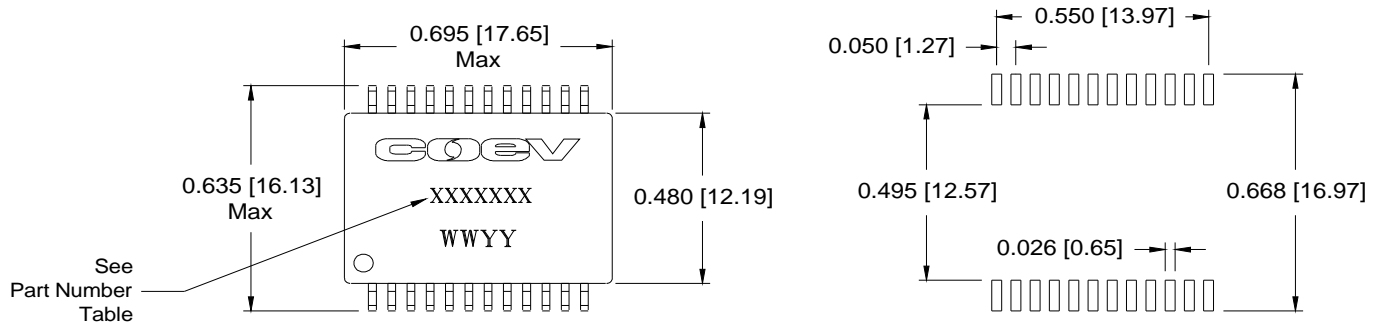
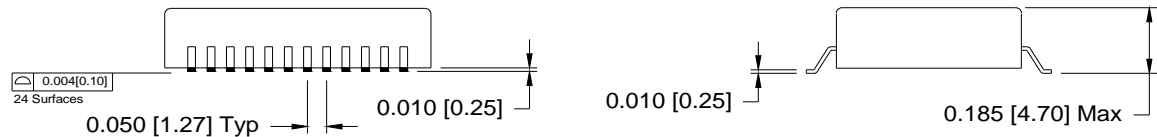


Standard Features

- Single channel interface for 10/100BASE-T applications
- Compliant with IEEE 802.3 and ANSI X3.263 Standards
- Surface mount package designed for reflow process (240°C peak)
- Tape & Reel Packaging standard
- Package molded using UL94-V0 rated material



Suggested Pad Layout



All dimensions are in inches [millimeters].
All dimensions are ± 0.005 [0.127] unless otherwise noted.

10/100BASE-T Electrical Characteristics @ 25°C

- Inductance: 350uH Min with 8mADC Bias, 0°C to +70°C
(each transformer measured on the cable side)
- Dielectric Isolation: 1500Vrms Minimum

Frequency	Insertion Loss (dB Max)	Return Loss (dB Min) (Note 1)	Crosstalk Attenuation (dB Min)	Transmit CMRR (dB Min)	Receive CMRR (dB Min)
0.1MHz - 1MHz	1.0	18.0	43.0	42.0	42.0
1.1MHz - 15MHz	0.5	18.0	43.0	42.0	42.0
15.1MHz - 30MHz	0.8	18.0	43.0	42.0	42.0
30.1MHz - 60MHz	0.8	12.0 @ 60MHz	43.0	42.0	42.0
60.1MHz - 80MHz	1.2	12.0 @ 80MHz	38.0	38.0	38.0
80.1MHz - 100MHz	1.4	10.0 @ 100MHz	38.0	35.0	35.0

Notes:

- 1) Minimum return loss is as follows with a circuit impedance of 100 Ohms +/- 15%:
- 0.1Mhz - 29.9MHz = 18dB
 - 30MHz - 60MHz = 18 - 20Log₁₀(f/30) dB where f is in MHz
 - 60Mhz - 80MHz = 12dB
 - 80.1Mhz - 100MHz = 10dB

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Product Description	10/100BASE-T Magnetics Single Port, Surface, Ethernet Module
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Part Number Table

Part Number	Transmit (TX) Turns Ratio (Chip:Cable)	Receive (RX) Turns Ratio (Chip:Cable)	Schematic	AutoMDIX Compatible
HB906-LP	1:1	1:1	A	Yes
HB906-1-LP	1:1	1:1	A-1	Yes
HB906-2-LP	1:1	1:1	A-2	Yes
HB906-4-LP	1:1	1:1	A-4	Yes
HB907-LP	2:1	1:1	B	No
HB907-1-LP	2:1	1:1	B-1	No
HB907-2-LP	2:1	1:1	B-2	No
HB907-4-LP	2:1	1:1	B-4	No
HB908-LP	1:1	1:1	C	No
HB908-1-LP	1:1	1:1	C-1	No
HB908-2-LP	1:1	1:1	C-2	No
HB908-4-LP	1:1	1:1	C-4	No
HB914-LP	1:1	1:1	D	No
HB914-1-LP	1:1	1:1	D-1	No
HB914-2-LP	1:1	1:1	D-2	No
HB914-4-LP	1:1	1:1	D-4	No
HB915-LP	1:1	1:1	E	Yes
HB915-1-LP	1:1	1:1	E-1	Yes
HB915-2-LP	1:1	1:1	E-2	Yes
HB915-4-LP	1:1	1:1	E-4	Yes
HB916-LP	1:1.41	1:1	B	No
HB916-1-LP	1:1.41	1:1	B-1	No
HB916-2-LP	1:1.41	1:1	B-2	No
HB916-4-LP	1:1.41	1:1	B-4	No
HB917-LP	1:1	1:1	B	No
HB917-1-LP	1:1	1:1	B-1	No
HB917-2-LP	1:1	1:1	B-2	No
HB917-4-LP	1:1	1:1	B-4	No

Continued on Customer Data Sheet (3)

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Product Description	10/100BASE-T Magnetics Single Port, Surface, Ethernet Module
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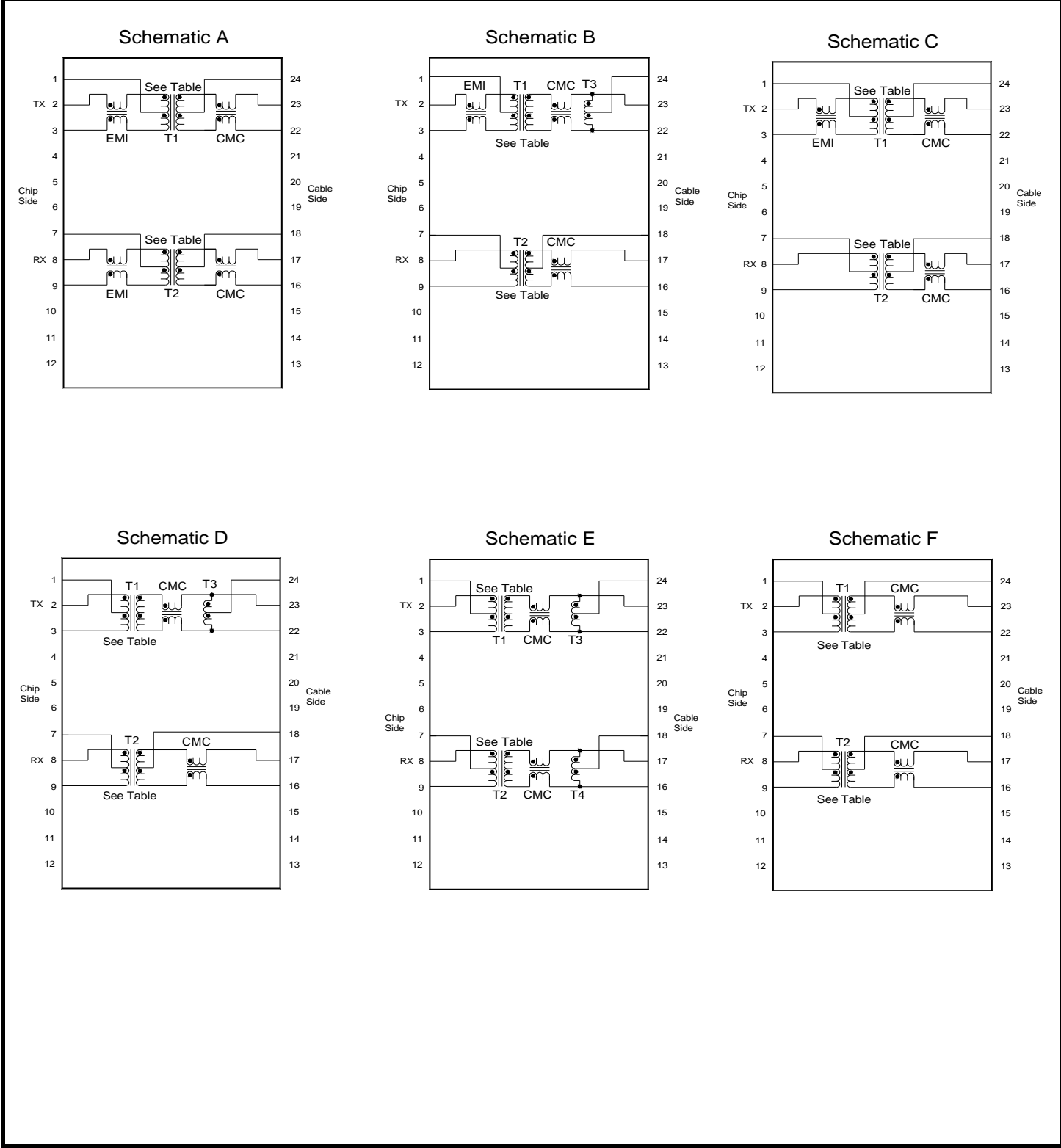
Part Number Table

Part Number	Transmit (TX) Turns Ratio (Chip:Cable)	Receive (RX) Turns Ratio (Chip:Cable)	Schematic	AutoMDIX Compatible
HB918-LP	2:1	1:1	D	No
HB918-1-LP	2:1	1:1	D-1	No
HB918-2-LP	2:1	1:1	D-2	No
HB918-4-LP	2:1	1:1	D-4	No
HB921-LP	2:1	1:1	F	No
HB921-1-LP	2:1	1:1	F-1	No
HB921-2-LP	2:1	1:1	F-2	No
HB921-4-LP	2:1	1:1	F-4	No
HB926-LP	1:1	1:1	F	Yes
HB926-1-LP	1:1	1:1	F-1	Yes
HB926-2-LP	1:1	1:1	F-2	Yes
HB926-4-LP	1:1	1:1	F-4	Yes
HB933-LP	1.25:1	1:1	F	No
HB933-1-LP	1.25:1	1:1	F-1	No
HB933-2-LP	1.25:1	1:1	F-2	No
HB933-4-LP	1.25:1	1:1	F-4	No
HB937-LP	1.25:1	1:1	D	No
HB937-1-LP	1.25:1	1:1	D-1	No
HB937-2-LP	1.25:1	1:1	D-2	No
HB937-4-LP	1.25:1	1:1	D-4	No
HB938-LP	1.41:1	1:1	D	No
HB938-1-LP	1.41:1	1:1	D-1	No
HB938-2-LP	1.41:1	1:1	D-2	No
HB938-4-LP	1.41:1	1:1	D-4	No
HB939-LP	1.41:1	1:1	F	No
HB939-1-LP	1.41:1	1:1	F-1	No
HB939-2-LP	1.41:1	1:1	F-2	No
HB939-4-LP	1.41:1	1:1	F-4	No
HB981-LP	1.41:1	1.41:1	F	Yes
HB981-1-LP	1.41:1	1.41:1	F-1	Yes
HB981-2-LP	1.41:1	1.41:1	F-2	No
HB981-4-LP	1.41:1	1.41:1	F-4	No
MGH9L-00001	1:1	1:1	B-3	No
MGH9L-00002	1:1	1:1	A-3	Yes

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Product Description	10/100BASE-T Magnetics Single Port, Surface, Ethernet Module
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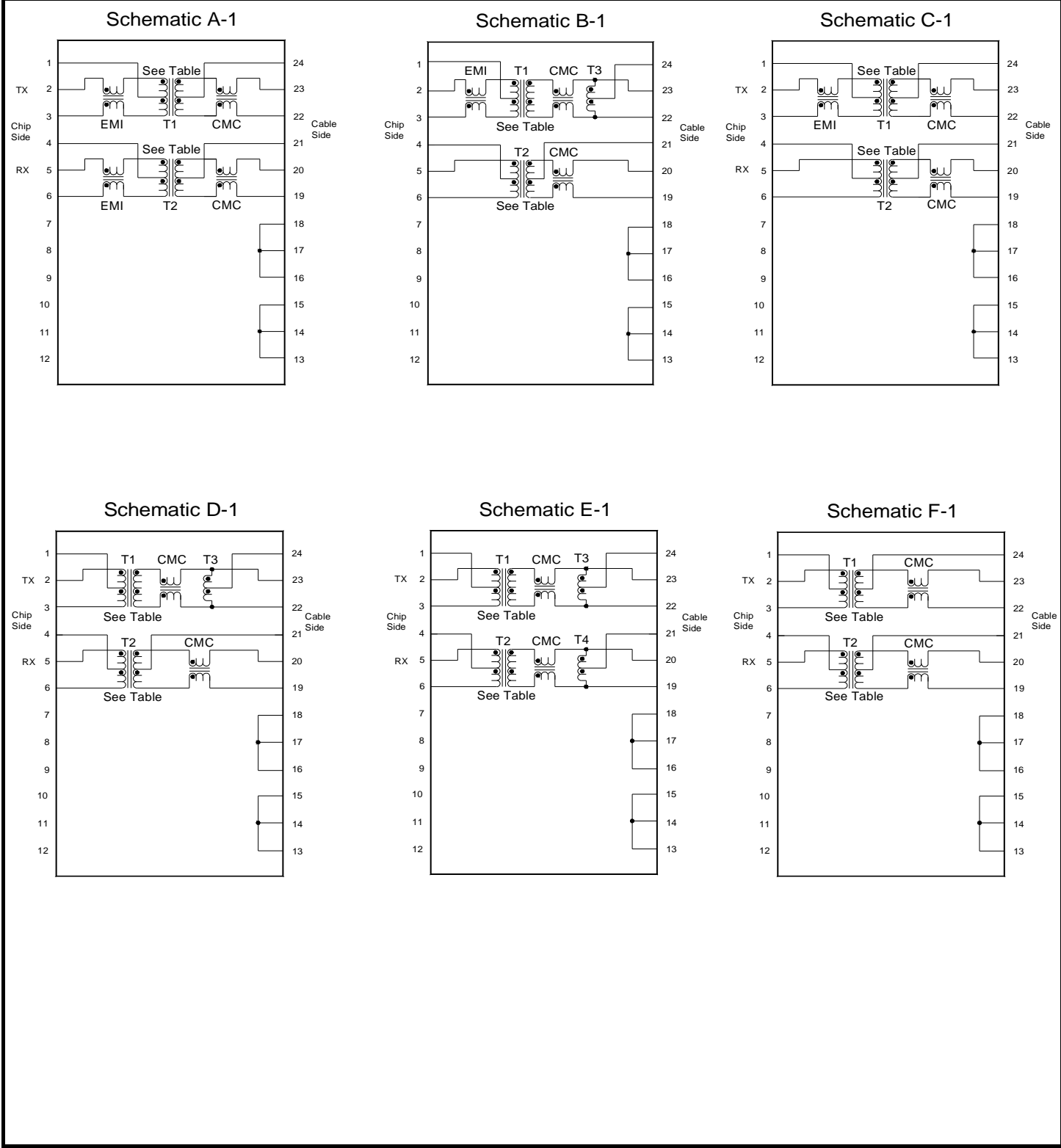


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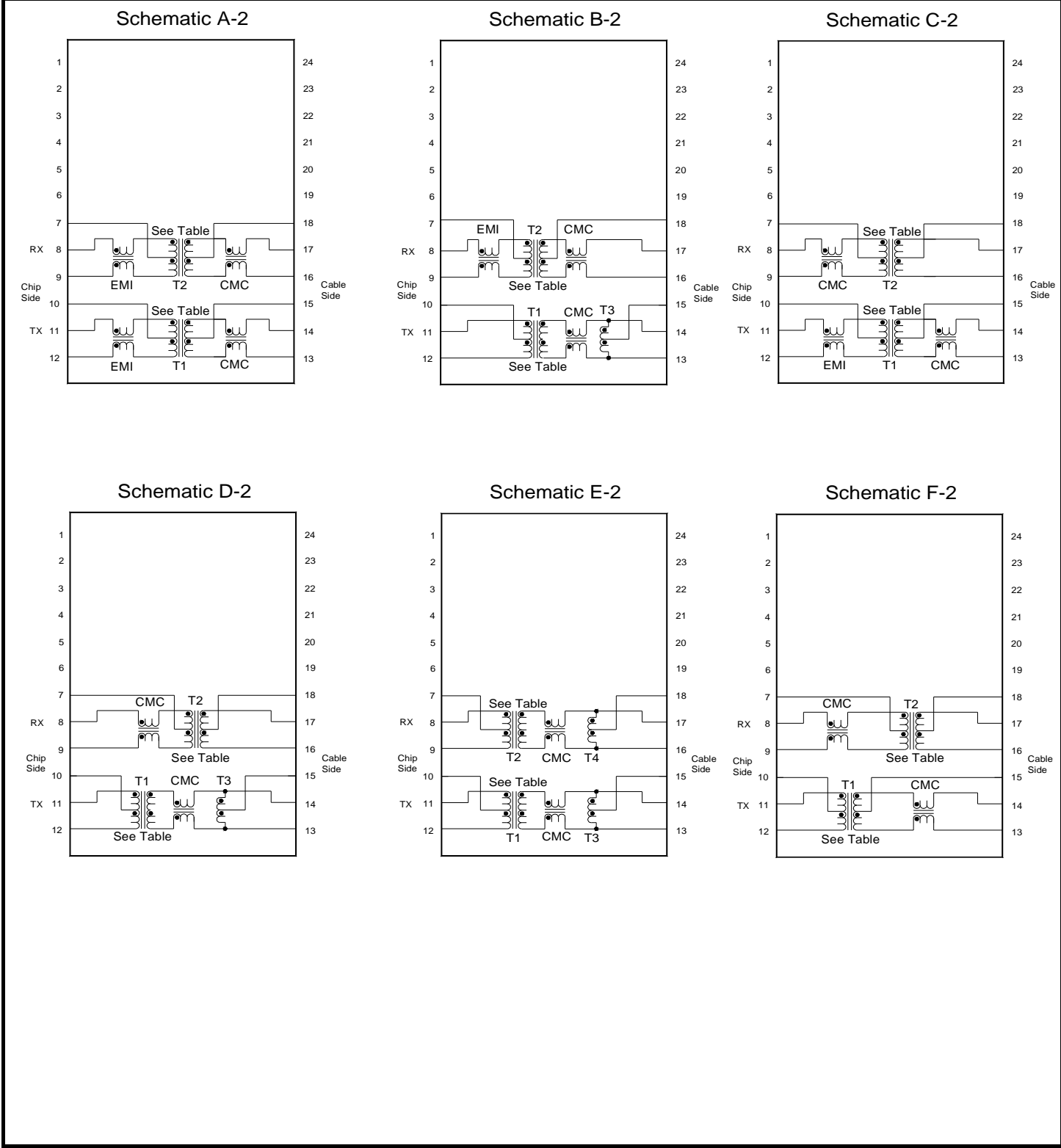
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Product Description	10/100BASE-T Magnetics Single Port, Surface, Ethernet Module
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Product Description	10/100BASE-T Magnetics Single Port, Surface, Ethernet Module
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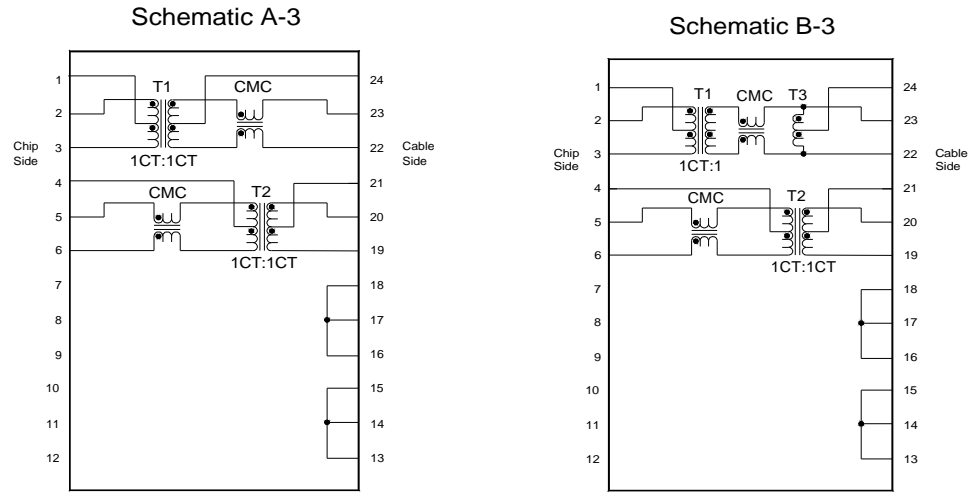


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MGH9L (HB9xx-LP)
Series

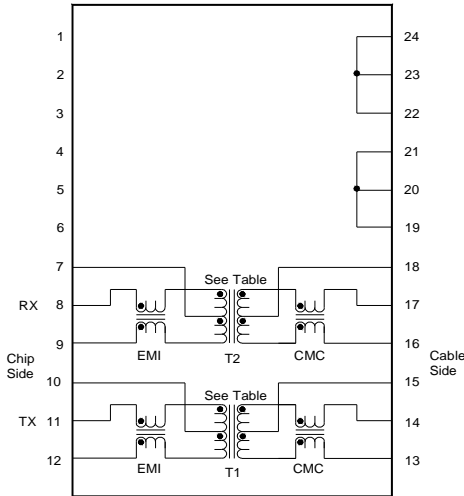
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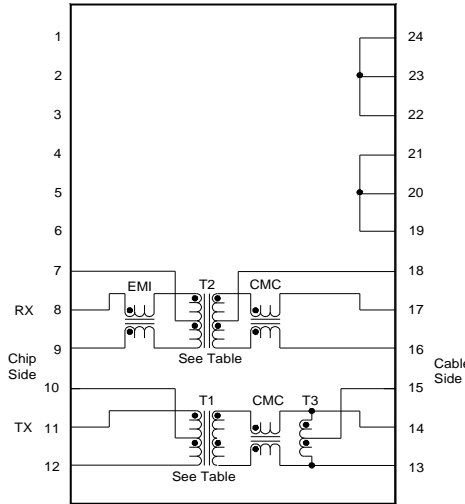
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Description

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Single Port, Surface, Ethernet Module

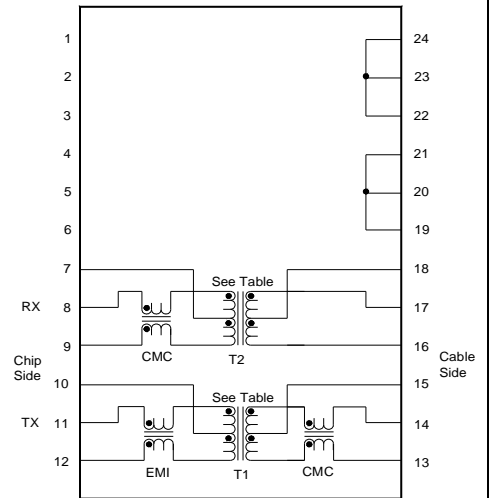
Schematic A-4



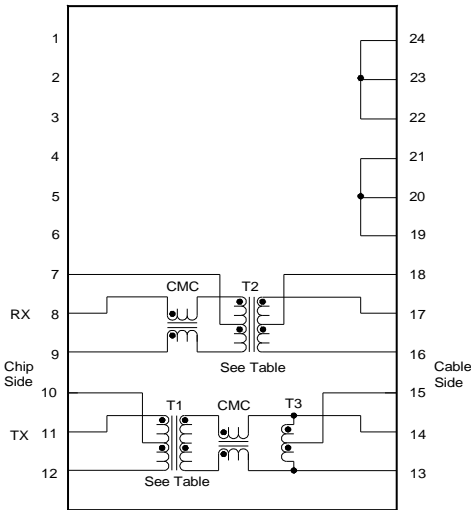
Schematic B-4



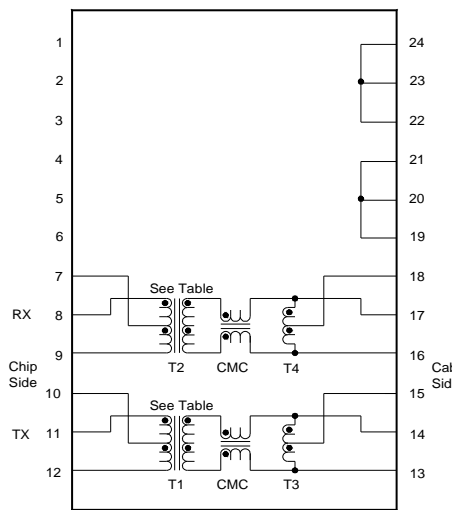
Schematic C-4



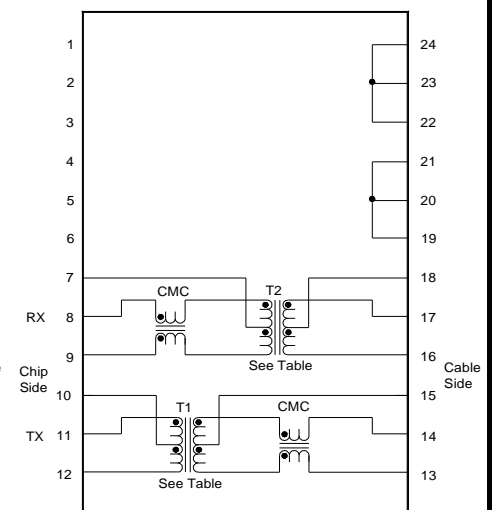
Schematic D-4



Schematic E-4



Schematic F-4



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