



REICHENBACH ENGINEERING



Microphone Input Transformer

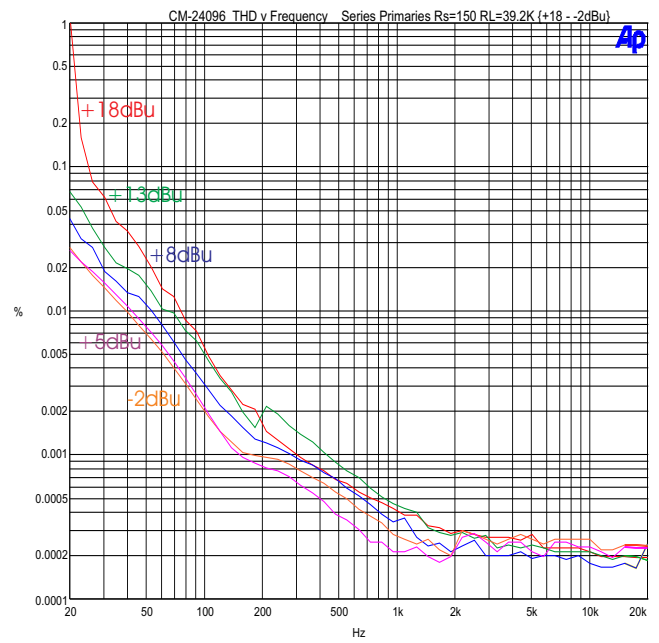
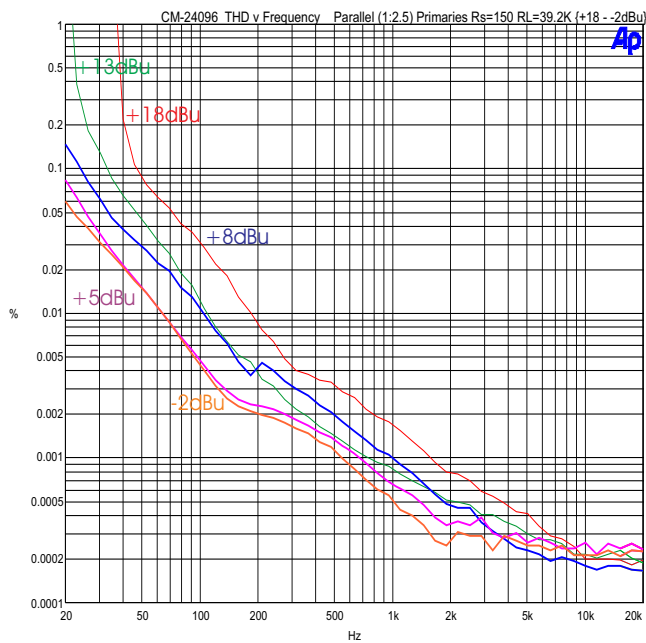
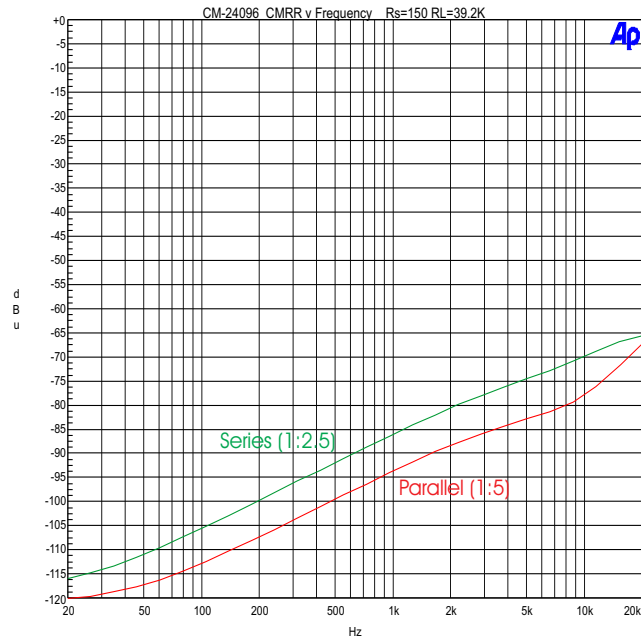
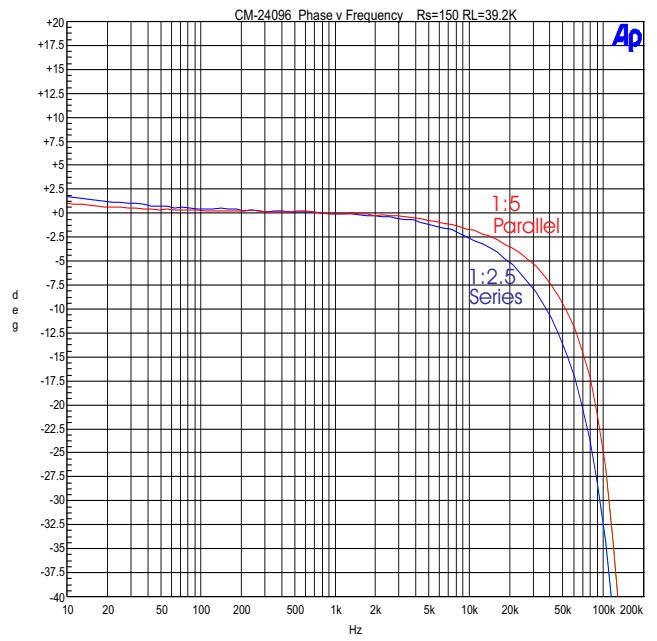
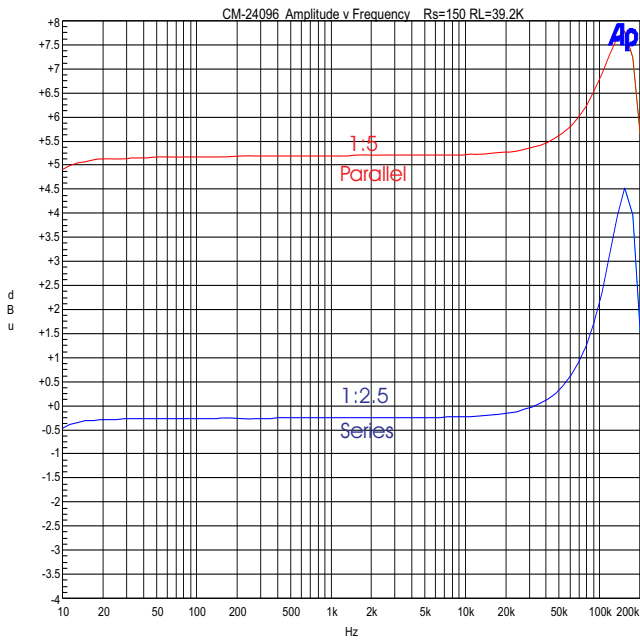
CM-24096/PC

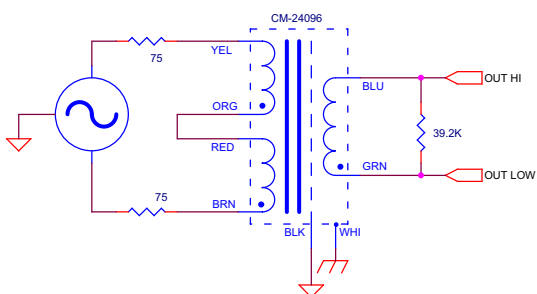
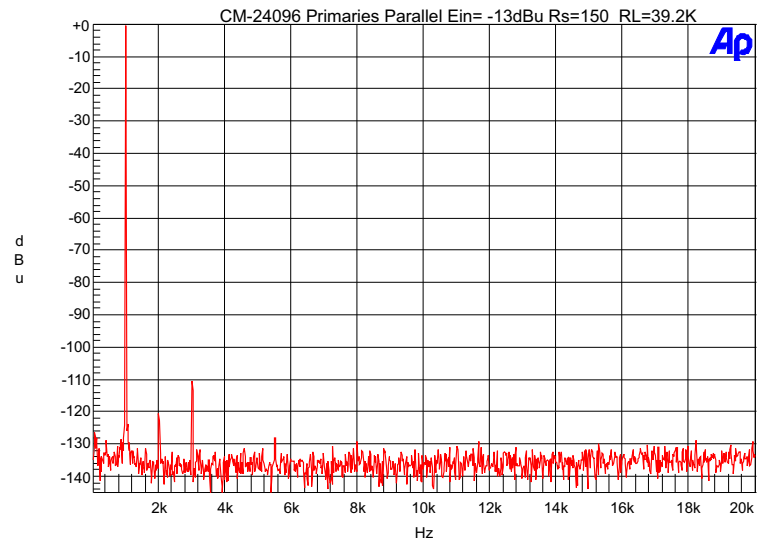
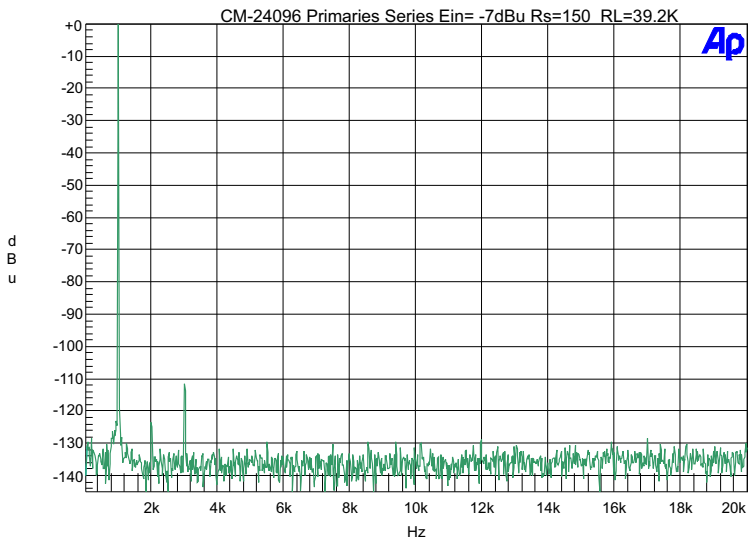
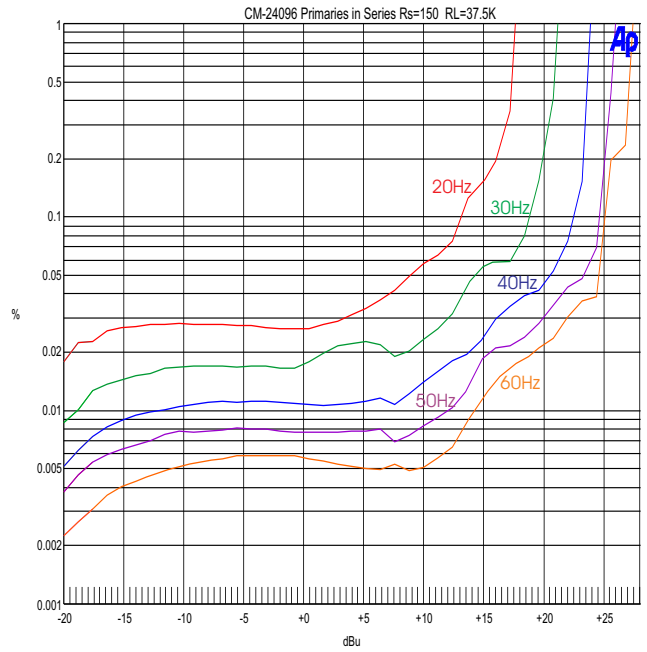
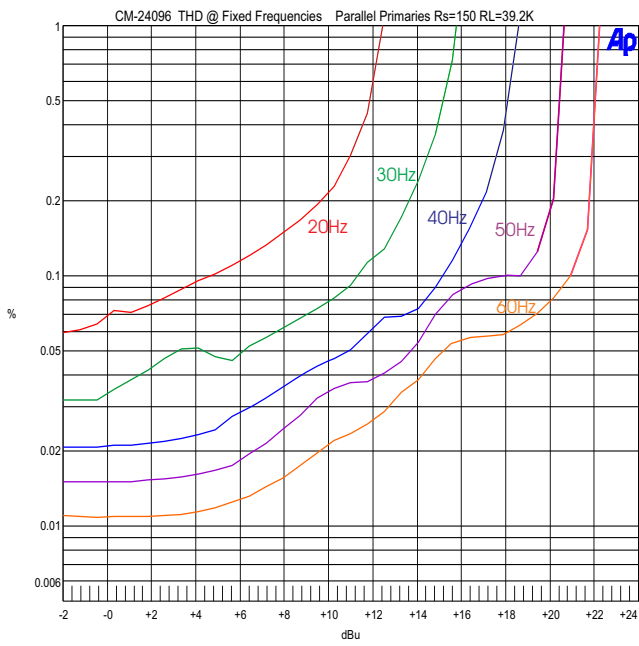
1+1:5 Turns ratio

- Hum-bucking topology for superior CMRR - Excellent winding balance
- Superb frequency response +1/2 dBu at 50kHz -0.2dBu at10Hz
- Superb phase shift -5° at 20kHz (1:2.5 Ratio); -3° at 20kHz (1:5 Ratio)
- Superb CMRR 110dB at 60Hz (1:2.5 Ratio); 115dB (1:5 Ratio)
- Printed circuit pins or lead wires
- Large input signal capability

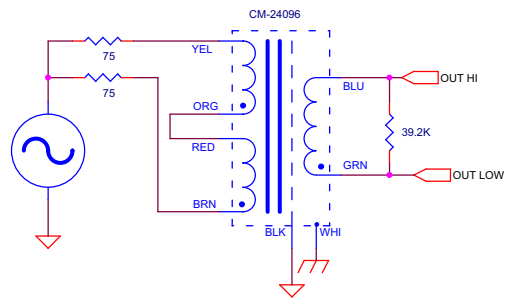
CM-24096 CM-24096PC

Parameter	Conditions	Typical
Turns Ratio		1+1:5
Distortion (THD+N%)	1 kHz, +0.0 dBu Test Circuit 1 Series	0.0005%
	Test Circuit 1 Parallel	0.0005%
	20 Hz, +0.0 dBu Test Circuit1 Series	0.03%
	Test Circuit 1 Parallel	0.07%
Max 20 Hz input level	1.0% THD; 150 Ω input	
	Test Circuit 1 Series Test Circuit 2 Parallel	+16dBu +12dBu
Response, ref 1 kHz	10 Hz Test Circuit 1 Series	-0.2dBu
	Test Circuit 1 Parallel	-0.2dBu
	20 kHz Test Circuit 1 Series	+0.1dBu
	Test Circuit 1 Parallel	+0.1dBu
Phase Shift at 20 Hz	Referenced to source generator	
	Primaries Parallel Test Circuit 1 Primaries Series Test Circuit 1	+1° +2°
Phase Shift at 20 kHz	Primaries Parallel Test Circuit 1 Primaries Series Test Circuit 1	-3° -5°
	CMRR	60 Hz Test Circuit 2 per IEE Std 389 ¶19
1 kHz Test Circuit 2 per IEE Std 389 ¶19		85dB
Operating Temp Range	Operation and storage	0° C Min 70° C Max
Max Soldering Temp (Printed Circuit Pins)	5 Seconds	270° C Max

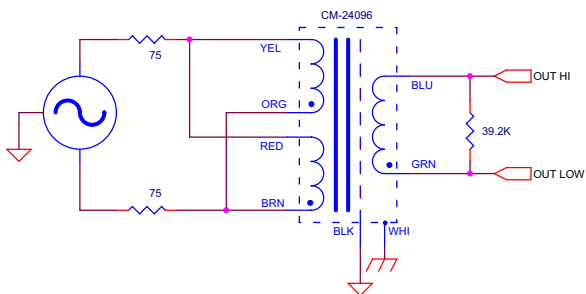




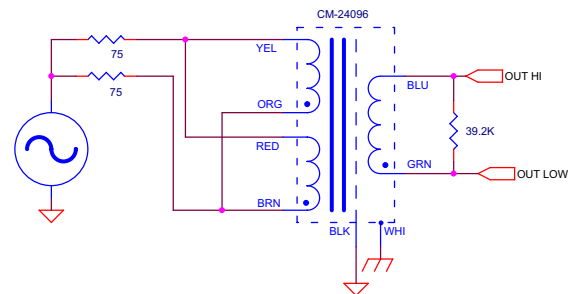
TEST CIRCUIT 1 - Series



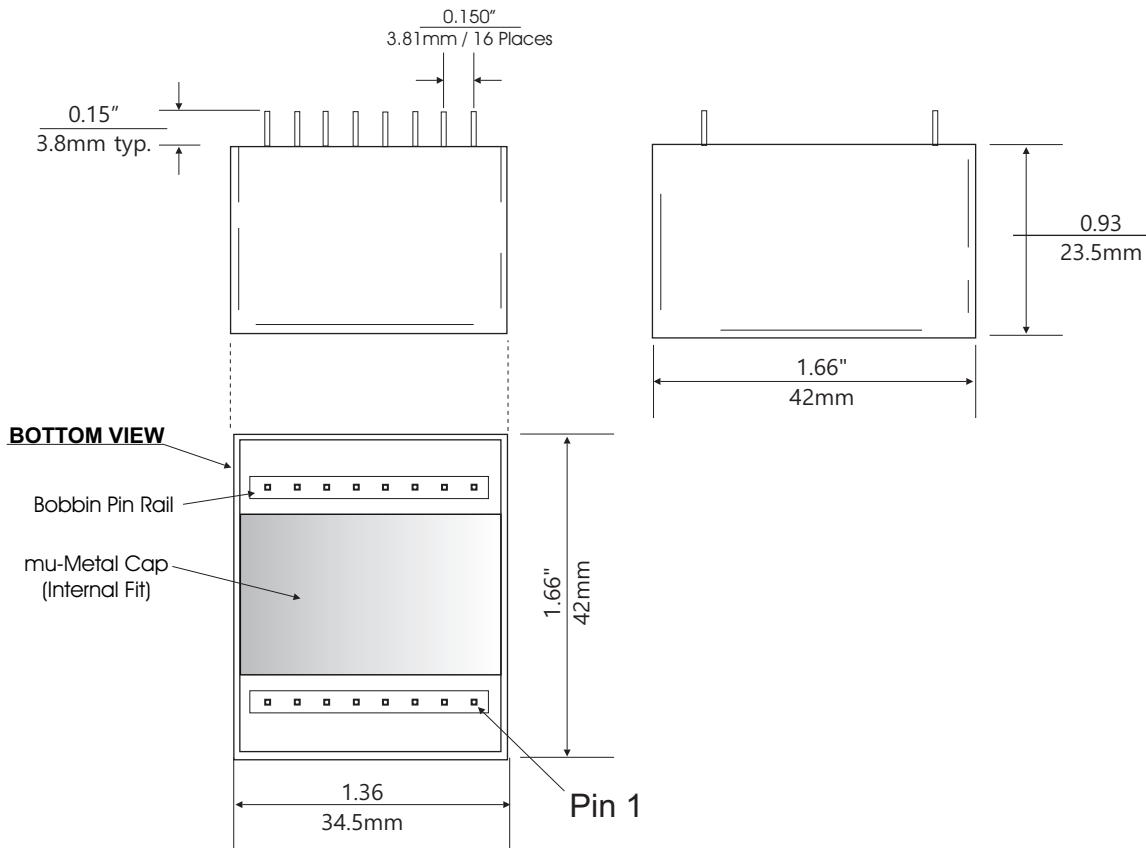
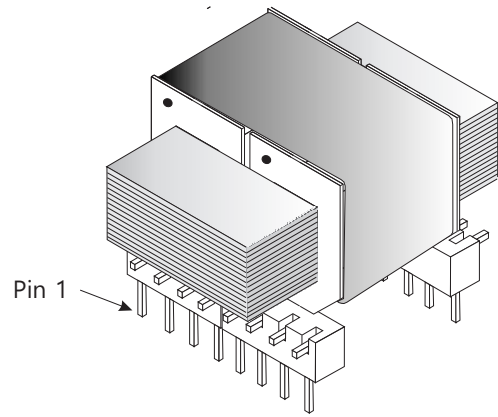
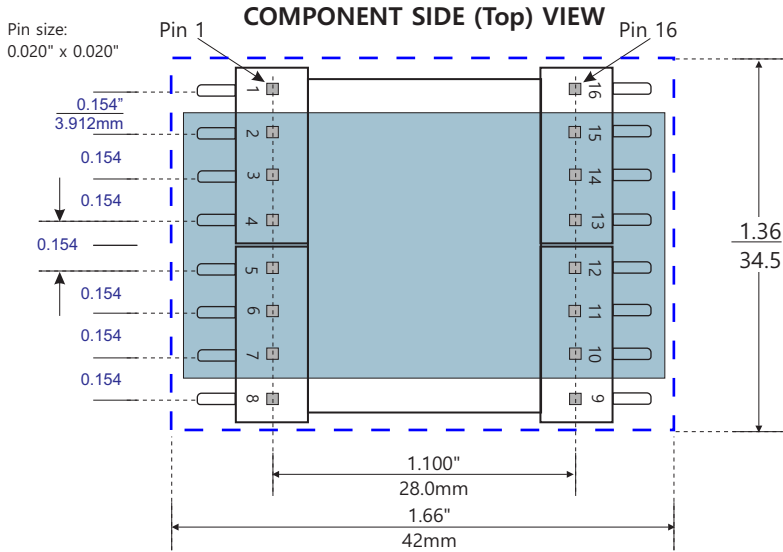
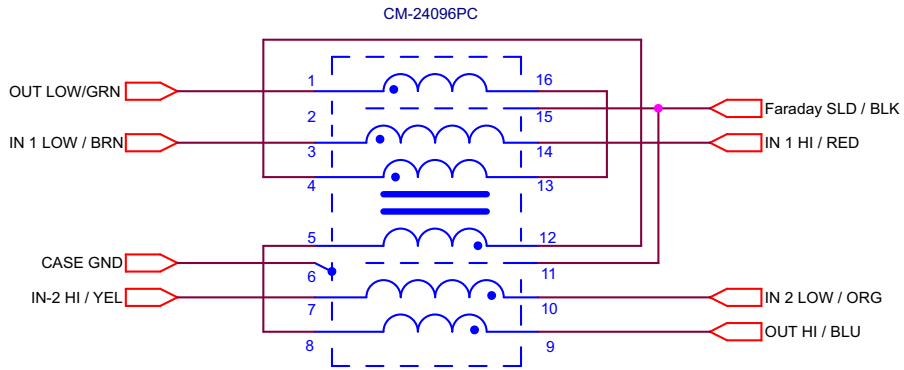
TEST CIRCUIT 2 - Series

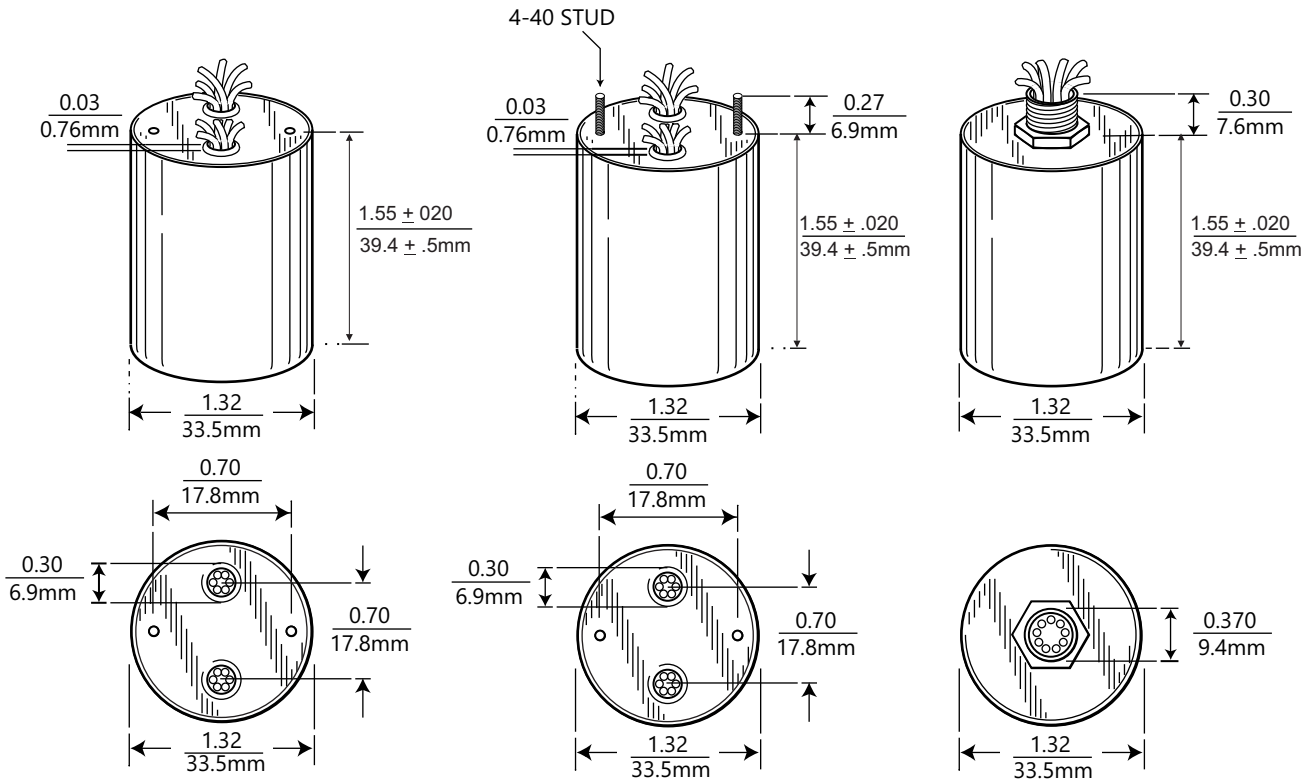


TEST CIRCUIT 1 - Parallel

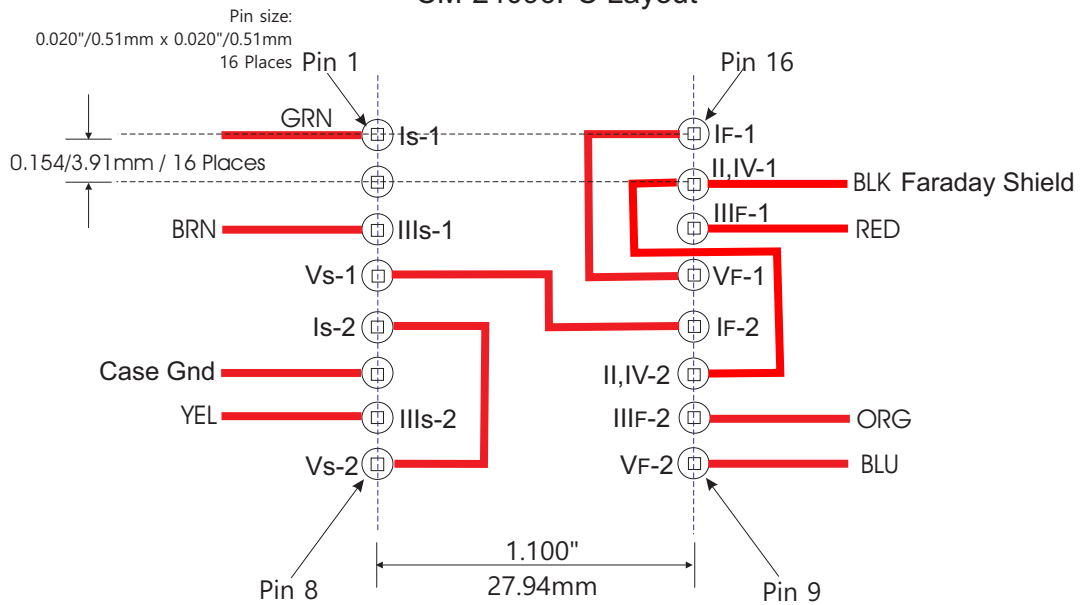


TEST CIRCUIT 2 - Parallel





TOP (COMPONENT SIDE) VIEW
CM-24096PC Layout



NOTES:

1. If traces are placed on the top side of the PCB, be sure that they do not come in contact with the transformer mu-metal can.