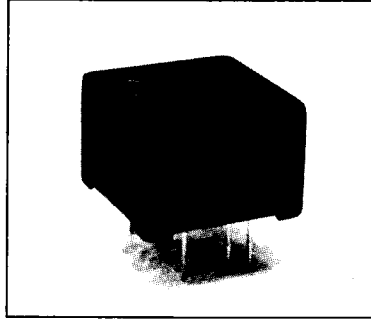


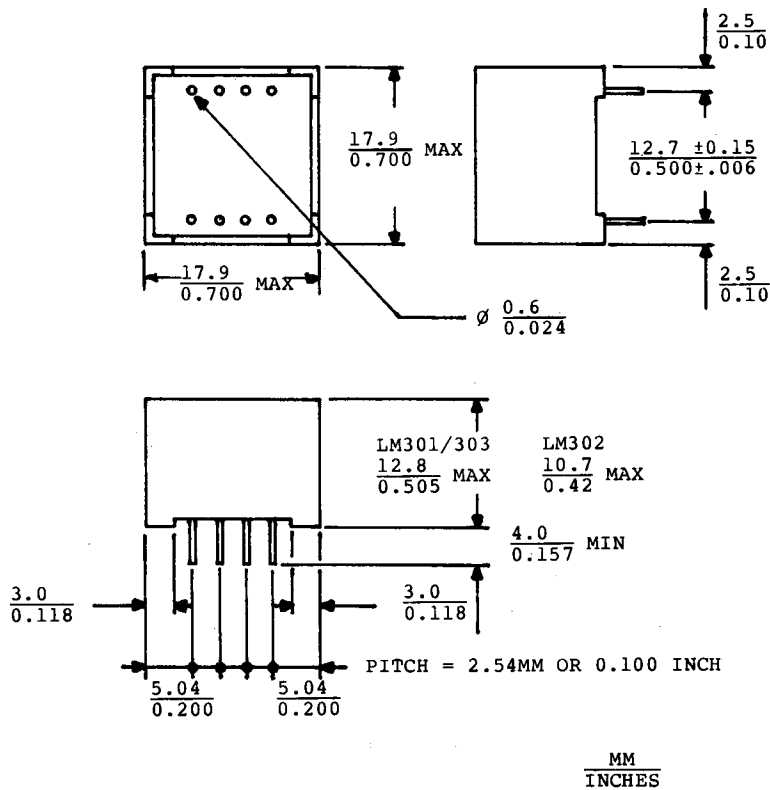
Telephone Line Matching Transformers LM 301 / LM 302 / LM 303 Series

FEATURES

- Designed to Meet FCC Part 68
- Encapsulated Design with Epoxy Resin Meeting UL94-V0
- Low Profile Package
- High Dielectric Strength
- All Units are Manufactured in Accordance with the Requirements of MIL-T-27
- Low Cost · 15 Models · Ex-Stock



Outline Dimensions for LM301 / LM302 / LM303 SERIES



LM 301 / LM 302 Series

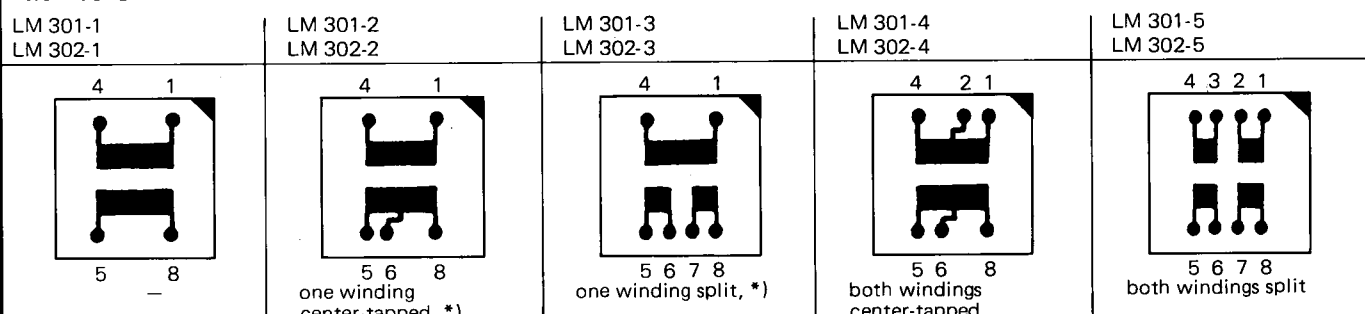
Telephone Line Matching Transformers

Electrical Specifications at 25°C

PART NUMBERS AND SPECIFICATIONS												
Parameters	Unit	LM					LM					
		301-1	301-2	301-3	301-4	301-5	302-1	302-2	302-3	302-4	302-5	
Impedance (min./at 1.0 kHz)	Primary	Ω	600	600	600	600 (150, 150)	600 (150+ 150)	600	600	600	600 (150, 150)	600 (150+ 150)
	Secondary	Ω	600	600 (150, 150)	600 (150+ 150)	600 (150, 150)	600 (150+ 150)	600	600 (150, 150)	600 (150+ 150)	600 (150, 150)	600 (150+ 150)
Inductance (min./at 0.2 kHz)	Primary	H	2.8	2.8	2.8	2.8 (0.7, 0.7)	2.8 (0.7+ 0.7)	2.8	2.8	2.8	2.8 (0.7, 0.7)	2.8 (0.7+ 0.7)
	Secondary	H	2.8	2.8 (0.7, 0.7)	2.8 (0.7+ 0.7)	2.8 (0.7, 0.7)	2.8 (0.7+ 0.7)	2.8	2.8 (0.7, 0.7)	2.8 (0.7+ 0.7)	2.8 (0.7, 0.7)	2.8 (0.7+ 0.7)
DC-Resistance (typical/±10.0%)	Primary	Ω	66.0	66.0	66.0	66.0 (33.0, 33.0)	66.0 (33.0+ 33.0)	90.0	90.0	90.0	90.0 (45.0, 45.0)	90.0 (45.0+ 45.0)
	Secondary	Ω	66.0	66.0 (33.0, 33.0)	66.0 (33.0+ 33.0)	66.0 (33.0, 33.0)	66.0 (33.0+ 33.0)	90.0	90.0 (45.0, 45.0)	90.0 (45.0+ 45.0)	90.0 (45.0, 45.0)	90.0 (45.0+ 45.0)
Turns Ratio (≤ +/- 2.0%)	-	1 : 1										
Winding Configurations	-	-	one winding center tapped	one winding split	both windings center tapped	both windings split	-	one winding center tapped	one winding split	both windings center tapped	both windings split	
Insertion Loss (at 2.0 kHz)	dB	≤ 1.5					≤ 2.0					
Return Loss	Transformer (0.2 – 4.0 kHz)	≥ 10.0					≥ 8.0					
	In networks	≥ 21.0					≥ 20.0					
Shunt Loss (typical)	kΩ	9.0										
Frequency Response (typical/0.2 – 3.5 kHz)	dB	-0.3					-0.5					
Wide Band Response (0.2 – 10.0 kHz)	dB	-2.5					-4.5					
Power Level	dB	-45.0/+3.0					-43.0/+3.0					
Longitudinal Balance (0.3 – 5.0 kHz)	dB	-80.0					-70.0					
Distortion (0 dB/at 1.0 kHz)	%	≤ 0.1					≤ 0.25					
Leakage Induction (typical)	mH	14.0										
Dielectric Strength (P/S)	kVDC	6.5										
Temperature Range	Operation Storage	°C					-10.0/+60.0 -20.0/+70.0					

Specifications met BS 6204: construction and flammability (UL 94VO) CCITT: Rec. T/CD 1 – 1
 BS 6301: isolation (Sept. 1982)
 BS 6305: return loss (1982/paragraph 4.3.2.2/b) FCC Part 68

PIN ASSIGNMENT AND WINDING CONFIGURATIONS (bottom view)



*) due to the unique design and the most advanced manufacturing techniques the 2 coils are fully identical, meaning there is no real primary nor secondary winding. Depending on the application, the transformers can be used either way.