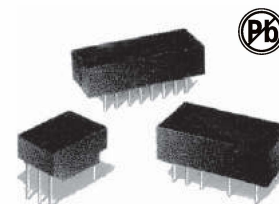


10/100BASE-TX MAGNETICS MODULES FAHS1606, 2007



FEATURES:

Designed to meet IEEE 802.3 requirements
Through-hole Low cost design

OPTIONS:

Tape & Reel is Standard
Bulk upon request

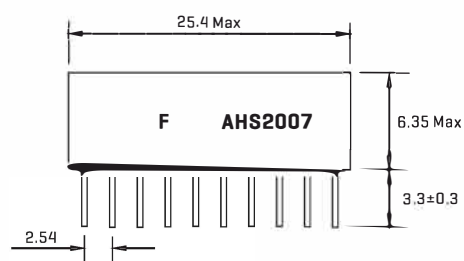
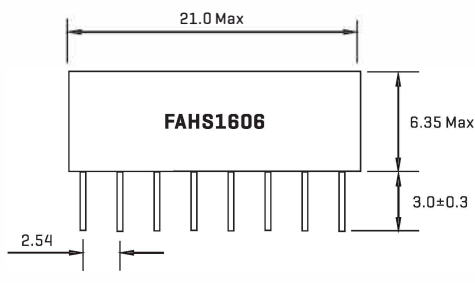
COMMON APPLICATIONS:

Multiport Repeater & Ethernet Switching HUB
Cable interface for isolation and low common mode emissions

ELECTRICAL SPECIFICATION@25°C -Operating Temperature 0°C to 70°C

Part number	Turns Ratio [±2%]	Insertion Loss [Max]	Return Loss [dB Min]					Crosstalk [dB Min]				Differential to Common Mode Rejection [dB Min]		Hi-pot [Vrms Min]
			0.1-100MHz	2-30MHz	40MHz	50MHz	60-80MHz	1KHz	30MHz	60MHz	100MHz	1-60MHz	60-200MHz	
FAHS1606	1CT:1CT	-1.1	-16	-15.0	-13.0	-12	-38	-38	-38	-38	-38	-38	15	
FAHS2007	1CT:1CT	-1.0	-16	-12.0	-10.0	-37	-25	-40	-40	-35	-40	-35	1500	

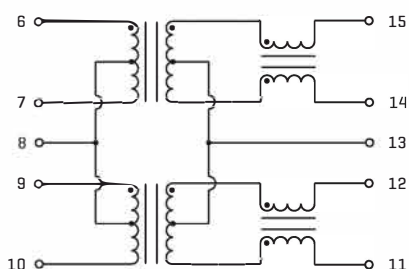
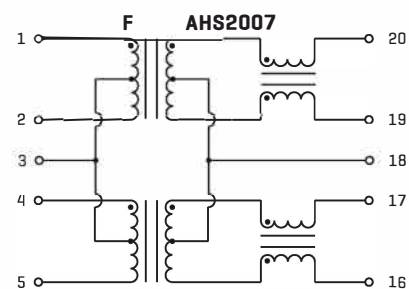
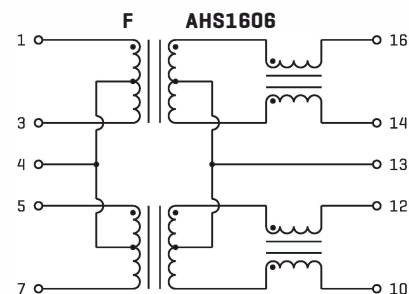
TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:



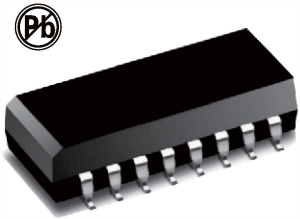
OCL:350uH Min 8mA DC bias[Line side]
Hi-Pot:1500 VRMS Min
Soldering methods:Wave,Reflow
Operating Temperature:0°C to 70°C
Storage Temperature:-25°C to 85°C

DIMENSIONS:mm
Unless otherwise specified all tolerances are±0.25

Note:All specifications subject to change without notice.



10/100BASE-TX MAGNETICS MODULES FAHS16001S-16002S



FEATURES:

Designed to meet IEEE 802.3 requirements

OPTIONS:

Tape & Reel is Standard
Bulk upon request

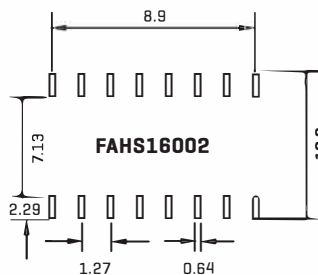
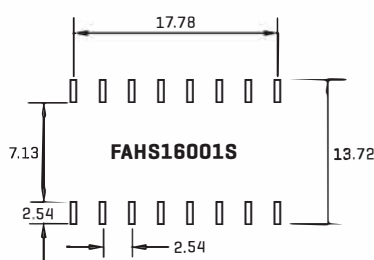
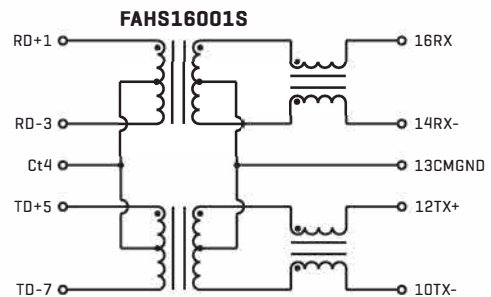
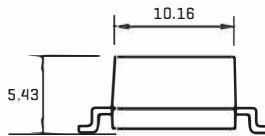
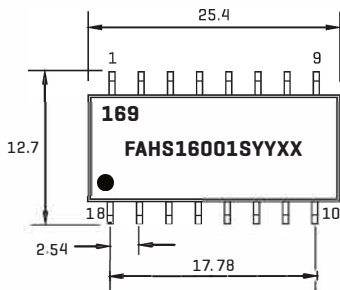
COMMON APPLICATIONS:

Cable interface for isolation and low common mode emissions
Multiport Repeater & Ethernet Switching HUB

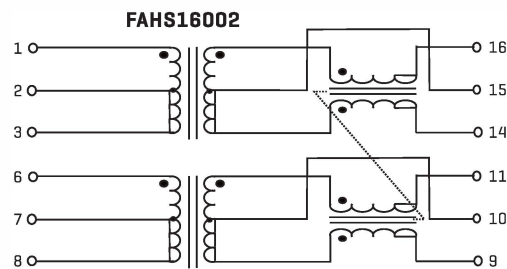
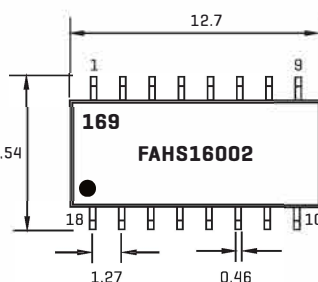
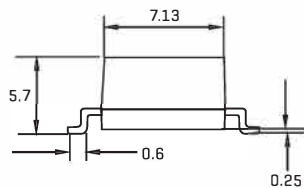
ELECTRICAL SPECIFICATION@25°C -Operating Temperature 0°C to 70°C

Part number	Turns Ratio [±2%]	Insertion Loss [Max]	Return Loss [dB Min]					Crosstalk [dB Min]				Differential to Common Mode Rejection[dB Min]		Hi-pot [Vrms Min]
			0.1-100MHz	2-30MHz	40MHz	50MHz	60-80MHz	1KHz	30MHz	60MHz	100MHz	1-60MHz	60-200MHz	
FAHS16001S	1CT:1CT	-1.0	-18	-14.4	-13.1	-12	-55	-45	-40	-32	-37	-25	1500	
FAHS16002	1CT:1CT	-1.0	-20	-20	-18	-14	-50	-40	-40	-42	-36	-33	1500	

TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:



DIMENSIONS:mm
Unless otherwise specified all tolerances are±0.25



OCL:350uH Min 8mA DC bias[Line side]
Hi-Pot:1500 VRMS Min
Soldering methods:Wave,Reflow
Operating Temperature:0°C to 70°C
Storage Temperature:-25°C to 85°C

Note:All specifications subject to change without notice.

10/100/1000BASE-T MAGNETICS MODULES FAHS7201



FEATURES:

Compliant with IEEE 802.3ab Standard for 1000BASE-T

OPTIONS:

Tape & Reel is Standard
Bulk upon request

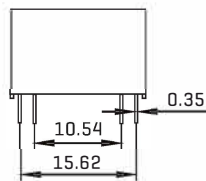
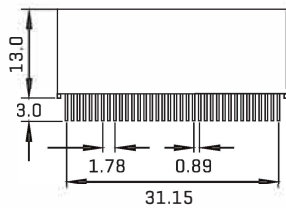
COMMON APPLICATIONS:

Designed for Ethernet 1000BASE-T, full Quad Port applications
Supports 16 pairs of category 5UTP cable
Cable interface for isolation and low common mode emissions

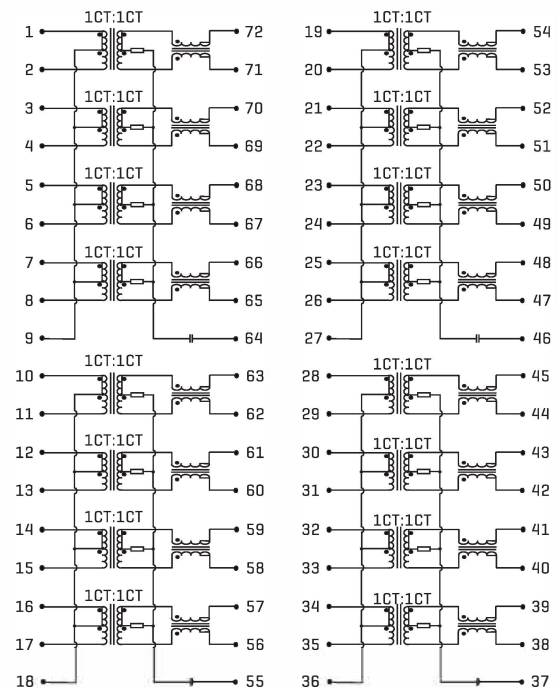
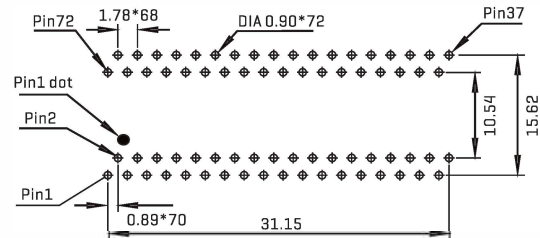
ELECTRICAL SPECIFICATION@25°C - Operating Temperature 0°C to 70°C

Part number	Turns Ratio [±2%]	Insertion Loss [Max]	Return Loss [dB Min]					Crosstalk [dB Min]				Differential to Common Mode Rejection[dB Min]		Hi-pot [Vrms Min]
			0.1-100MHz	2-30MHz	40MHz	50MHz	60-80MHz	1KHz	30MHz	60MHz	100MHz	1-60MHz	60-200MHz	
FAHS7201	1CT:1CT	-1.0	-18	-14.4	-18	-13.1	-40	-35	-30	-40	-35	-30	1500	

TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:



Recommended Pad Layout

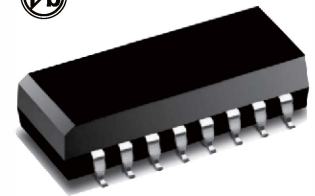


OCL:350uH Min 8mA DC bias(Line side)
Hi-Pot:1500 VRMS Min
Soldering methods:Wave,Reflow
Operating Temperature:0°C to 70°C
Storage Temperature:-25°C to 85°C

DIMENSIONS:mm
Unless otherwise specified all tolerances are±0.25

Note:All specifications subject to change without notice.

10/100/1000BASE-T MAGNETICS MODULES FAHS16015S,16063S



FEATURES:

Designed to fit with Broadcom, Intel, Micrel, National, Seemiconductor, ICS
Compliant with IEE 802.3u and ANSI X.3.263 standards Including 350uH OCL with 8mA bias

OPTIONS:

Tape & Reel is Standard
Bulk upon request

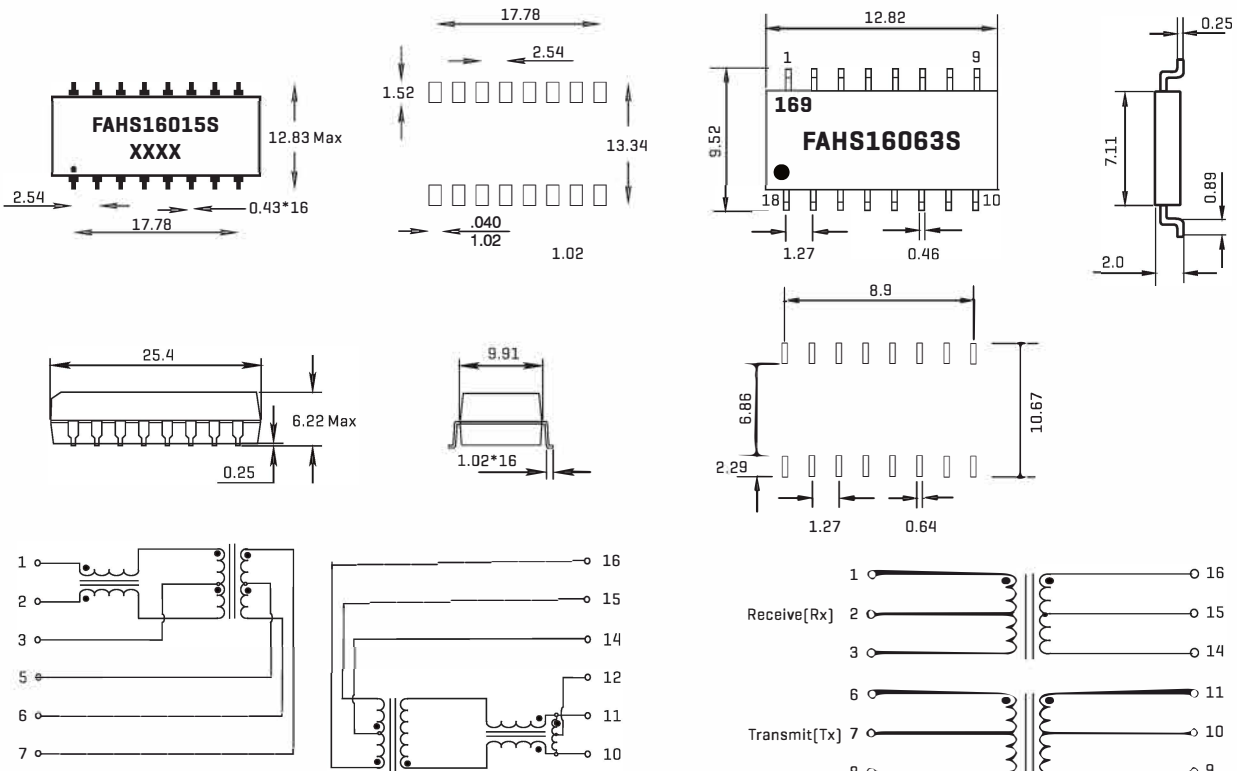
COMMON APPLICATIONS:

Cable interface for isolation and low common mode emissions
Multiport Repeater & Ethernet Switching HUB

ELECTRICAL SPECIFICATION@25°C -Operating Temperature 0°C to 70°C

Part number	Turns Ratio [±2%]	Insertion Loss [Max]	Return Loss [dB Min]				Crosstalk [dB Min]				Differential to Common Mode Rejection [dB Min]		Hi-pot (Vrms Min)	
			0.1-100MHz	2-30MHz	40MHz	50MHz	60-80MHz	1KHz	30MHz	60MHz	100MHz	1-60MHz		60-200MHz
FAHS16015S	1CT:1CT	-1.0	-20	-20	-20	-18	-14	-50	-40	-40	-42	-36	-33	1500
FAHS16063S	1CT:1CT	-1.0	-18	-14.4	-13.1	-12	-65	-50	-40	-35	-40	-35	1500	

TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:



OCL:350uH Min 8mA DC bias[Line side]
Hi-Pot:1500 VRMS Min
Soldering methods:Wave,Reflow
Operating Temperature:0°C to 70°C
Storage Temperature:-25°C to 85°C

DIMENSIONS:mm
Unless otherwise specified all tolerances are±0.25

Note:All specifications subject to change without notice.

10/100/1000BASE-T MAGNETICS MODULES FAHS2410,2411



FEATURES:

1:1 Turns Ratio
Full Duplex Compatible
Poe MAGNETICS
Compliant with IEE 802.3u and ANSI X.3.263 standards including 350uH OCL with 8mA bias

OPTIONS:

Bulk upon request
Custom Design Available
Thru Hole Available

COMMON APPLICATIONS:

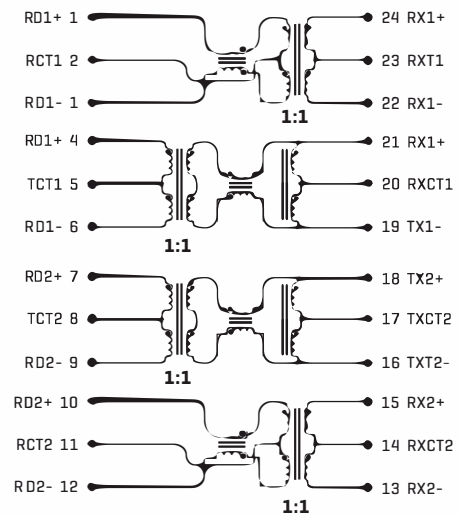
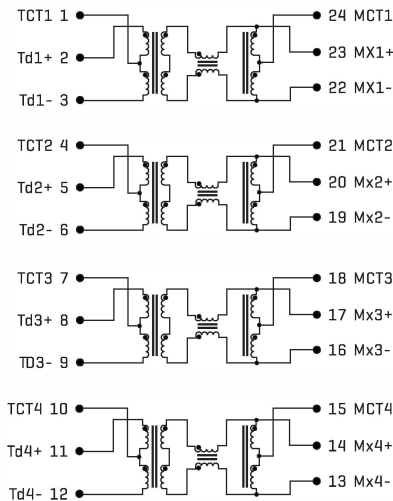
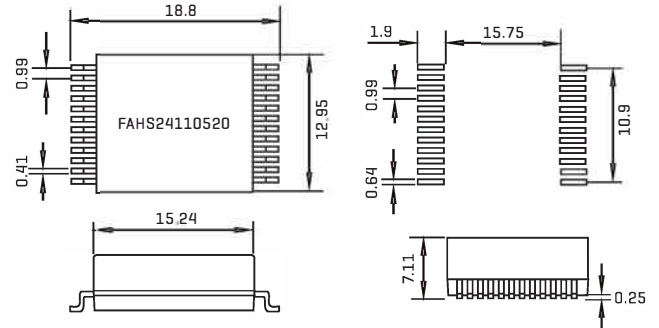
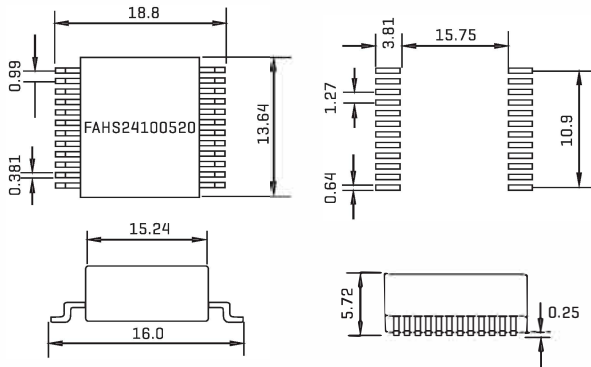
Cable interface for isolation and low common mode emissions
Designed to fit behind 1*1 RJ45 connector
Hs2411 Designed for IP phone or Switch

ELECTRICAL SPECIFICATION@25°C -Operating Temperature 0°C to 70°C

Part number	Turns Ratio [±2%]	Insertion Loss [Max]	Return Loss [dB Min]					Crosstalk [dB Min]				Differential to Common Mode Rejection[dB Min]		Hi-pot [Vrms Min]
			0.1-100MHz	2-30MHz	40MHz	50MHz	60-80MHz	1KHz	30MHz	60MHz	100MHz	1-60MHz	60-200MHz	
FAHS2410	1CT:1CT	-1.0	-18	-14.4	-13.1	-12	-65	-50	-40	-35	-40	-35	1500	
FAHS2411	1CT:1CT	-1.2	-16	-14.0	-13.0	-12	-43	-37	-33	-50	-43	-35	1500	

TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:

Primary OCL Tx & Rx:350uH Min@Idc=8mA
Hi-Pot:1500VRMS



Soldering methods:Wave,Reflow
Operating Temperature:0°C to 70°C
Storage Temperature:-55°C to 70°C

DIMENSIONS:mm
Unless otherwise specified all tolerances are±0.25
Note:All specifications subject to change without notice.

ISDN S-INTERFACE MAGNETICS MODULES FAHS5011-5015



FEATURES:

Meet Industry Standard Footprints
Designed for enhanced EMC performance
ISDN Interface Isolation
Through-Hole Dual 1500Vrms

OPTIONS:

Bulk upon request
Custom Design Available

COMMON APPLICATIONS:

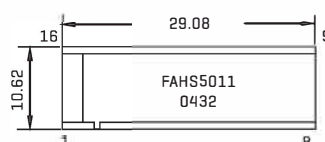
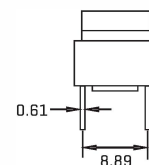
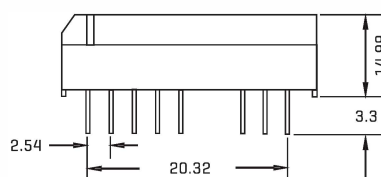
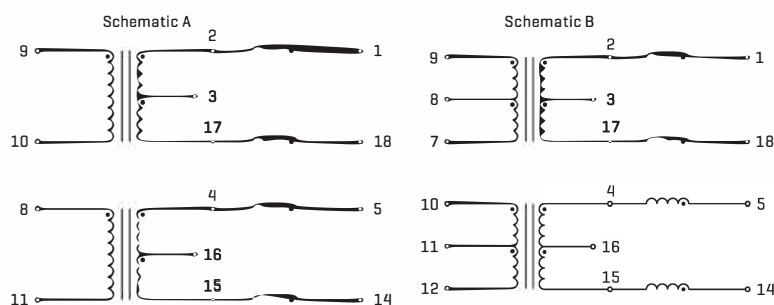
Cable interface for isolation and low common mode emissions
Designed to fit behind 1*1 RJ45 connector
ISDN S-Interface Single Port

STANDARD SPECIFICATIONS

Part number	Transformer						Choke				Schematic
	Inductance OCL [mH Min]	Inductance Leakage [uH Max]	Interwinding Capacitance [pF Max]	DC Resistance [ohms Max]		Turn Ratio Pri:Sec [±3%]	Inductance OCL [mH Min]	Inductance Leakage [uH Max]	DC Resistance [ohms Max]	Turns [±5%]	
				Pri	Sec						
FAHS5011	30	10	150	4.00	4.00	1CT:1CT	4.70	0.6	1.20	1:1:1	A
FAHS5012	30	30	150	4.00	6	1CT:2CT	4.70	0.6	1.20	1:1:1	A
FAHS5013	30	30	150	4.00	9	1CT:2.5CT	4.70	0.6	1.20	1:1:1	A
FAHS5015	30	30	150	4.00	6	1CT:2CT	4.70	0.6	1.20	1:1:1	B

TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:

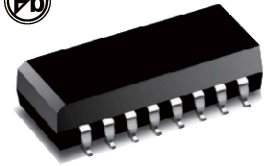
Dimension:mm
Isolation Hi-Pot:1500 VRMS(Pri/Sec)
Soldering methods:Wave,Reflow
Operating Temperature:0°C to 70°C
Storage Temperature:-55°C to 125°C
Note:All specifications subject to change without notice



Recommended Pad Layout



10 BASE-T COUPLING TRANSFORMER FAHS16005-16025



FEATURES:

Compliant with IEE 802.3u and ANSI X.3.263
Cable interface for isolation and low common mode emissions
Meet FCC Class B Approval
SMT Pick & Place Available

OPTIONS:

Bulk upon request
Custom Design Available
Thru Hole Available

COMMON APPLICATIONS:

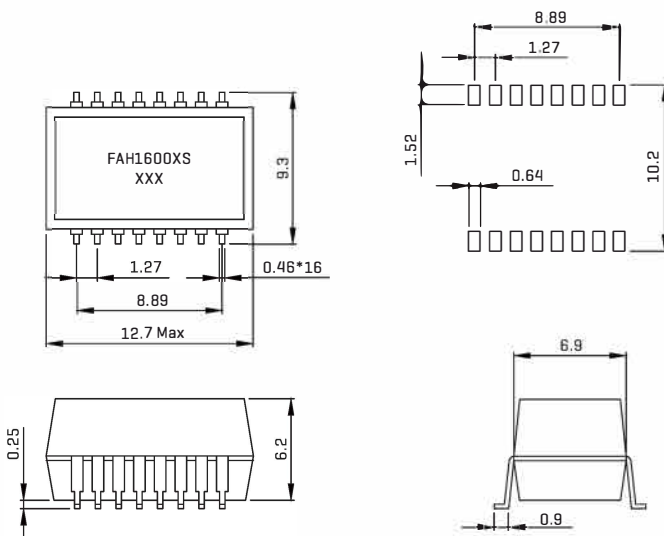
Cable interface for isolation and low common mode emissions
Designed for reflow soldering at temperature up to 234°C non-RoHS, 260°C RoHS

ELECTRICAL SPECIFICATION @ 25°C - Operating Temperature 0°C to 70°C

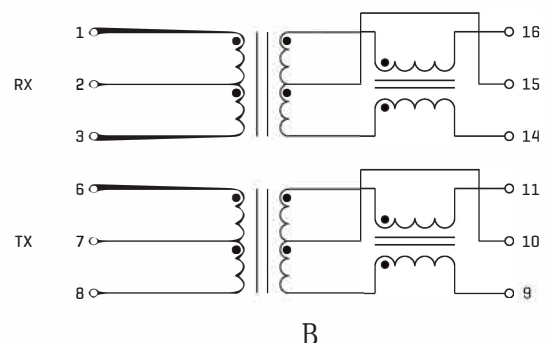
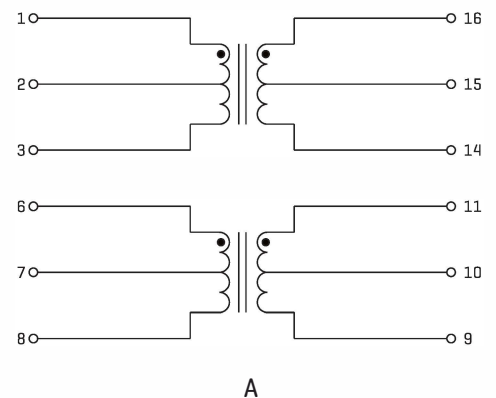
Part number	Turns Ratio [±5%]		Primary Inductance [uH]	Primary Capacitance [uH]	Leakage Inductance [uH]	DCR PRI [ohms Max]	Primary Pins	HI-PDT Vrms	Fig
	Receive [1-3:16-14]	Transmit [6-8:11-9]							
FAHS16005S	1CT:1CT	1CT:2.5CT	200/35min	15	0.4	0.5	6-881-3	2000	B
FAHS16020S	1CT:1CT	1CT:2.0CT	140Typ	15	0.4	0.3	6-881-3	2000	A
FAHS16021S	1CT:1CT	1CT:2.0CT	140Typ	15	0.4	0.3	6-881-3	2000	B
FAHS16022S	2CT:1CT	2CT:1.0CT	150min	10	0.4	0.35	6-881-3	2000	A
FAHS16023S	2CT:1CT	2CT:1.0CT	150min	10	0.4	0.35	6-881-3	2000	B
FAHS16024S	1CT:1CT	1CT:2.0CT	140/25Typ	15	0.4	0.3	6-881-3	2000	A
FAHS16025S	1CT:1CT	1CT:2.0CT	140/25Typ	15	0.4	0.3	6-881-3	2000	B

TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:

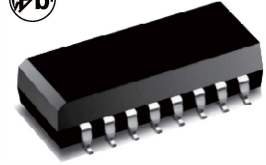
Dimension:mm
Isolation Hi-Pot:1500 VRMS[Pri/Sec]
Soldering methods:Wave,Reflow
Operating Temperature:0°C to 70°C
Storage Temperature:-55°C to 125°C
Note:All specifications subject to change without notice



Unless otherwise specified all tolerances are ±0.25



B



1000 BASE-T COUPLING TRANSFORMER FANS16008S,16009S

FEATURES :

Compliant with IEE 802.3u and ANSI X.3.263
Standards including 350uH OCL with 8mA bias
Cable interface for isolation and low common mode emissions
Meet FCC Class B Approval
SMT Pick & Place Available

OPTIONS:

Bulk upon request
Custom Design Available
Thru Hole Available

COMMON APPLICATIONS:

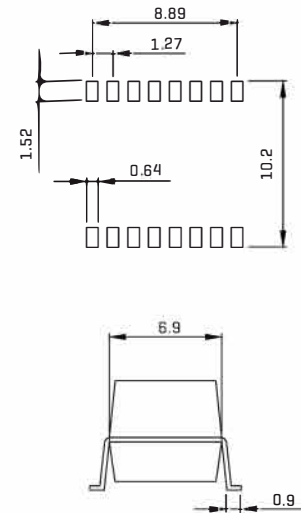
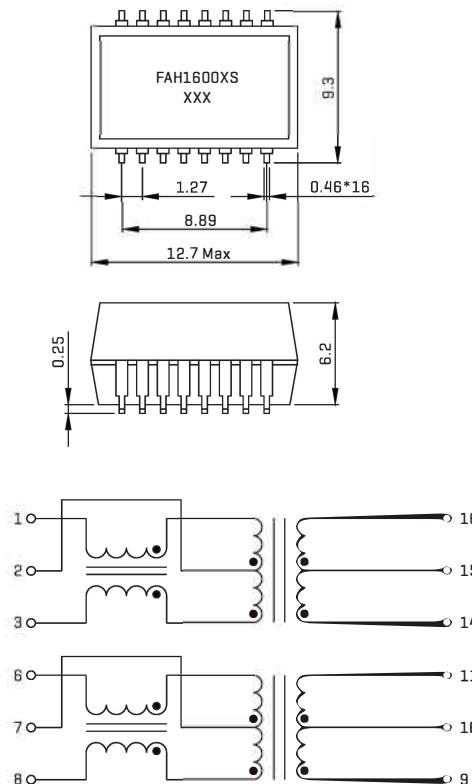
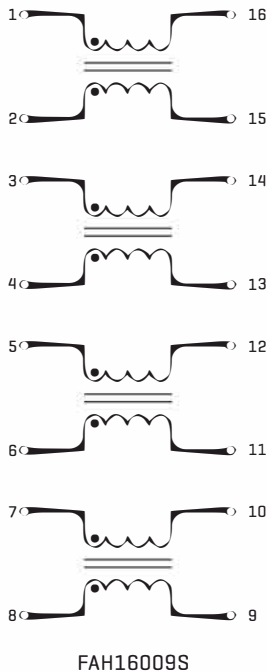
Cable interface for isolation and low common mode emissions
Designed to fit with Intel, Panasonic, Asus, Semiconductor
Designed for reflow soldering at temperature up to 234°C non-RoHS, 260°C RoHS

ELECTRICAL SPECIFICATION@25°C -Operating Temperature 0°C to 70°C

Part number	Turns Ratio	Insertion Loss [dB Max] 100K-100MHz	Return Loss [dB Min @ 100 ohms]				Crosstalk [dB Type]			Differential to common mode rejection [dB Min]			Isolation Volage [Vrms]
	Rx:Tx		0.5-30 MHz	40 MHz	50 MHz	60-80 MHz	30 MHz	60 MHz	100 MHz	30 MHz	50 MHz	100 MHz	
	±2% Max												
FAHS16008S	1CT:1CT	-0.1	-18	-16	-14	-12	-35	-35	-35	-40	-40	-40	1500CT
FAHS16009S	1:1:1:1:1:1:1:1	-0.1	-20	-20	-18	-14	-50	-40	-40	-42	-36	-33	1500CT

TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:

Dimension:mm
Isolation Hi-Pot:1500 VRMS(Pri/Sec)
Soldering methods:Wave,Reflow
Operating Temperature:0°C to 70°C
Storage Temperature:-55°C to 125°C
Note:All specifications subject to change without notice

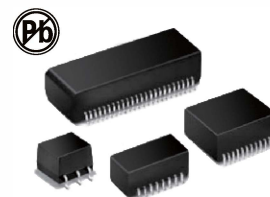


Unless otherwise specified all tolerances are ±0.25

FAH16008S

10/100 BASE-T COUPLING TRANSFORMER

FALAN-100 ,125 SERIES



FEATURES:

IEE 802.3u and ANSI X.3.263
SMT Pick & Place Available
Miniature size

OPTIONS:

Tape & Reel is Standard
Custom Design Available

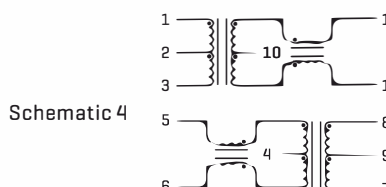
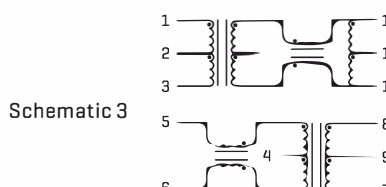
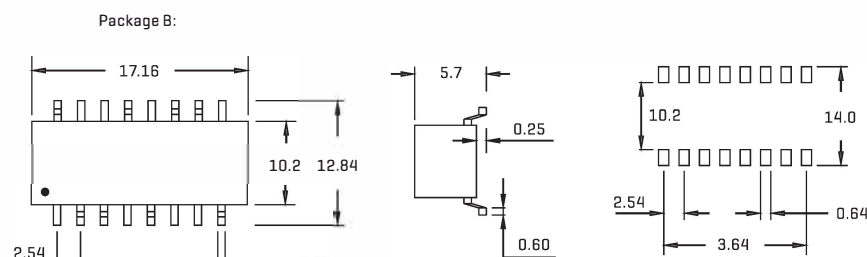
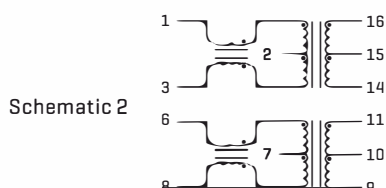
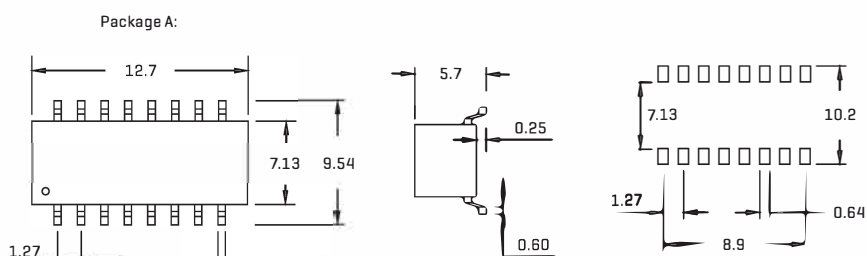
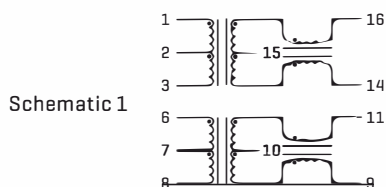
COMMON APPLICATIONS:

10/100 Base-T Single Port

STANDARD SPECIFICATIONS

Part number	Turns Ratio±2%		Insertion Loss 1-100MHz [dB Max]	Cross Talk 0.1-100MHz [dB Max]	CMR 0.1-100MHz [dB Max]	Return Loss[dB Max]			SCH	Package
	TX	RX				30MHz	50MHz	80MHz		
FALAN-101	1CT:1CT	1CT:1CT	1:1	35	30	18	15	13	1	A
FALAN-102	1CT:1CT	1CT:1CT	1:1	35	30	18	15	13	2	A
FALAN-103	2CT:1CT	1CT:1CT	1:1	35	30	18	13	13	1	A
FALAN-104	1.41CT:1CT	1CT:1CT	1:1	35	30	18	13	13	1	A
FALAN-121	1CT:1CT	1CT:1CT	1:1	38	42	18	13	12	3	B
FALAN-122	1CT:1CT	1CT:1CT	1:1	38	38	16	13	12	4	B
FALAN-123	2CT:1CT?	1CT:1CT	1:1	38	35	16	13	12	4	B
FALAN-124	1CT:1.41CT	1CT:1CT	1:1	38	42	16	13	12	3	B
FALAN-125	1CT:1.41CT	1CT:1CT	1:1	38	38	16	13	12	4	B

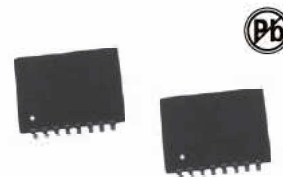
Primary DCL TX & RX:350uH Min @ I_{dc}=8mA
Hi-Pot:1500VRMS



TECHNICAL INFORMATION:

Dimension:mm
Soldering methods:Wave,Reflow
Operating Temperature:0°C to 70°C
Storage Temperature:-55°C to 125°C
Note:All specifications subject to change without notice

HOME PHONE NETWORKING MAGNETIC MODULES FAHPN-101



FEATURES :

Bandpass filter
Isolation and EMI Filtering

OPTIONS:

Tape & Reel is Standard
Bulk upon request

COMMON APPLICATIONS:

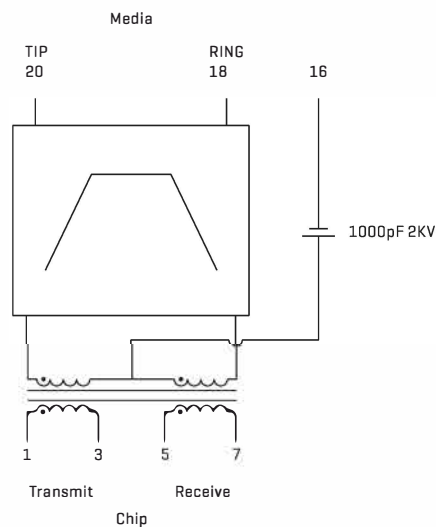
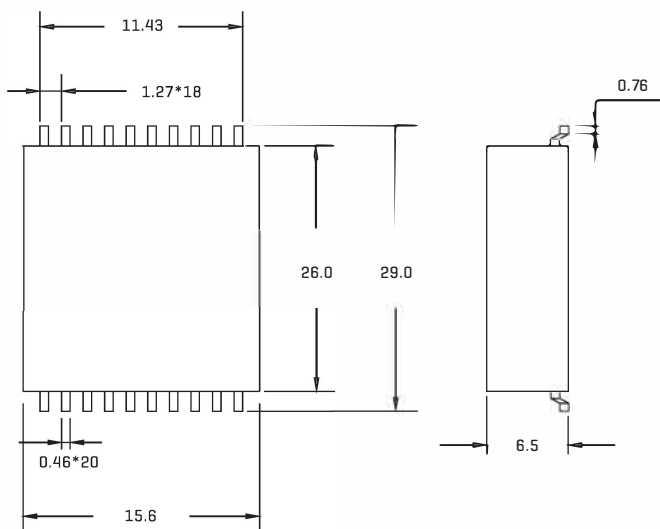
Home Phone Networking

STANDARD SPECIFICATIONS

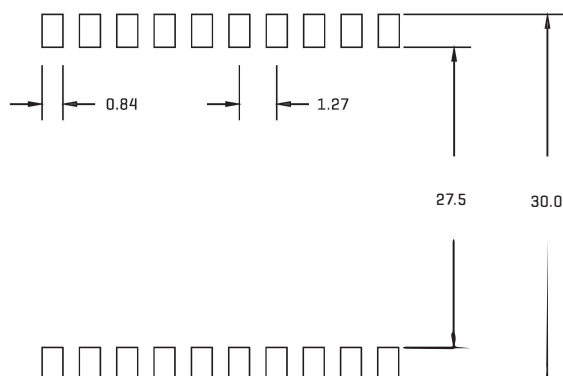
Part number	Cut-off Frequency		Insertion Loss 4.25MHz-9.75MHz		Return Loss MHz	Allenuation		CMR	Turns Ratio		
	Lower Band	Higher Band	[dB] Min	[dB] Max	[dB Min] 6.0MHz-9.0MHz Max	[dB] 1.1MHz-22MHz	[dB] 54MHz	[dB Min] 200KHz-22MHz	20-18 :1-3	20-18 :5-7	
FAHPN-101	3.5 MHz	11.5 MHz	1.0	2.2	12	60	35	40	40	1:0667	1:2

Hi-Pot:1500VRMS1-3 TO 18-20,5-7 TO 18-12

SCHEMATIC:



Recommended Pad Layout



TECHNICAL INFORMATION:

Dimmension:mm
 Soldering methods:Wave,Reflow
 Operating Temperature:0°C to 70°C
 Storage Temperature:-55°C to 125°C
 Note:All specifications subject to change without notice

10/100BASE-TX MAGNETICS MODULES FAHS1164



FEATURES:

Compliant with IEE 802.3u and ANSI X.3.263 Standards including 350uH DCL with 8mA bias
Cable interface for isolation and low common mode emissions

OPTIONS:

Tape & Reel is Standard
Bulk upon request

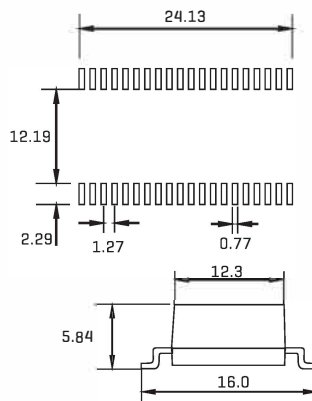
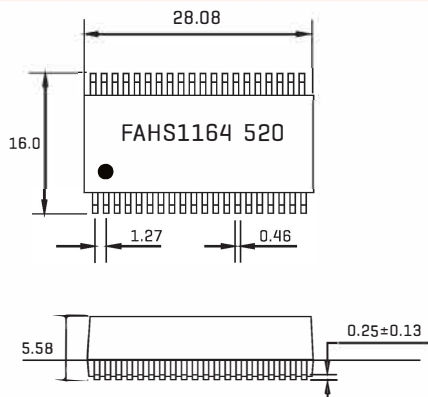
COMMON APPLICATIONS:

Symmrtria TX and RX channels for auto MDI/MDIX capability.
Approved for use with Broadcom BCM5226/BCM5228 and Level One LXT9784
Multiport Repeater & Ethernet Switching HUB

ELECTRICAL SPECIFICATION@25°C -Operating Temperature 0°C to 70°C

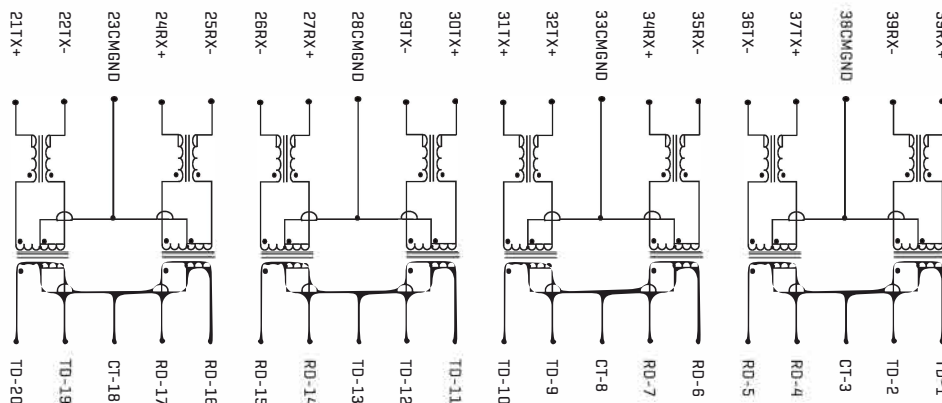
Part number	Turns Ratio [±2%]	Insertion Loss [Max]	Return Loss [dB Min]					Crosstalk [dB Min]				Differential to Common Mode Rejection[dB Min]		Hi-pot [VRms Min]
			0.1-100MHz	2-30MHz	40MHz	50MHz	60-80MHz	1KHz	30MHz	60MHz	100MHz	1-60MHz	60-200MHz	
FAHS1164	1CT:1CT	-1.0	-18	-14.4	-13.1	-12	-55	-45	-40	-33	-37	-25	1500	

TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:



DIMENSIONS:mm

Unless otherwise specified all tolerances are 60.25



OCL:350uH Min 8mA DC bias[Line side]
Hi-Pot:1500 VRMS Min
Soldering methods:Wave,Reflow
Operating Temperature:0°C to 70°C
Storage Temperature:-25°C to 85°C

Note:All specifications subject to change without notice.