VO Series • SMD 10/100Base-TX VoIP Magnetics



Features

- Meets requirements of IEEE 802.3af and ANSI X3.263
- Supports 10Mbps and 100 Mbps VoIP applications
- Manufactured in an ISO-9001:2000, TS-16949:2002 and ISO-14001:2004 certified Talema facility
- Fully RoHS compliant and meets lead free reflow level J-STD-020C

Electrical Specifications @ 25°C

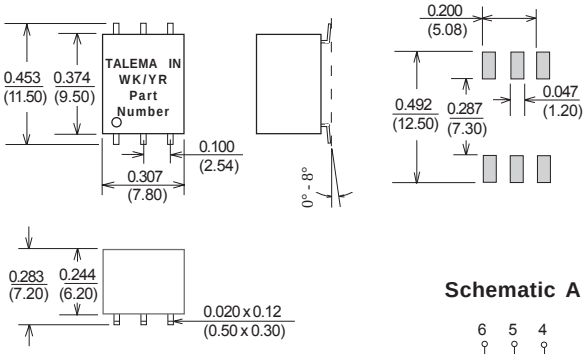
Inductance: 350µH minimum @ 100kHz, 100mV, 8mA
Leakage Inductance: 0.25µH @ 1MHz
$C_{W/W:}$ 25pF typical
Minimum isolation voltage: 1500 Vrms
Extended Operating Temperature Range: -40°C to +85°C
Storage Temperature: -40°C to +125°C
Standard Packing: Tape and Reel

Quality and consistency is 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.

VO Series • SMD 10/100Base-T X VoIP Modules

Part Number	Turns Ratio ±2%	Nr. Ports	Insertion Loss (dB Typ)	Return Loss (dB Min)				Crosstalk (dB Typ)			Differential to Common Mode Rejection (dB Typ)			Schematic
			0.1 - 100 MHz	1-30 MHz	40 MHz	50 MHz	60-80 MHz	30 MHz	60 MHz	100 MHz	30 MHz	60 MHz	100 MHz	
VO-100A	1 : 1	1	-1.4	-16	-14	-13	-12	-45	-40	-35	-43	-37	-33	A
VO-200B	1 : 1	1	-1.4	-16	-14	-13	-12	-45	-40	-35	-43	-37	-33	B
VO-200C	1 : 1	1	-1.4	-16	-14	-13	-12	-45	-40	-35	-43	-37	-33	C
VO-300D	1 : 1	2	-1.4	-16	-14	-13	-12	-45	-40	-35	-43	-37	-33	D
VO-300E	1 : 1	2	-1.4	-16	-14	-13	-12	-45	-40	-35	-43	-37	-33	E
VO-300F	1 : 1	2	-1.4	-16	-14	-13	-12	-45	-40	-35	-43	-37	-33	F
VO-300F1	1 : 1	2	-1.4	-16	-14	-13	-12	-45	-40	-35	-43	-37	-33	F1
VO-300G	1 : 1	2	-1.4	-16	-14	-13	-12	-45	-40	-35	-43	-37	-33	G
VO-300H	1 : 1	2	-1.4	-16	-14	-13	-12	-45	-40	-35	-43	-37	-33	H
VO-400D	1 : 1	2	-1.4	-16	-14	-13	-12	-45	-40	-35	-43	-37	-33	D
VO-400F	1 : 1	2	-1.4	-16	-14	-13	-12	-45	-40	-35	-43	-37	-33	F
VO-400G	1 : 1	2	-1.4	-16	-14	-13	-12	-45	-40	-35	-43	-37	-33	G
VO-500H	1 : 1	4	-1.4	-16	-14	-13	-12	-45	-40	-35	-43	-37	-33	H
VO-500J	1 : 1	4	-1.4	-16	-14	-13	-12	-45	-40	-35	-43	-37	-33	J

VO-100



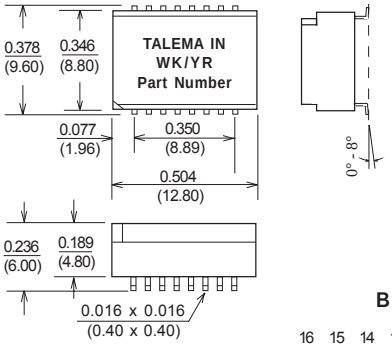
Surface coplanarity will be 0.004 (0.01) max.

Dimensions: Inches (Millimeters)
Tolerance: ±0.010 (0.25) unless specified otherwise

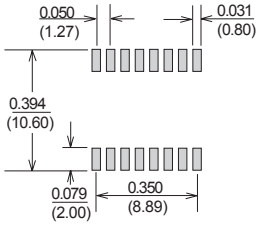
Schematic A



VO-200

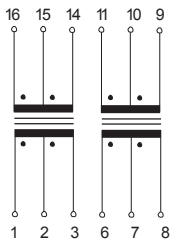


Suggested Pad Layoout

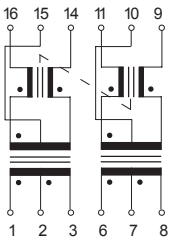


Schematics

B



C

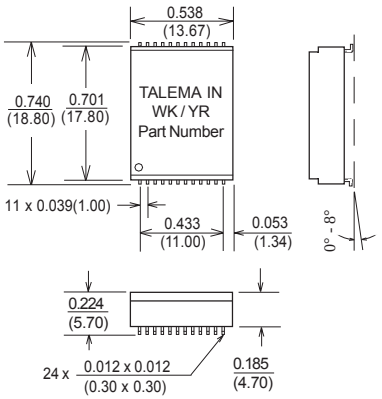


Dimensions & Schematics • VO Series 10/100Base-T VoIP Magnetices

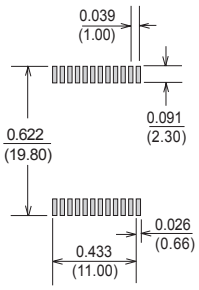
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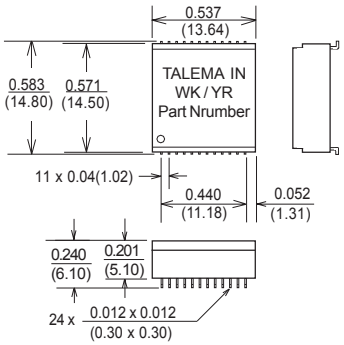
VO-300



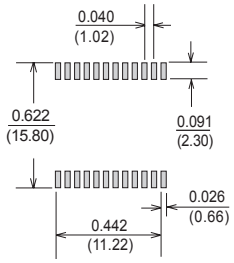
Suggested Pad Layout



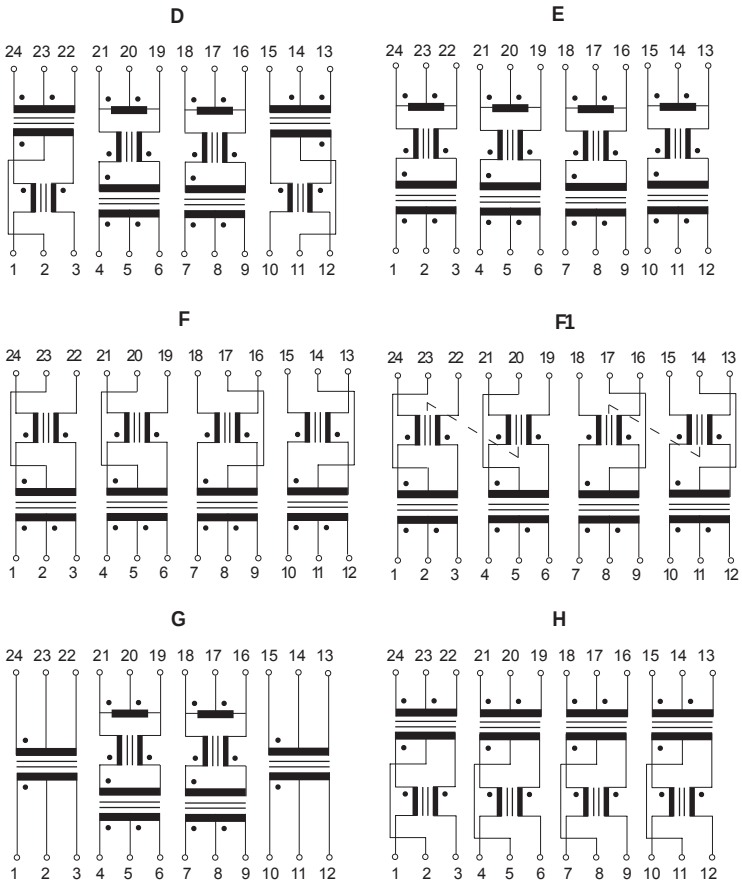
VO-400



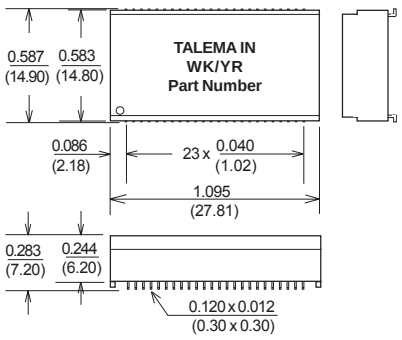
Suggested Pad Layout



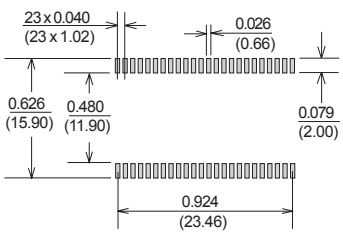
Schematics



VO-500



Suggested Pad Layout



Schematics

