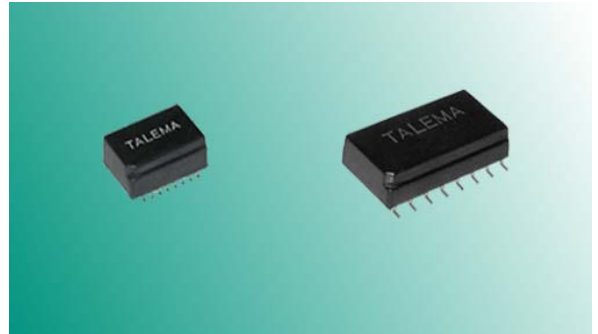


TMM Series • 10 Base-T Single Port SMD Transformer Modules

Features

- Low profile and light weight 10 Base-T modules facilitate pick and place compatibility and speed of placement
- Meets requirements of IEEE 802.3
- Consistent and reliable coplanarity
- Excellent quality at extremely competitive price due to high volume production
- Manufactured in an ISO 9001:2015 and ISO 14001:2015 certified Talema facility
- Fully RoHS & REACH Compliant and meets lead free reflow level J-STD-020E



Electrical Specifications @ 25°C

Minimum isolation voltage: 1500 Vrms
 Operating Temperature Range: -40°C to +85°C
 Storage Temperature: -40°C to +125°C

Test Frequency:

Inductance, Interwinding Capacitance and Leakage Inductance measured @ 100KHz/20mV

Quality and consistency are guaranteed through 100% testing of the specified parameters for primary inductance, leakage inductance, turns ratio, DC resistance and interwinding capacitance. This ensures that the return loss and pulse wave shape requirements can be fully maintained. Additionally, all parts are tested for 1500V minimum isolation.

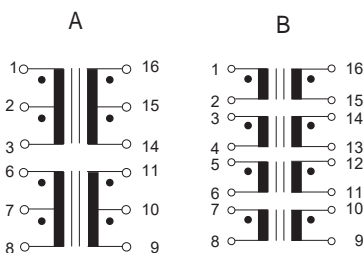
Applications:

Talema 10Base-T transformer modules contain transmit and receive isolation transformers to maintain consistent wave shape and suppression of common mode noise while providing equipment isolation per IEEE 802.3. High impedance common mode quad chokes for additional EMI suppression have been added on some models as required for FCC and CISPR 22 Class B certification.

TMM Series • 10 Base-T Single Port SMD Transformer Modules

Part Number	Turns Ratio ±5%		Pri. OCL (µH Min)	L _L (µH Max) Pri / Sec	C _{WW} (pF Max) Pri / Sec	DCR (Ohms Max.)				V _P (Vrms)	Schematic
	1-3:16-14	6-8:11-9				1-3	16-14	6-8	11-9		
						Pri. Windings		Sec. Windings			
TMM-100A1-J	1ct:1ct	1ct:1ct	100	0.25	9	0.30	0.30	0.30	0.30	1500	A
TMM-100A6-J	2ct:1ct	1ct:1ct	100	0.25	12	0.60	0.30	0.30	0.30	1500	A
TMM-112A3-J	1ct:1ct	1ct:2ct	112	0.30	8	0.30	0.30	0.30	0.60	1500	A
TMM-140A2-J	1ct:1ct	1ct:1.414ct	140	0.20	12	0.30	0.30	0.30	0.45	1500	A
TMM-140A3-J	1ct:1ct	1ct:2ct	140/25	0.30	12	0.30	0.30	0.30	0.45	1500	A
TMM-150A6-J	2ct:1ct	1ct:1ct	150	0.20	12	0.60	0.30	0.30	0.30	1500	A
TMM-200A1-J	1ct:1ct	1ct:1ct	200	0.20	10	0.30	0.30	0.30	0.30	1500	A
TMM-200A2-J	1ct:1ct	1ct:1.414ct	200	0.50	15	0.30	0.30	0.30	0.45	1500	A
TMM-200A4-J	1ct:1ct	1ct:2.5ct	200/35	0.40	15	0.30	0.30	0.30	0.80	1500	A
TMM-200A5-J	1ct:2ct	1ct:1ct	50/200	0.20	12	0.30	0.60	0.30	0.30	1500	A
TMM-140B1-J	Pri. Winding:Sec. Winding		140	0.20	12	Pri. Windings		Sec. Windings		1500	B
	1:1 (4x)					0.30		0.30			
TMM-140B2-J	1:1.41(4x)		140	0.20	12	0.41		0.60		1500	B

Schematics without Choke



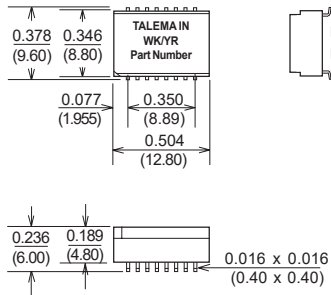
See next page for electrical specifications for modules with common mode chokes for EMI noise suppression and for dimensions and **schematics with choke**.

TMCM Series • 10 Base-T Transformers with Common Mode Choke for EMI Suppression

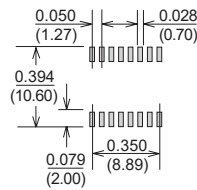
Part Number	Turns Ratio ±5%		Pri. OCL (μH Min)	L_L (μH Max)	C_{WW} (pF Max)	DCR (Ohms Max.)				V_P (Vrms)	Schematic
	1-3:16-14	6-8:11-9				1-3	16-14	6-8	11-9		
TMCM-100A1-J	1ct:1ct	1ct:1ct	100	0.30	8	0.30	0.30	0.30	0.30	1500	A
TMCM-110B2-J	1ct:1ct	1ct:1.414ct	110	0.40	15	0.30	0.30	0.30	0.90	1500	B
TMCM-112B3-J	1ct:1ct	1ct:2ct	112	0.30	8	0.40	0.40	0.40	1.10	1500	B
TMCM-120A3-J	1ct:1ct	1ct:2ct	120/20	0.40	9	0.90	0.90	0.90	0.90	1500	A
TMCM-140A2-J	1ct:1ct	1ct:1.414ct	140	0.40	20	0.40	0.40	0.40	0.40	1500	A
TMCM-140A3-J	1ct:1ct	1ct:2ct	140	0.2	12	0.30	0.30	0.30	0.90	1500	A
TMCM-140A6-J	2ct:1ct	1ct:1ct	140	0.3	12	0.60	0.30	0.30	0.30	1500	A
TMCM-150A6-J	2ct:1ct	1ct:1ct	150	0.90	10	0.70	0.35	0.35	0.35	1500	A
TMCM-200A1-J	1ct:1ct	1ct:1ct	200	0.25	10	0.30	0.30	0.30	0.30	1500	A
TMCM-200A2-J	1ct:1ct	1ct:1.414ct	200	0.5	12	0.30	0.30	0.30	0.75	1500	A
TMCM-200A4-J	1ct:1ct	1ct:1.25ct	200	0.5	15	0.30	0.30	0.30	1.05	1500	A
TMCM-200A5-J	1ct:2ct	1ct:1ct	200	0.3	8	0.30	0.90	0.30	0.30	1500	A
TMCM-350A4-J	1ct:1ct	1ct:2.5ct	350	0.8	30	0.30	0.30	0.30	1.05	1500	A

Dimensions

Miniature Module - TMM & TMCM



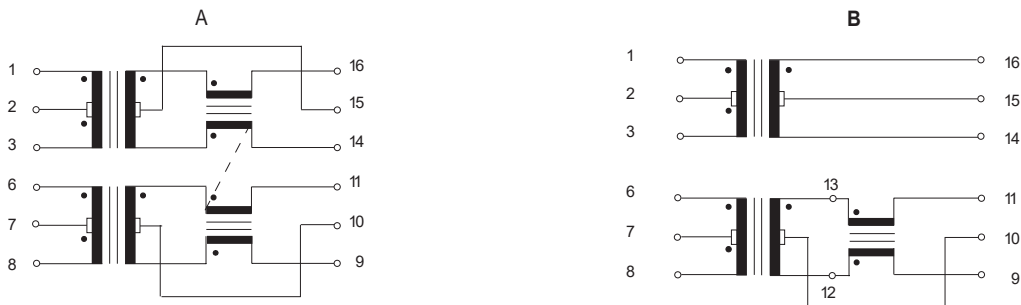
Suggested Pad Layout



Dimensions: Inches (Millimeters)
 Tolerance: ± 0.010 (0.25) unless specified otherwise
 Surface coplanarity will be 0.004 (0.01) maximum

Packing Method: Tape and Reel; Qty/Reel: 600 Pcs

Schematics with Choke



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