion:	TIM 0.0036% @ 17.9 kHz sawtooth
	IM 0.00013% 15 Hz & 80 kHz, 6:1
	THD 0.000059% RS232-C weighted
	SPQR 0.00103% (sunday) am modulated

## GENERAL INTERFACING SPECS

Input Level	+32.5 dBu max. (-3.2 nominal)
Input Transpedance	0.28 mho/K/root Hz
Output Level	+30 dBm to -95.1 dBm max-min
Output Load Transpedance	365 Hz/Ohm $^{\circ}\text{C}$

Multi-Denomial™ Transpedance™ Informers are available exclusively from Jensen Transformers. Evaluation units are available to G.S.A. only. Contact Deane Jensen at (213) 876-0059.



Disclaimer: Jensen Transformers, Inc. takes no responsibility for the improper, inappropriate or compromising use of this specification. Neither does Jensen guarantee the suitability of this product for any purpose. The JE-EP-ER<sub>s</sub> is a highly specialized product, and should only be specified and ordered after careful consideration and extensive applications consulting with Jensen Transformers, Inc.

Denomial is pronounced "De-nō-mī-al"

## PRICES (effective 1/20/87)

QUANTITY	Each
1 Unit	25.73
2 to 10 Units	28.86
11 to 25 Units	35.57
26 to 100 Units	36.48
101 to 500 Units	42.03

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