

## SOWTER TYPE 9045 50+50/5k Microphone Input

### Applications

Recording quality microphone transformer. Minimal microphone loading and distortion. Full geometric balance in and out. Microphone sees 1k over wide frequency band. Can be used with primary windings in parallel for 50 ohm mics and in series for 200 ohm mics. +18 dBu. Exceptionally high 20 Hz level, high bandwidth 200 ohm microphone transformer. Minimal microphone loading. Suitable as replacement for original transformer in many vintage recording studio units. 100% geometric balance relative to the secondary centre tap ensures near perfect phase splitting for use with balanced amplifiers



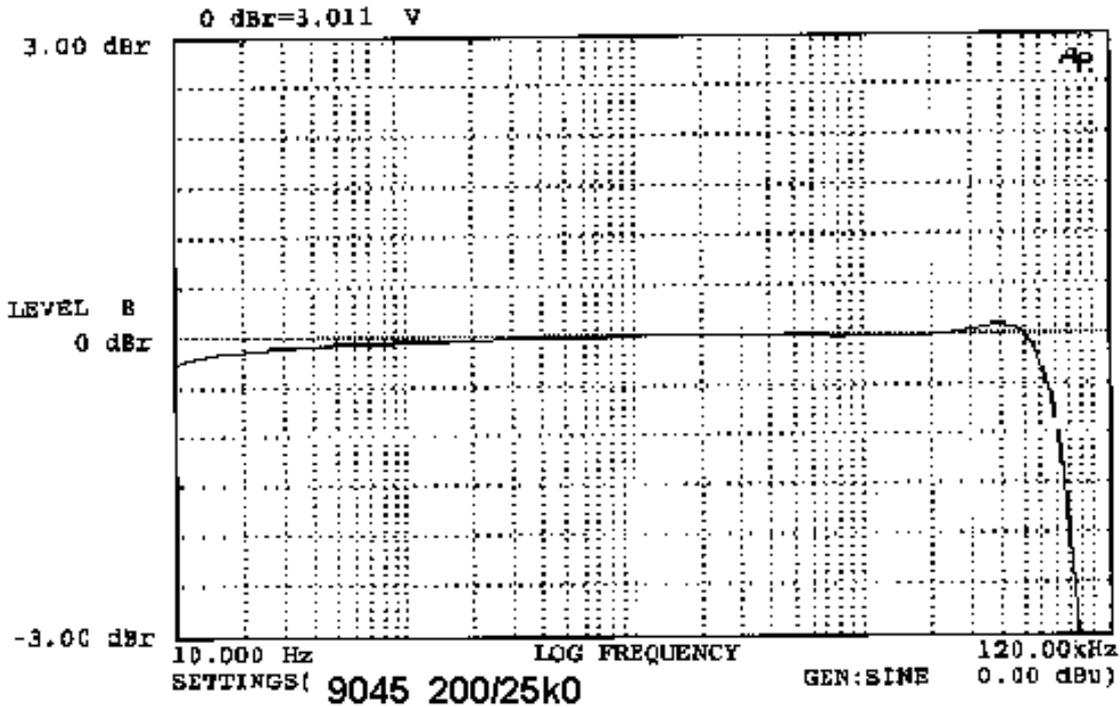
### Features

Unusually large Mumetal laminated core for minimal distortion and even at very high levels. Two chamber bobbin provides full geometric balance and 4 internal electrostatic shields for the ultimate in noise rejection and phase splitting performance. The primary windings may be used in parallel for increased voltage ratio when used with 50 ohm microphones. Heavy Mumetal screening can to ensure immunity from hum fields. Phantom powering may be supplied in the 1:5 configuration using the primary centre tap (Yellow + Grey). A damping network of 45k0 ohms in series with 25 pF across the secondary may be used depending on the input capacitance of the amplifier.

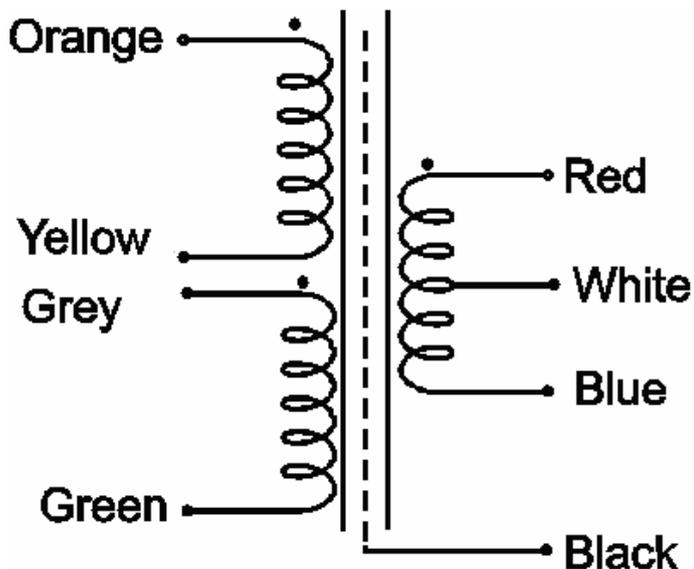
## Specifications

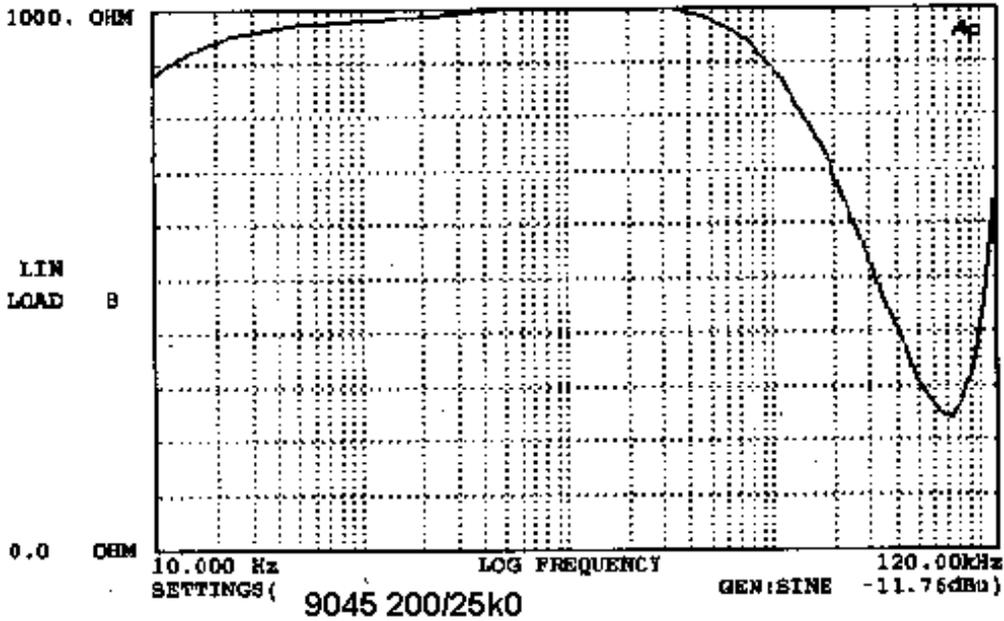
Item	Value
RATIO	1ct:5ct or 1:10ct
MAXIMUM LEVEL 0.5 % THD at 50 Hz (40 ohm source)	+10 dBu
DISTORTION at 50 Hz (Source 40 ohms)	0.05% at +20 dBu
PRIMARY INDUCTANCE	10H approx
TOTAL DCR (Referred to primary)	21 Ohms approx
INSERTION LOSS 10k ohm source 10k ohm load	1.08 dBu
INPUT/OUTPUT BALANCE	>60 dB
FREQUENCY RESPONSE 6k4 ohm source 10k ohm load	+/- 0.25 dB 15 Hz to 60 kHz

## Mechanicals

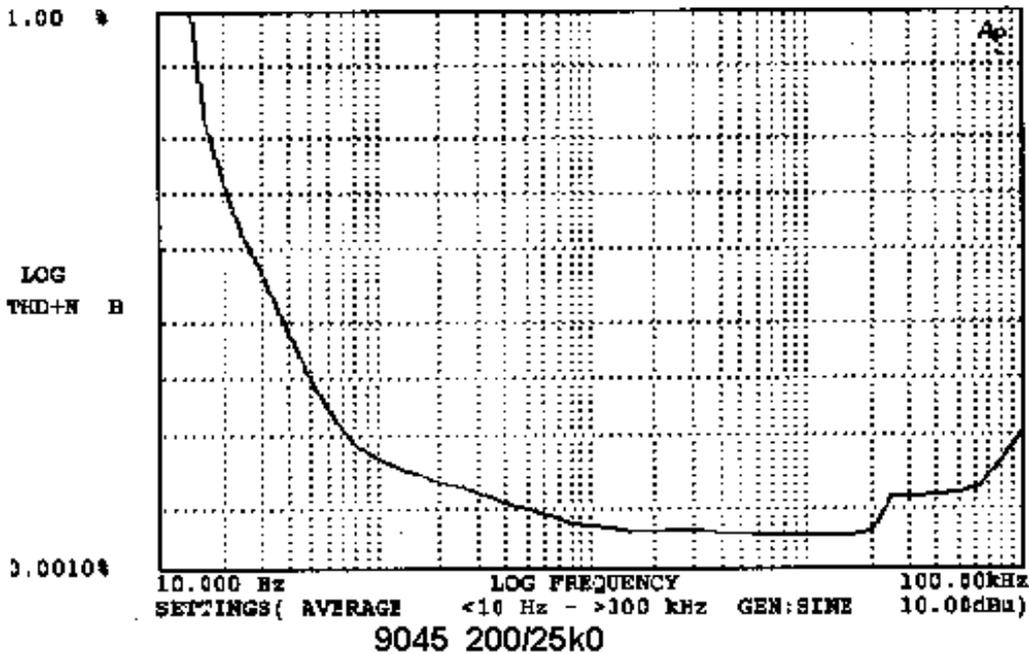


FREQUENCY RESPONSE measured using 200 ohm source and 25k0 ohm load and a damping network of 45k0 ohms in series with 25 pF.

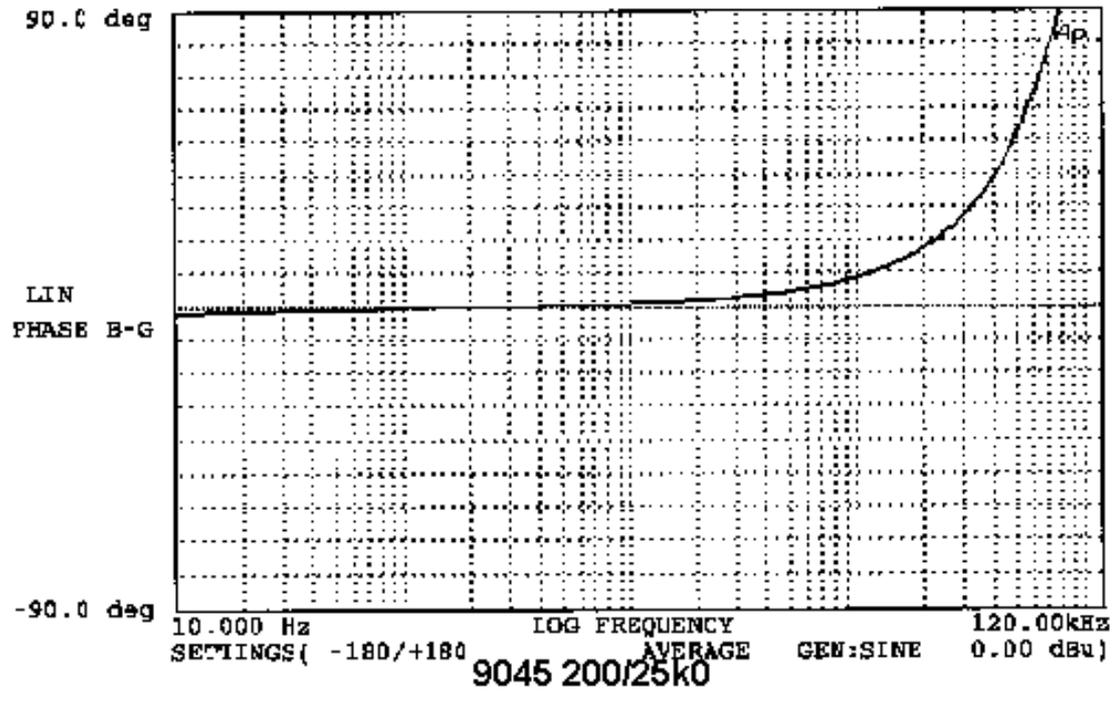




TOTAL HARMONIC DISTORTION measured with 40 ohm source and 25k0 ohm load. Input Level +10 dBu.



INPUT IMPEDANCE measured with 25k0 ohm load.



PHASE RESPONSE measured using 200 ohm source and 25k0 ohm load.