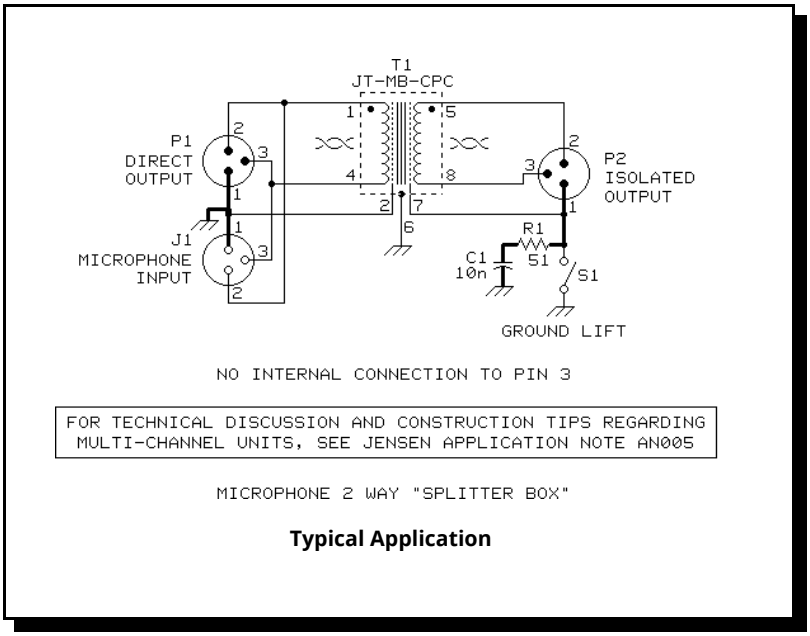
Microphone Bridging Transformer

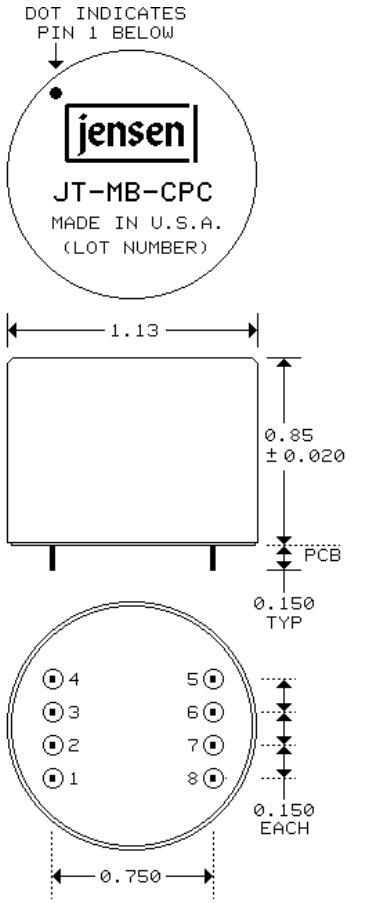
DUAL FARADAY SHIELDS FOR HIGH ISOLATION

- **Provides additional, isolated balanced output as mic 'splitter'**
- **Solves 'transformerless' preamp problems when used as retrofit**
- **High common-mode rejection: 130 dB at 60 Hz**
- **Excellent frequency response and time domain performance**
- **Low insertion loss: 0.8 dB**

This transformer is designed to be driven from a 150 Ω microphone source and loaded by the typical 1 kΩ input impedance of microphone preamplifiers. It can be used with balanced or unbalanced sources and/or loads since both primary and secondary are fully balanced. A 30 dB magnetic shield package is standard.



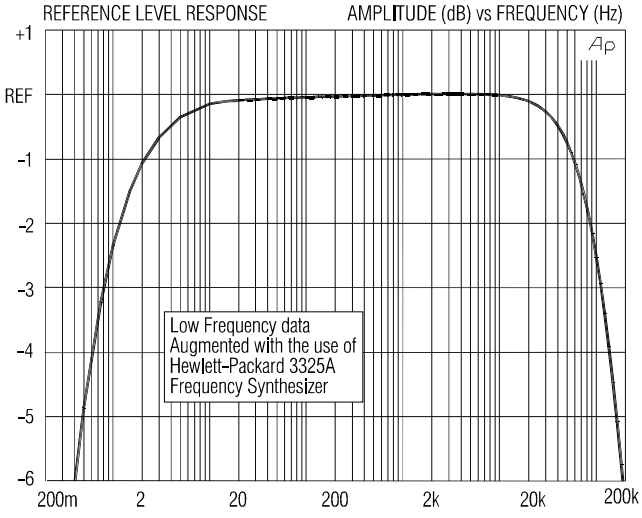
Typical Application

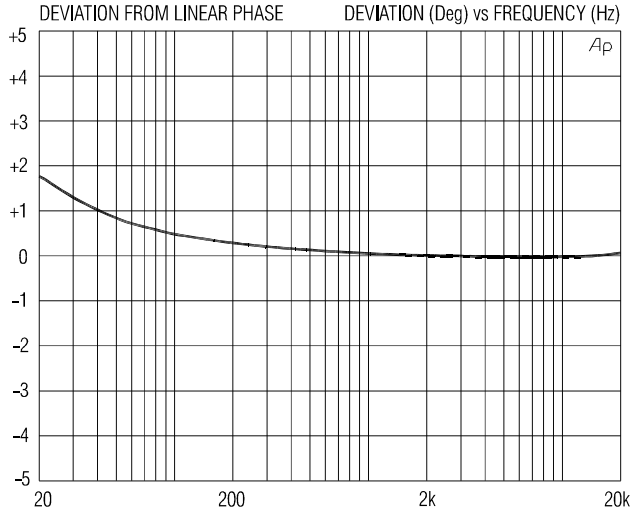


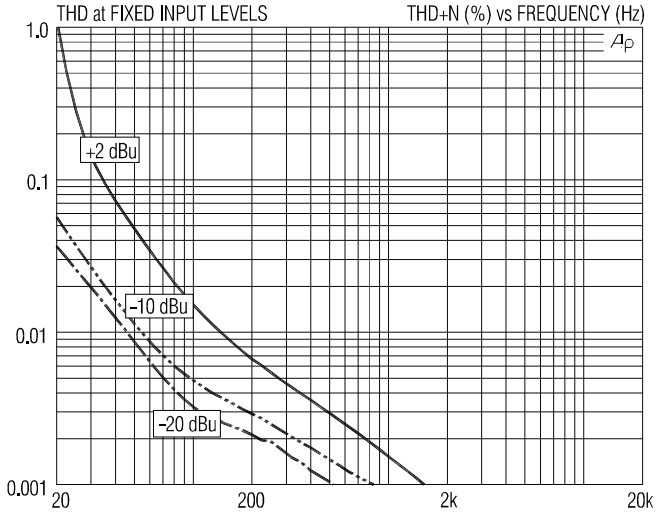
PIN NUMBERS NOT MARKED ON PART

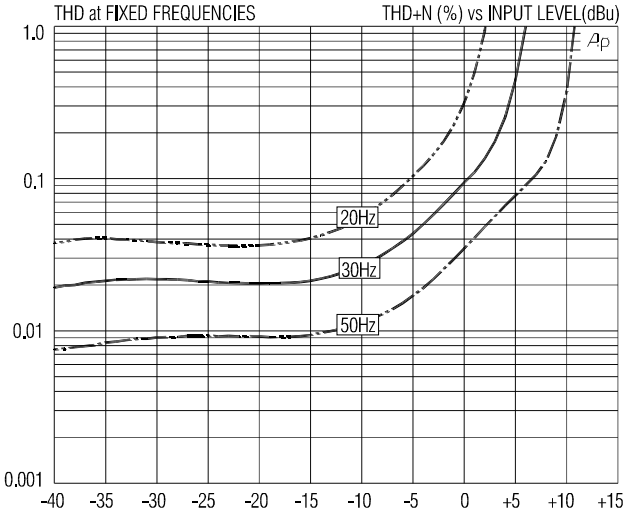
TERMINAL PINS 0.018 x 0.030
PC HOLES 0.040 DIA SUGGESTED

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





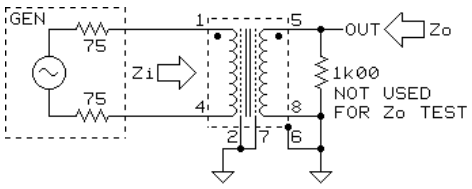




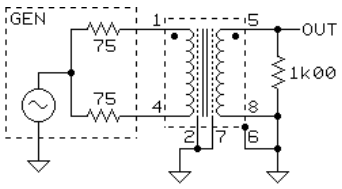
JT-MB-CPC SPECIFICATIONS (all levels are input unless noted)

PARAMETER	CONDITIONS	MINIMUM	TYPICAL	MAXIMUM
Input impedance, Zi	1 kHz, –20 dBu, test circuit 1	1.00 kΩ	1.08 kΩ	1.15 kΩ
Voltage gain	1 kHz, –20 dBu, test circuit 1	–0.90 dB	–0.82 dB	–0.70 dB
Magnitude response, ref 1 kHz	20 Hz, –20 dBu, test circuit 1	–0.25 dB	–0.09 dB	±0.0 dB
	20 kHz, –20 dBu, test circuit 1	–0.25 dB	–0.10 dB	+0.1 dB
Deviation from linear phase (DLP)	20 Hz to 20 kHz, –20 dBu, test circuit 1		+1.7/–0°	±3.0°
Distortion (THD)	1 kHz, –20 dBu, test circuit 1		<0.001%	
	20 Hz, –20 dBu, test circuit 1		0.036%	0.15%
Maximum 20 Hz input level	1% THD, test circuit 1	0 dBu	+2.0 dBu	
Common-mode rejection ratio (CMRR) 150 Ω balanced source	60 Hz, test circuit 2		130 dB	
	3 kHz, test circuit 2	80 dB	95 dB	
Common-mode rejection ratio (CMRR) 150 Ω unbalanced source	60 Hz, test circuit 3		115 dB	
	3 kHz, test circuit 3		80 dB	
Output impedance, Zo	1 kHz, test circuit 1		250 Ω	
DC resistances	primary (pin 1 to pin 4)		50 Ω	
	secondary (pin 5 to pin 8)		50 Ω	
Capacitances @ 1 kHz	primary to shield and case		75 pF	
	secondary to shield and case		87 pF	
Turns ratio		1:0.999	1:1.000	1:1.001
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		

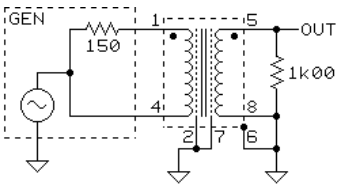
IMPORTANT NOTE: This device is NOT intended for use in life support systems or any application where its failure could cause injury or death. The breakdown voltage specification is intended to insure integrity of internal insulation systems; continuous operation at these voltages is NOT recommended.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



TEST CIRCUIT 1



TEST CIRCUIT 2



TEST CIRCUIT 3