



DATA SHEET DS70-01

MUSTANG COMMUNICATIONS LTD

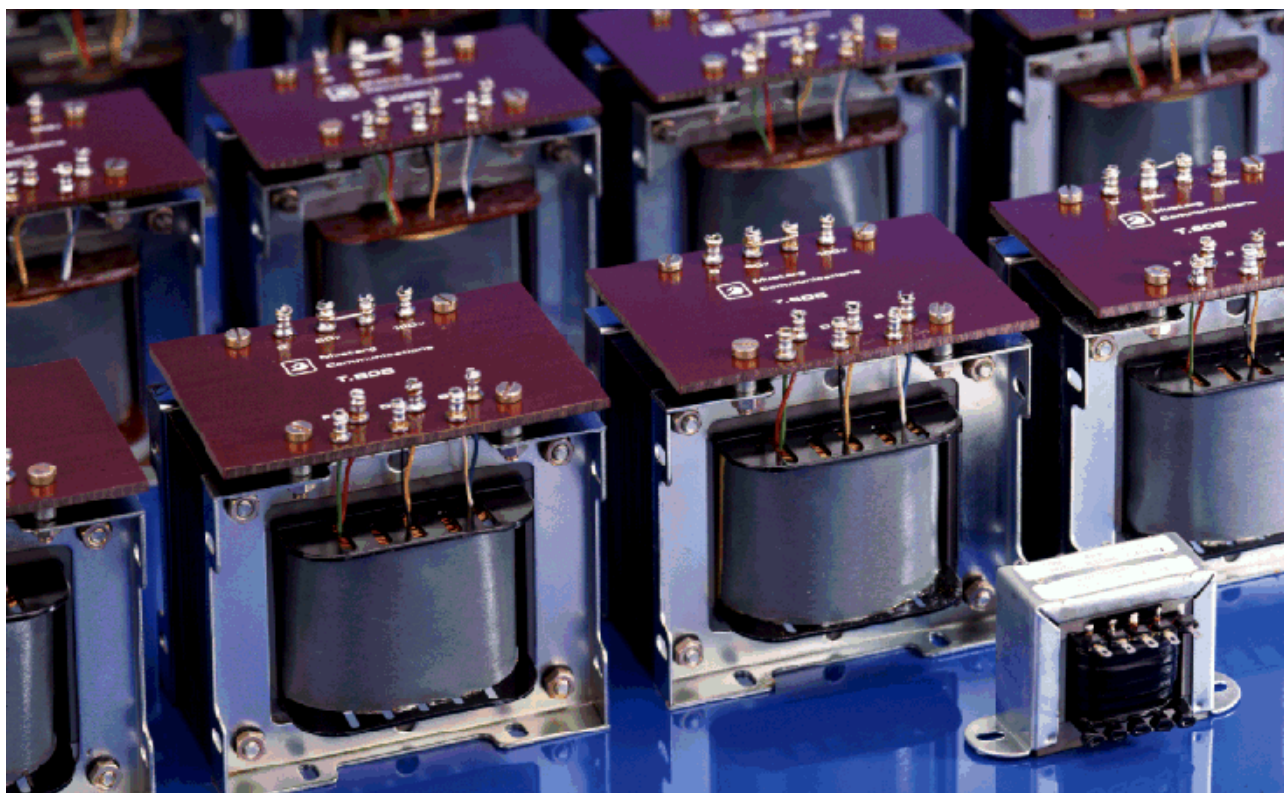
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T.5 WIDEBAND 100V MATCHING TRANSFORMERS



GENERAL DESCRIPTION

Quality transformers for those applications where a premium grade low impedance loudspeaker is to be powered from a 100V line. The T.5 range features universal mountings, and unusually wide bandwidth - similar to transformers fitted to Mustang amplification products.

By means of a matrix of terminals, the transformer may be matched to a range of load impedances, enabling the user to combine individual loudspeaker chassis as required.

Alternative transformers may be designed and wound to order, in quantity. Enquiries are welcome.

MAIN FEATURES -

- Very low insertion loss
- Choice of four ratings
- Very wide bandwidth
- Low core saturation frequency
- Robust mechanical construction
- Universal mounting
- Multi-tapped secondary for comprehensive matching
- Balanced primary
- Fully impregnated

TECHNICAL SPECIFICATIONS

	T.805	T.505	T.305	T.205
Power capacity	80Watts	50Watts	30Watts	20Watts
Secondary power tappings	1/2 1/4 1/8 1/16 1/32 of maximum power for most loads - see connection chart below			
Secondary matching	32 - 16 - 8 - 4 - 2 ohms for most powers - see connection chart below			
Primary input	100V and 50V			
Power bandwidth: Full power ref 1kHz	16Hz - 17kHz	17Hz - 18kHz	17Hz - 20kHz	18Hz - 22kHz
Power bandwidth: 1W ref 1kHz	<15Hz - 19kHz	<15Hz - 19kHz	<15Hz - >25kHz	<15Hz - >25kHz
Insertion loss	Typically 0.3dB @ 1kHz			
Connections	Solderable turret terminals			
Size WxHxD mm	116 x 116 x 95	116 x 116 x 80	98 x 103 x 79	98 x 103 x 70
Fixing centres	4 holes @ 5mm dia 62mm x 64mm on two planes	4 holes @ 5mm dia 49mm x 64mm on two planes	4 holes @ 5mm dia 54mm x 64mm on two planes	4 holes @ 5mm dia 49mm x 64mm on two planes
Unit weight - net	4.3kg	3.5kg	2.9kg	2.2kg
Shipping (gross)	4.5kg 0.002cu.M	3.7kg 0.002cu.M	3.1kg 0.002cu.M	2.4kg 0.002cu.M

CONNECTION DETAILS:

POWER LOADING (watts)

Transformer type

T.805	T.505	T.305	T.205
160*	100*	60*	40*
80	50	30	20
40	25	15	10
20	12.5	7.5	5
10	6.2	3.7	2.5
5	3	1.9	1.2
2.5	1.5	1	0.6

CONNECTIONS

Loudspeaker load (ohms)

32	16	8	4	2
—	—	A-F	A-E	A-D
—	A-F	A-E	A-D	A-C
A-F	A-E	A-D	A-C	A-B
A-E	A-D	A-C	A-B	—
A-D	A-C	A-B	—	—
A-C	A-B	—	—	—
A-B	—	—	—	—

TO USE THE TABLE -

Reading down the vertical column under the appropriate transformer type select the power required. Follow this line across to the right hand section of the table, the connections required will be found under the column headed by the appropriate loudspeaker load impedance.

* Overloading is permissible but when loading at these powers, a slight loss of efficiency will be experienced at frequencies below 40Hz.

PHASING

PRIMARY CONNECTIONS -

1.	0 (start)
2-3	50V
4.	100V

SECONDARY CONNECTIONS -

A.	0 (start)
B, C, D, E, F.	Power taps

QUALITY ASSURANCE

Guided by a policy of non-obsolescence, every part for the T.5 range is carefully manufactured direct from raw materials to ensure total control of all aspects of quality and delivery. All procedures meet our internal Quality Assurance standards, which in turn are maintained to ISO.9002.

CONTACT

We will be pleased to receive enquiries regarding application of these transformers, either by phone, fax, or email.

In the interests of continuous development, specifications are subject to change without notice.

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Electromagnetic compatibility (EMC) directive 89/336/EEC and amendment directive 92/31/EEC

This equipment has been designed and manufactured to the highest standards. If connected and operated as set out in this manual, there should be no Electromagnetic Compatibility problems. If any aspect of operation gives rise to concern, then please contact the manufacturer for advice.