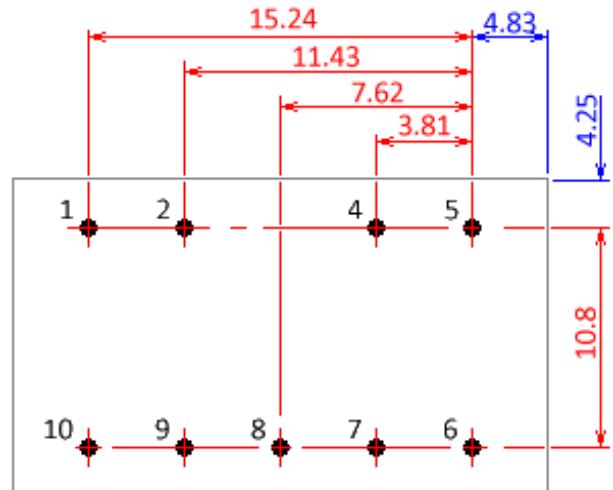
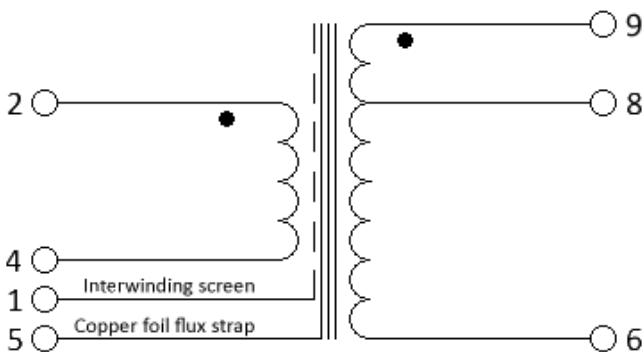


Suitable for microphone input stages optimised for medium source impedances ($\sim 5\text{k}\Omega$), typical of medium Rbb bipolar transistors and operational amplifiers such as the NE5534. It can also be used for line level inputs when used in current mode active input circuits.

Schematic & Pin Layout



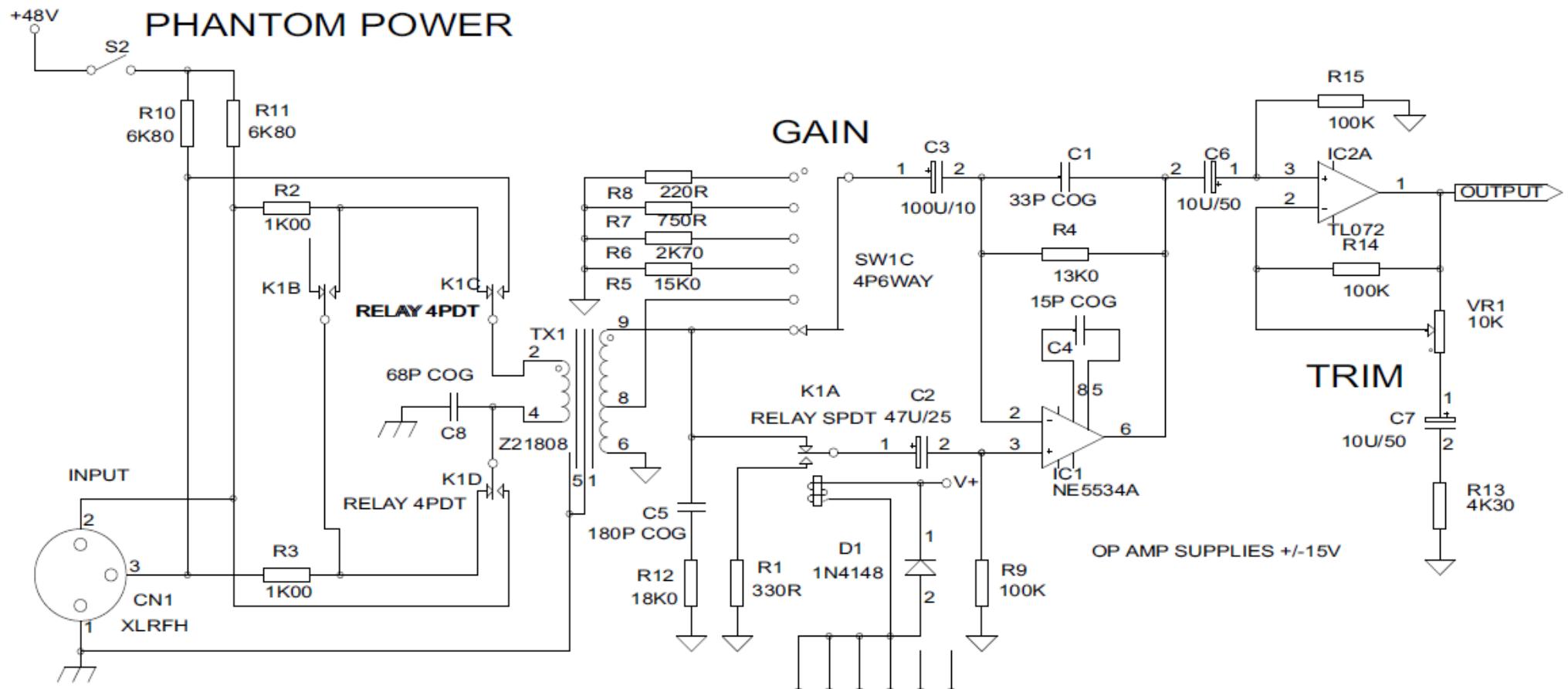
Specifications

Turns ratio	1:6 tapped at 1:1.8
Dimensions	(L x W x H) 24.9 x 19.3 x 18.9mm
Pin diameter	0.71mm
Weight	45g
Optimum secondary load	(2 pole) 100k//180p series 18k

		Min	Typ	Max
Primary DC resistance	(Pins 2 – 4)		45 Ω	
Secondary DC resistance	(Pins 6 – 9)		1k Ω	
Optimal source impedance			150 Ω	
LF	(-3dB point)		5Hz	10Hz
HF *	(-3dB point)	65kHz	80kHz	
30Hz max level	(3% THD)	-1dBu	0dBu	
THD	(-10dBu, 1kHz)		0.003%	0.006%
CMRR	(10kHz)	65dB	75dB	
CMRR	(50Hz)	120dB		
Primary Inductance	(100Hz, 0.1V)		6.57H	

- * With 150 Ω source resistance and external trimming capacitor (see application drawings), optimum 2 pole secondary termination, screen and case, (pins 1 & 5), grounded. Unused pins should be left floating with minimal pad size for best performance.
- Pins 7 & 10 no connection
- Pin 3 removed for orientation
- All dimensions +/- 0.2mm unless otherwise stated

Z21808C wide range mic pre application circuit



GAIN STEPS OF 0...+10...+20...+30...+40...+50 & 0....+10dB TRIM

FREQUENCY RESPONSE <10Hz....>75kHz (-3db)

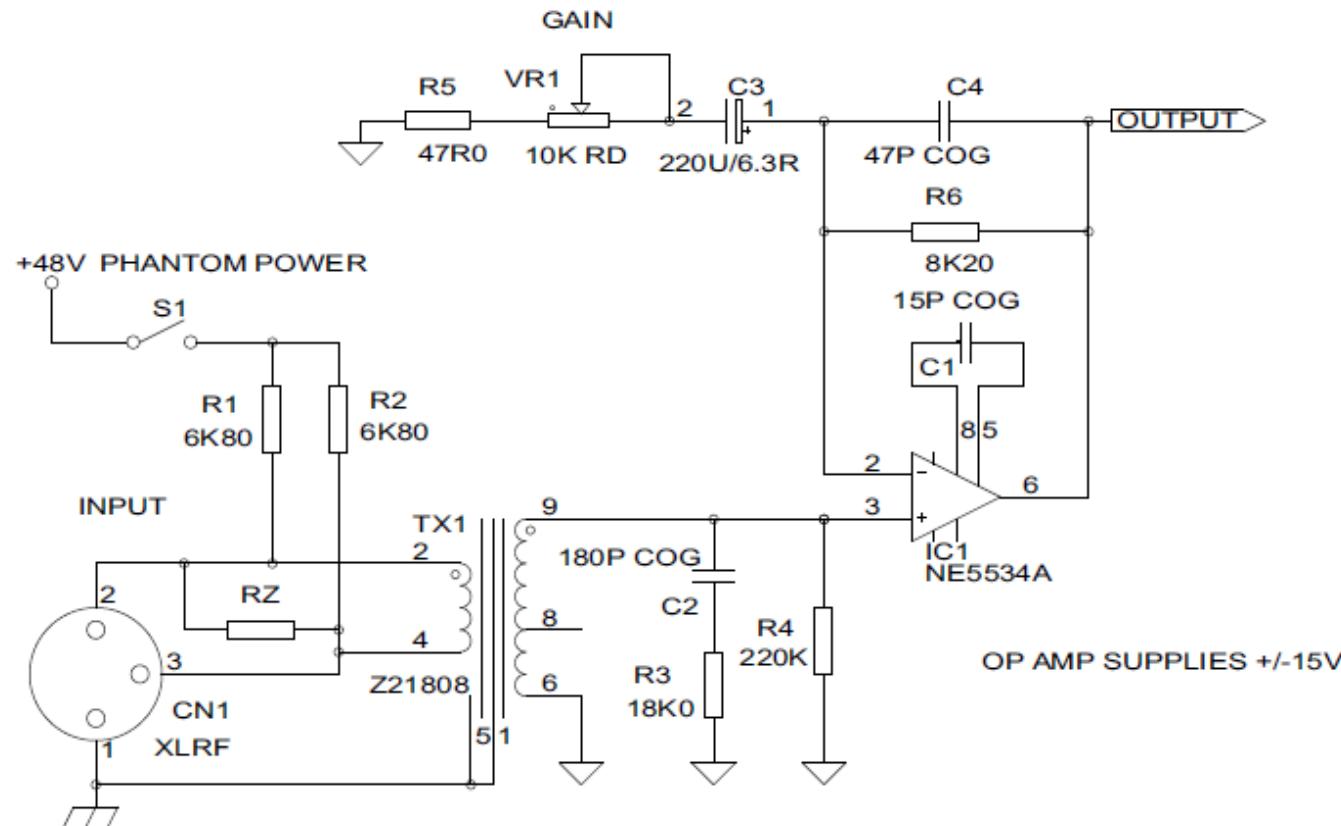
EIN <-126dBu AT 50dB GAIN

30HZ MAX INPUT LEVEL >20dBu @ 0dB GAIN, 0dB @ >10dB GAIN

CMRR TYPICALLY <75dB @ 10kHz. +20dB GAIN



Z21808C simple mic pre application circuit



SELECT RZ=2k20 FOR 1k20 ZIN

GAIN RANGE +20....+60 dB

FREQUENCY RESPONSE <10Hz....>75kHz (-3db)

EIN <-126dBu AT 50dB GAIN

30HZ MAX INPUT LEVEL 0dB @ +20dB GAIN

CMRR TYPICALLY 65dB @ 10kHz

