

The AMI T58 moving coil to mic pre input transformer was special developed as an high resolution transformer for handheld microphones, either as an upgrade for existing mics or for self build and custom application.

The T58 even compact in design is capable to transform the low impedance signal of moving coil elements, typical 15 to 25 Ohm to 150 Ohm (actual 300 Ohm) without loading down the or restricting upper mid and high end response.

The transformer keeps the microphone stable over a wide range of inductive, resistive or capacitive loads, for mic-preamplifier inputs from 150 Ohm to 50 kOhm or no load at all. Even the T58 has a special envelop to minimize self microphonic, it is recommended to secure the transformer inside the microphone cavity with a rubber latex compound, hot glue, electronic epoxy or one sided adhesive rubber foams like Rubatex, standard door/window foam will work fine too. The transformer can withstand short time heat exposure up to 250 degree.

The wire termination leads are silver-plated solid copper in a Teflon sleeve, the negative wire is indicated with a black PVC jacket. In order to remove the Teflon sleeve, Teflon wire strippers for fine wire gauge are needed.

Technical specs:

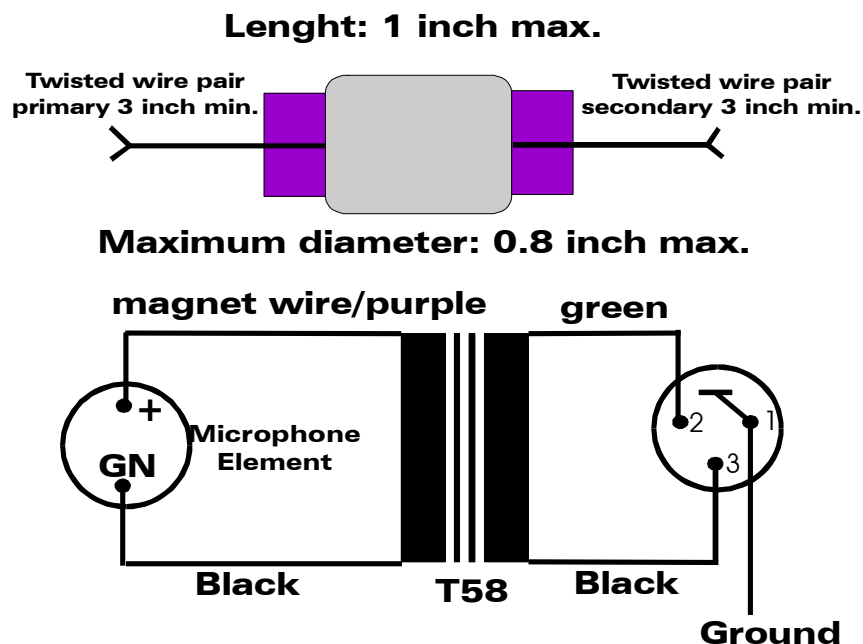
Primary impedance: 15 to 25 Ohm

Primary inductance: 250 mH (120Hz) @ 1.5 Ohm

Step up ratio: 1 to 5

Secondary inductance: 5.4H (120Hz) @ 25 Ohm

Short impedance: 0.029mH



Test Conditions

Source Z: 10 ohms via recommended network

Load Z: 200, 600, or 10 kohms

T58 Transformer:

<u>Gain @ 1000 Hz</u>	<u>200 ohms</u>	<u>600 ohms</u>	<u>10 kohms</u>
	+5.6 dB	+9.8 dB	+12.8 dB

Frequency Response @ -10 dBu output

	<u>200 ohms</u>	<u>600 ohms</u>	<u>10 kohms</u>
20 Hz	-0.25 dB	-0.4 dB	-0.5 dB
100 Hz	-0.1 dB	-0.15 dB	-0.2 dB
1000 Hz	0 dB	0 dB	0 dB
10 kHz	+0.05 dB	+0.1 dB	+0.15 dB
20 kHz	-0.05 dB	+0.1 dB	+0.15 dB
30 kHz	-0.2 dB	+0.05 dB	+0.2 dB

Harmonic Distortion @ -10 dBu output

	<u>200 ohms</u>	<u>600 ohms</u>	<u>10 kohms</u>
100 Hz	.016 %	.02 %	.025 %
1000 Hz	.0035 %	.0045 %	.005 %
10 kHz	.003 %	.0035 %	.002 %

SM58 Transformer

<u>Gain @ 1000 Hz</u>	<u>200 ohms</u>	<u>600 ohms</u>	<u>10 kohms</u>
	+5.95 dB	+10.0 dB	+12.7 dB

Frequency Response @ -10 dBu output

	<u>200 ohms</u>	<u>600 ohms</u>	<u>10 kohms</u>
20 Hz	-0.25 dB	-0.4 dB	-0.55 dB
100 Hz	-0.1 dB	-0.1 dB	-0.2 dB
1000 Hz	0 dB	0 dB	0 dB
10 kHz	-0.5 dB	-0.05 dB	+0.2 dB
20 kHz	-1.85 dB	-0.5 dB	+0.25 dB
30 kHz	-3.55 dB	-1.15 dB	+0.4 dB

Harmonic Distortion @ -10 dBu output

	<u>200 ohms</u>	<u>600 ohms</u>	<u>10 kohms</u>
100 Hz	.025 %	.024 %	.025 %
1000 Hz	.0035 %	.0045 %	.005 %
10 kHz	.003 %	.0038 %	.0045 %

All specifications are subject to change without notice; SM58 is a registered trademark of SHURE. AMI/TAB-Funkenwerk is not affiliated with Shure in any way.