

## MJQ Series • T1/CEPT/E1/PRI Transformer Modules for Quad Ports

### Features

- designed for optimum compatability with all established interface IC's - see listing on last page
- module contains eight transformers for Quad T1/E1 Ports
- SMD design provides consistent and reliable coplanarity - fully pick and place compatible
- controlled parameters ensure full compliance with ITU-T G.703 when matched with recommended IC
- 1500 Vrms minimum isolation voltage
- ideal for all 1.544 and 2.048 Mbs interface applications
- manufactured in ISO-9001 approved Talema facility
- extended operating temperature of -40° to 85°C standard for all types



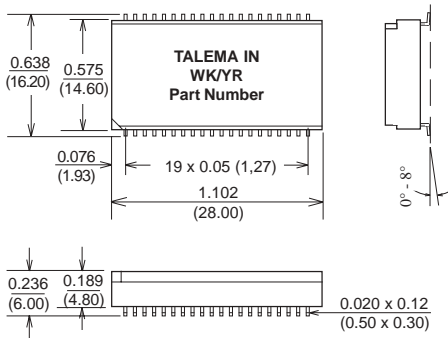
### Electrical Specifications @ 25°C

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

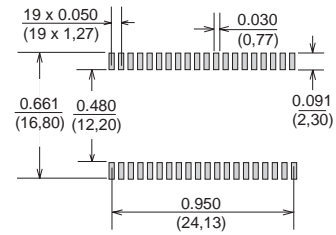
MJQ Transformer Modules for Quad T1/E1 Ports										
Extended Operating Temperature Range: -40° to +85°C										
Part Number	Transformer	Turns Ratio (Pri:Sec +/-2%)	OCL (mH Min.)	L <sub>L</sub> (µH Max)	C <sub>WW</sub> (pF Max)	DCR (mOhms)		Pins		Schematic
						Pri	Sec	Primary	Secondary	
MJQ-001-40	Transmit	1:1. <b>36CT</b>	1.2	0.6	35	390	550	24-25, 29-30, 34-35, 39-40	16-18, 11-13, 6-8, 1-3	C
	Receive	1:2CT	1.2	0.6	35	390	780	4-5, 9-10, 14-15, 19-20	36-38, 31-33, 26-28, 21-23	
MJQ-002-40	Transmit	1:1. <b>15</b>	1.2	0.6	35	390	450	1-2, 6-7, 11-12, 16-17	39-40, 34-35, 29-30, 24-25	A
	Receive	1:2CT	1.2	0.6	35	390	780	21-23, 26-28, 31-33, 36-38	18-20, 13-15, 8-10, 3-5	
MJQ-003-40	Transmit	1:2CT	1.2	0.6	35	390	780	1-2, 6-7, 11-12, 16-17	38-40, 33-35, 28-30, 23-25	B
	Receive	1:1CT	1.2	0.6	35	390	390	21-22, 26-27, 31-32, 36-37	18-20, 13-15, 8-10, 3-5	
MJQ-006-40	Transmit	1:2CT	1.2	0.6	35	390	780	4-5, 9-10, 14-15, 19-20	36-38, 31-33, 26-28, 21-23	C
	Receive	1:2CT	1.2	0.6	35	390	780	24-25, 29-30, 34-35, 39-40	16-18, 11-13, 6-8, 1-3	
MJQ-007-40	Transmit	1:1/1. <b>26</b>	1.2	0.6	35	390	490	1-2, 6-7, 11-12, 16-17	38-40, 33-35, 28-30, 23-25	B
	Receive	1:2CT	1.2	0.6	35	390	780	21-22, 26-27, 31-32, 36-37	18-20, 13-15, 8-10, 3-5	
MJQ-009-40	Transmit	1:1. <b>14</b>	1.2	0.6	35	390	440	1-2, 6-7, 11-12, 16-17	39-40, 34-35, 29-30, 24-25	A
	Receive	1:1. <b>14CT</b>	1.2	0.6	35	390	440	36-38, 31-33, 26-28, 21-23	3-5, 8-10, 13-15, 18-20	
MJQ-012-40	Transmit	1:1. <b>36</b>	1.2	0.4	20	390	540	1-2, 6-7, 11-12, 16-17	39-40, 34-35, 29-30, 24-25	A
	Receive	1:1. <b>36CT</b>	1.2	0.5	20	390	540	36-38, 31-33, 26-28, 21-23	3-5, 8-10, 13-15, 18-20	
MJQ-015-40	Transmit	1:1. <b>15</b>	1.2	0.6	35	390	450	1-3, 6-8, 11-13, 16-18	38-40, 33-35, 28-30, 23-25	E
	Receive	1:1. <b>15</b>	1.2	0.6	35	390	450	4-5, 9-10, 14-15, 19-20	36-37, 31-32, 26-27, 21-22	
MJQ-016-40	Transmit	1CT:1. <b>41</b>	1.2	0.6	35	420	580	1-3, 6-8, 11-13, 16-18	39-40, 34-35, 29-30, 24-25	C
	Receive	1CT:1. <b>41</b>	1.2	0.6	35	420	580	21-23, 26-28, 31-33, 36-38	19-20, 14-15, 9-10, 4-5	
MJQ-017-40	Transmit	1:2	1.2	0.6	35	390	780	1-3, 6-8, 11-13, 16-18	38-40, 33-35, 28-30, 23-25	E
	Receive	1:2	1.2	0.6	35	390	780	4-5, 9-10, 14-15, 19-20	36-37, 31-32, 26-27, 21-22	
MJQ-020-40	Transmit	1:2CT	1.2	0.6	35	390	780	4-5, 9-10, 14-15, 19-20	36-38, 31-33, 26-28, 21-23	C
	Receive	1CT:2	1.2	0.6	35	390	780	1-3, 6-8, 11-13, 16-18	39-40, 34-35, 29-30, 24-25	
MJQ-021-40	Transmit	1:2	1.2	0.6	35	390	780	1-2, 9-10, 11-12, 19-20	39-40, 31-32, 29-30, 21-22	D
	Receive	1:2CT	1.2	0.6	35	390	780	23-25, 26-28, 33-35, 36-38	16-18, 13-15, 6-8, 3-5	
MJQ-022-40	Transmit	1:1	1.0	0.5	35	390	390	1-2, 8-9, 11-12, 18-19	39-40, 32-33, 29-30, 22-23	F
	Receive	1:2.4	1.0	0.5	35	410	900	24-25, 27-28, 34-35, 37-38	16-17, 13-14, 6-7, 3-4	
MJQ-023-40	Transmit	1:1. <b>70</b>	1.2	0.8	35	390	670	1-2, 6-7, 11-12, 16-17	39-40, 34-35, 29-30, 24-25	A
	Receive	1:1. <b>36CT</b>	1.2	0.6	35	390	540	21-23, 26-28, 31-33, 36-38	18-20, 13-15, 8-10, 3-5	
MJQ-024-40	Transmit	1:1. <b>36CT</b>	1.2	0.6	35	390	540	24-25, 29-30, 34-35, 39-40	16-18, 11-13, 6-8, 1-3	C
	Receive	1:1CT	1.2	0.6	35	390	390	4-5, 9-10, 14-15, 19-20	36-38, 31-33, 26-28, 21-23	
MJQ-026-40	Transmit	1:1.5	1.0	0.5	35	390	580	1-2, 8-9, 11-12, 18-19	39-40, 32-33, 29-30, 22-23	F
	Receive	1.41:1	1.0	0.5	35	390	390	24-25, 27-28, 34-35, 37-38	16-17, 13-14, 6-7, 3-4	
MJQ-028-40	Transmit	1:2.42	1.2	0.6	35	390	940	1-3, 6-8, 11-13, 16-18	38-40, 33-35, 28-30, 23-25	E
	Receive	1:2.42	1.2	0.6	35	390	940	4-5, 9-10, 14-15, 19-20	36-37, 31-32, 26-27, 21-22	
MJQ-029-40	Transmit	1:2.1CT	1.2	0.6	35	390	810	1-2, 6-7, 11-12, 16-17	38-40, 33-35, 28-30, 23-25	B
	Receive	1:2.1CT	0.6	0.6	35	280	590	21-22, 26-27, 31-32, 36-37	18-20, 13-15, 8-10, 3-5	
MJQ-030-40	Transmit	1:2.45CT	1.2	0.6	35	390	960	1-2, 6-7, 11-12, 16-17	38-40, 33-35, 28-30, 23-25	B
	Receive	1:2.45CT	0.6	0.6	35	280	690	21-22, 26-27, 31-32, 36-37	18-20, 13-15, 8-10, 3-5	

# Packaging & Dimensions for SMD Quad Port Transformer Modules

## MJQ Series Quad Module Package



### Suggested Pad Layout



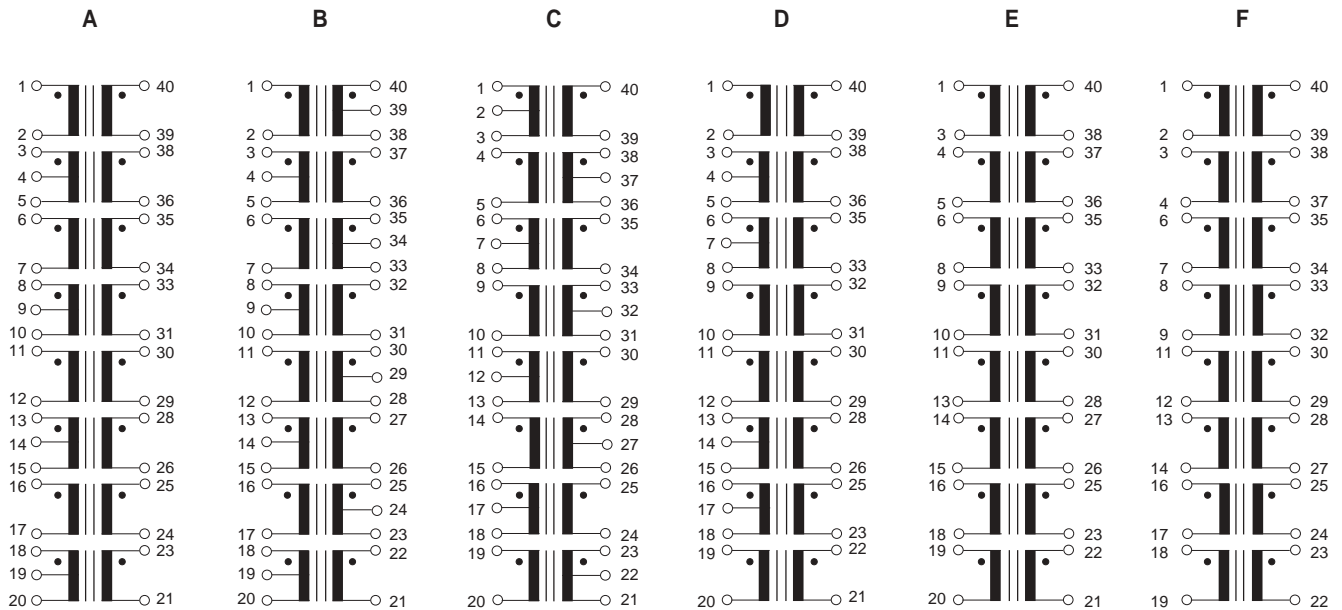
Surface coplanarity will be <math><0.004 (0.10)</math>

Weight: 5 grams

Dimensions: Inches (Millimeters)

Tolerance:  $\pm 0.010 (0.25)$  unless specified otherwise

## Schematics



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