



# E1/T1/ PRI/CEPT Dual Transformer Modules

## Features

- SMD design ideal for pick and place compatability while providing unrivaled coplanarity
- controlled parameters ensure full compliance with ITU-T G.703 when matched with recommended IC
- ideal for all 1.544 and 2.048 Mbs interface applications
- manufactured in an ISO-9001:2000, TS-16949:2002 and ISO-14001:2004 certified Talema facility
- 1500Vrms minimum isolation voltage
- extended operating temperature: -40° to +85°C
- fully RoHS compliant and meets lead free reflow level J-STD-020C



## Electrical Specifications @ 25°C

Turns Ratio: **Bold** = IC side windings

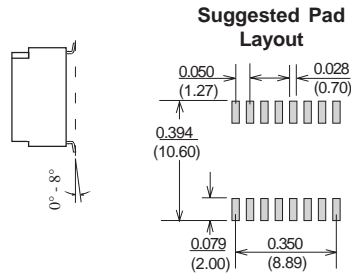
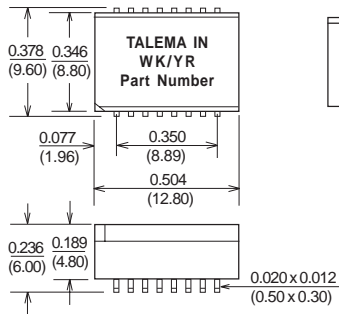
### MJM Series - Dual Transformers

Part Number	Transformer - I						Transformer - II						Schematic
	Turns Ratio +/-5%	L <sub>p</sub> (mH Min)	R <sub>CU</sub> (Ohms)		Pri. Pins	Sec. Pins	Turns Ratio +/-5%	L <sub>p</sub> (mH Min)	R <sub>CU</sub> (Ohms)		Pri. Pins	Sec. Pins	
			Pri.	Sec.					Pri.	Sec.			
MJM-010	1ct:1.41ct	1.2	0.41	0.58	16-15-14	1-2-3	1ct:1.41ct	1.2	0.41	0.58	11-10-9	6-7-8	A
MJM-013	1ct:1.15ct	1.2	0.39	0.44	1-2-3	16-15-14	1ct:1.15ct	1.2	0.39	0.44	6-7-8	11-10-9	A
MJM-016	1ct:2ct	1.2	0.39	0.77	6-7-8	11-10-9	1ct:2.3ct	1.2	0.39	0.88	16-15-14	1-2-3	A
MJM-017	1ct:2ct	1.2	0.39	0.77	16-15-14	1-2-3	1ct:2ct	1.2	0.39	0.77	6-7-8	11-10-9	A
MJM-018	1ct:1ct	1.2	0.39	0.38	16-15-14	1-2-3	1ct:2ct	1.2	0.39	0.77	6-7-8	11-10-9	A
MJM-019	1:1.15ct	1.2	0.39	0.44	16--14	1-2-3	1ct:2ct	1.2	0.39	0.77	6-7-8	11-10-9	B
MJM-021	1ct:1.41ct	1.2	0.41	0.58	1-2-3	16-15-14	1ct:1.41ct	1.2	0.41	0.58	11-10-9	6-7-8	A
MJM-022	1ct:1ct	1.0	0.39	0.39	11-10-9	6-7-8	1ct:2.4ct	1.0	0.41	0.90	1-2-3	16-15-14	A
MJM-023	1:1ct	1.2	0.39	0.39	16-14	1-2-3	1:1ct	1.2	0.39	0.39	6-8	11-10-9	C
MJM-024	1ct:1ct	1.0	0.39	0.39	6-7-8	11-10-9	1ct:1.67ct	1.0	0.39	0.66	16-15-14	1-2-3	A
MJM-025	1:1/1.26	1.2	0.39	0.48	16-14	1-2-3	1ct:2ct	1.2	0.39	0.77	6-7-8	11-10-9	B
MJM-026	1ct:1ct	1.2	0.39	0.39	16-15-14	1-2-3	1ct:1.5ct	1.2	0.39	0.58	6-7-8	11-10-9	A
MJM-027	1:2ct	1.6	0.41	0.83	16-14	1-2-3	2:1	1.6	0.41	0.21	6-8	11-9	D
MJM-028	1ct:2ct	1.2	0.39	0.77	16-15-14	1-2-3	1:1.36ct	1.2	0.39	0.52	6-8	11-10-9	E
MJM-029	1:2.42ct	1.2	0.39	0.94	16-14	1-2-3	1:2.42ct	1.2	0.39	0.94	6-8	11-10-9	C
MJM-030	2:1:1	1.2	0.46	0.26	16-14	1-2, 3-4	2:1:1	1.2	0.46	0.26	11-9	5-6, 7-8	F
MJM-031	2ct:1/1.26	1.5	0.41	0.52	1-2-3	16-15-14	2ct:1/1.26	1.5	0.41	0.52	11-10-9	6-7-8	A
MJM-032	1:2.42	1.2	0.39	0.94	16-14	1-2-3	1:1ct	1.2	0.39	0.39	6-8	11-10-9	C
MJM-033*	1:1.9/2.4	1.0	0.41	0.94	16-15-14	1-2-3	0.79:1.9/1	1.0	0.40	0.75	6-7-8	11-10-9	A
MJM-034	1ct:1.5ct	1.5	0.41	0.62	1-2-3	16-15-14	1ct:1.5ct	1.5	0.41	0.62	6-7-8	11-10-9	A
MJM-035	1ct:1ct	1.2	0.39	0.39	6-7-8	11-10-9	1ct:1.36ct	1.2	0.39	0.52	1-2-3	16-15-14	A
MJM-036	2cs:1.57/2	1.5	0.41	0.82	1-2		2cs:1.57/2	1.5	0.41	0.82	5-6		G
MJM-037	1ct:1ct	1.2	0.39	0.39	16-15-14	1-2-3	1ct:1.36ct	1.2	0.39	0.53	6-7-8	11-10-9	A
MJM-038	1ct:2.42ct	1.2	0.39	0.94	1-2-3	16-15-14	1ct:2.42ct	1.2	0.39	0.94	6-7-8	11-10-9	A
MJM-039	1:2/2.4	1.0	0.39	0.94	1-3	16-15-14	1:0.79/1	1.0	0.39	0.39	6-8	11-10-9	H
MJM-040	1ct:2.4ct	1.2	0.39	0.94	1-2-3	16-15-14	1ct:2.4ct	1.2	0.39	0.94	6-7-8	11-10-9	A
MJM-041	1:2ct	1.2	0.39	0.77	1-3	16-15-14	1:2cs	1.2	0.39	0.77	11-9	5-6,7-8	J
MJM-042	1:1.36ct	1.2	0.39	0.53	16-14	1-2-3	1:2ct	1.2	0.39	0.77	6-8	11-10-9	C
MJM-043	1ct:2ct	1.2	0.39	0.77	1-2-3	16-15-14	1ct:2ct	1.2	0.39	0.77	6-7-8	11-10-9	A
MJM-044	1ct:2ct	1.2	0.39	0.77	1-2-3	16-15-14	1:1	1.2	0.39	0.39	6-8	11-9	K
MJM-045	1ct:2ct	1.2	0.39	0.77	1-2-3	16-15-14	1ct:2.42ct	1.2	0.39	0.95	6-7-8	11-10-9	A
MJM-046	1ct:1ct	1.2	0.39	0.39	1-2-3	16-15-14	1ct:1ct	1.2	0.39	0.39	6-7-8	11-10-9	A
MJM-047	1ct:1.26ct	1.2	0.39	0.50	1-2-3	16-15-14	1ct:1.26ct	1.2	0.39	0.50	6-7-8	11-10-9	A
MJM-048	1ct:1:0.8	1.2	0.39	0.39	16-15-14	1-2, 3-4	1ct:1:0.8	1.2	0.39	0.39	11-10-9	5-6, 7-8	G
MJM-049	1ct:1.58:2	1.2	0.39	0.80	2-3-4	16-15, 14-13	1:1.65:2	1.2	0.39	0.80	6-7	12-11, 10-9	L
MJM-050	1ct:1:1	1.2	0.39	0.39	16-15-14	1-2, 3-4	1ct:1:1	1.2	0.39	0.39	11-10-9	5-6, 7-8	G
MJM-051	1ct:2.4ct	1.2	0.39	0.94	1-2-3	16-15-14	1ct:1ct	1.2	0.39	0.39	6-7-8	11-10-9	A

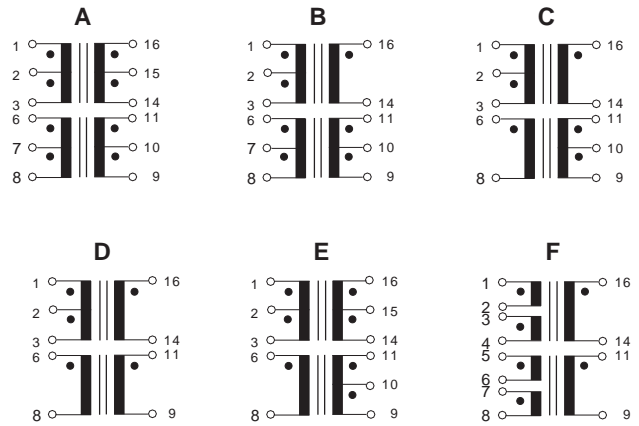
\* MJM-033 Turns Ratio: Pins 16-14:1-2 = 1:1.9, Pins 16-14:1-3=1:2.4; Pins 6-8:9-11=0.79:1.9, Pins 6-8:11-10=0.79:1

# Packaging & Schematics for MJM Series Dual Transformer Modules

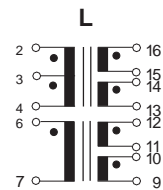
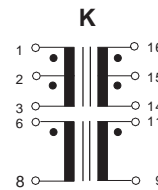
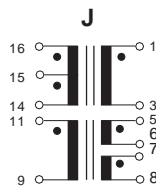
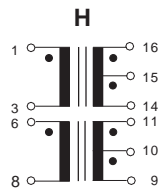
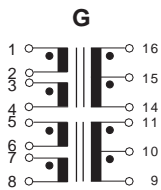
## MJM Dimensions



## Schematics



Surface Coplanarity will be 0.004(0.10) maximum  
 Dimensions: Inches (Millimeters)  
 Tolerance:  $\pm 0.010$  (0.25) unless specified otherwise



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