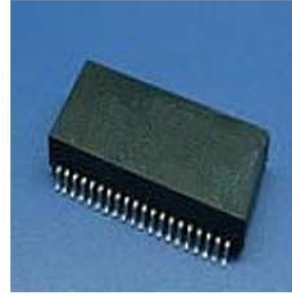


**FEATURES**

- Compliant with IEEE 802.3u and ANSI X3.236-1995 standards including 350  $\mu$ H OCL with 8 mA bias from 0°C to 70°C.
- Modules designed to support two RJ-45 connectors.
- IC-grade transfer molded package withstands 235°C peak temperature profile.
- Recognized by UL 1950.

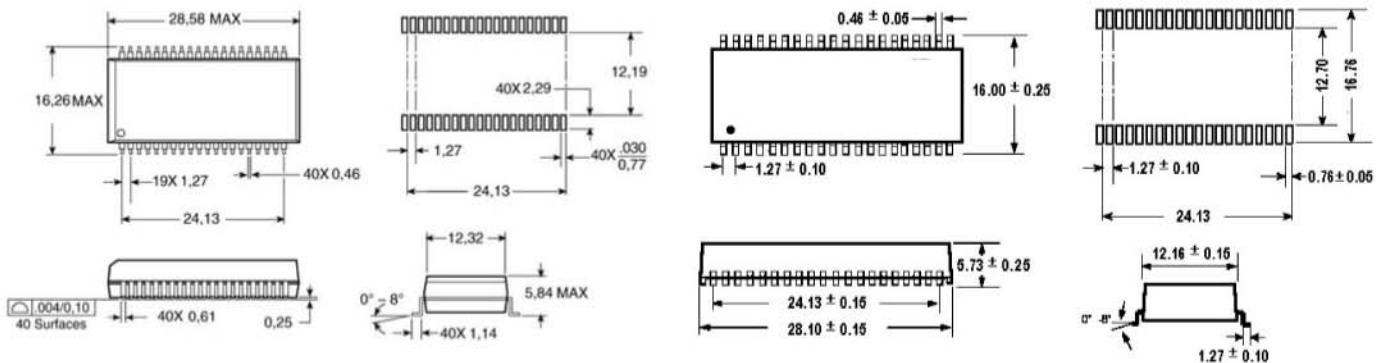


**ELECTRICAL SPECIFICATIONS @25°C-Operating temperature -40°C TO +85°C**

Part Number	Insertion Loss (dB TYP)	Return Loss (dB TYP)				Crosstalk (dB TYP)				Common to Common Rejection Ratio 0.1-60MHz (dB TYP)		Differential to Common Mode Rejection(dB TYP)	
		0.1-100MHz	2-30MHz	40MHz	50MHz	60-80MHz	1MHz	30MHz	60MHz	100MHz	Transmit	Receive	1-60MHz
ST-81F01	-0.5	-21	-17	-14.5	-12	-65	-50	-40	-30	-30	-30	-40	-30
ST-81F02	-0.5	-21	-17	-14.5	-12	-65	-55	-45	-35	-30	-30	-40	-30
ST-81F03L	-0.5	-21	-17	-14.5	-12	-65	-55	-45	-35	-30	-30	-40	-30
ST-81F04	-0.5	-21	-17	-14.5	-12	-65	-55	-45	-35	-30	-30	-40	-30
ST-81F05	-0.5	-21	-17	-14.5	-12	-65	-55	-45	-35	-45	-30	-53	-40
ST-81F06	-0.5	-21	-17	-14.5	-12	-65	-50	-40	-30	-30	-30	-40	-30
ST-81F07	-0.5	-21	-17	-14.5	-12	-65	-50	-40	-30	-30	-30	-40	-30
ST-81F08	-0.5	-21	-17	-14.5	-12	-65	-55	-45	-35	-40	-30	-45	-35
ST-81F09	-0.5	-21	-17	-14.5	-12	-65	-55	-45	-35	-40	-30	-45	-35
ST-81F10	-0.5	-21	-17	-14.5	-12	-65	-55	-45	-35	-30	-30	-40	-30
ST-81F11	-0.5	-21	-17	-14.5	-12	-65	-50	-40	-30	-30	-30	-40	-30
ST-81F12	-0.5	-21	-17	-14.5	-12	-65	-50	-40	-30	-30	-30	-40	-30
ST-81F13	-0.5	-21	-17	-14.5	-12	-65	-50	-40	-30	-30	-30	-40	-30
ST-81F14	-1.2	-16	-14	-13.0	-12	-50	-45	-40	-35	-40	-30	-37	-33

NOTE: 1. All MODELS MEET INPUT/OUTPUT BREAKDOWN (Hipot) of 1500 Vrms.

**DIMENSIONS**



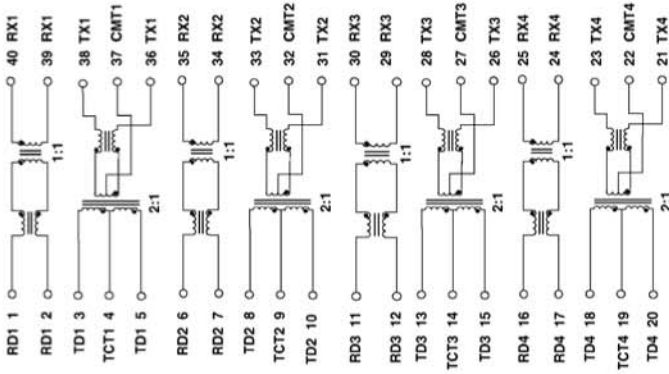
Molding

Bottom Potting

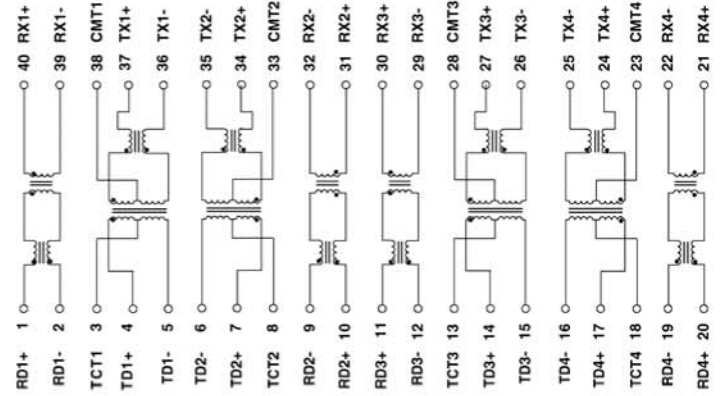
**UNIT: mm Unless otherwise specified, all tolerances are  $\pm 0.25$**

**SCHEMATICS**

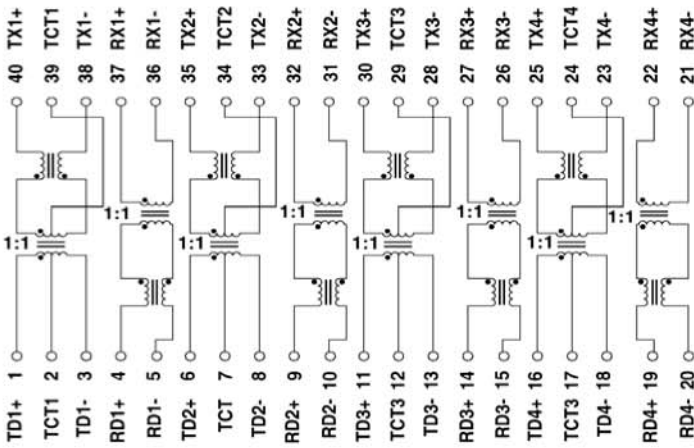
**ST-81F01**



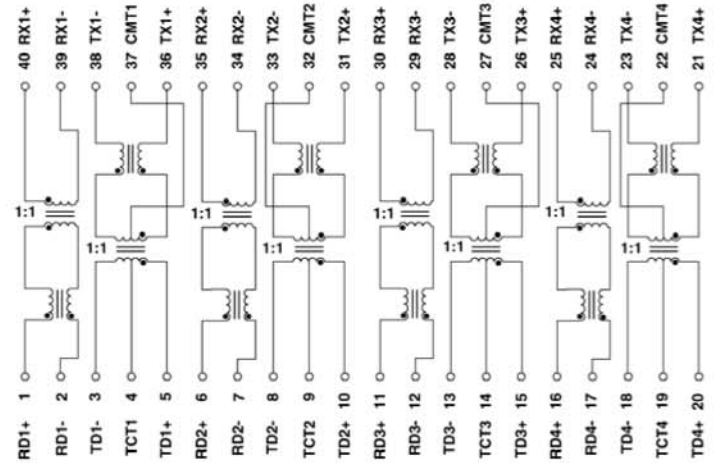
**ST-81F02**



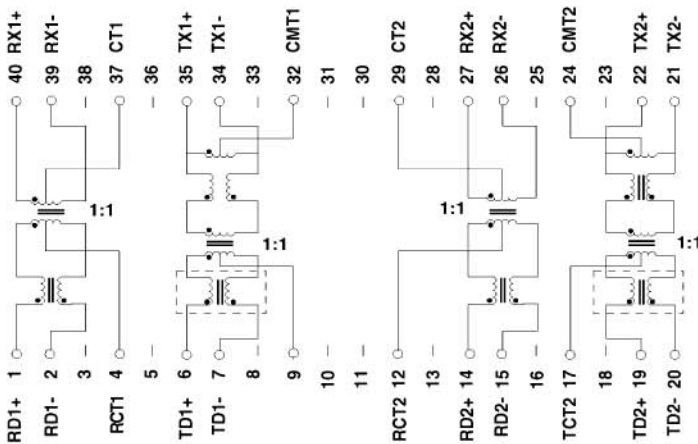
**ST-81F03L**



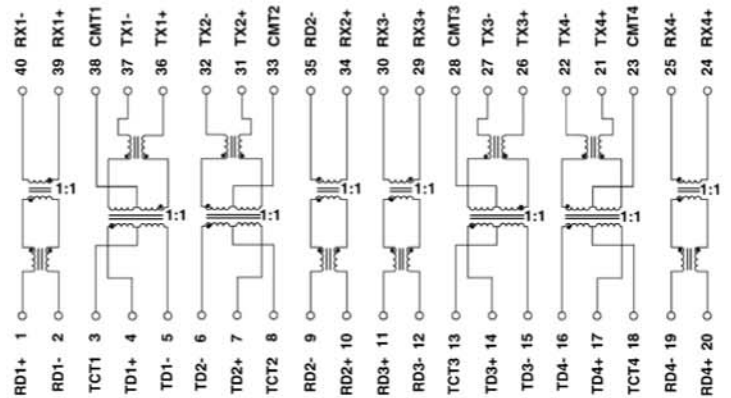
**ST-81F04**



**ST-81F05/ST-81F08**



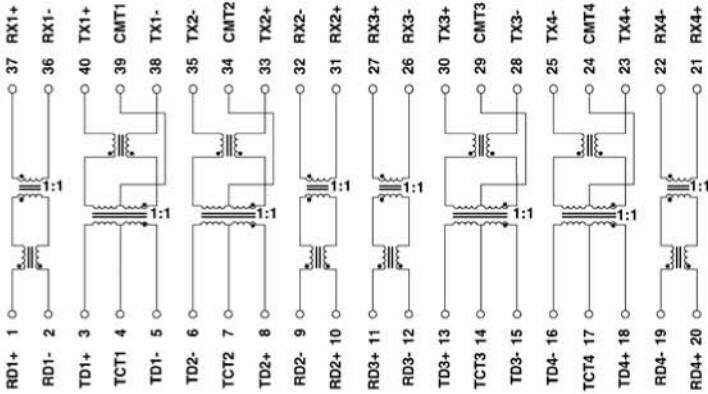
**ST-81F06**



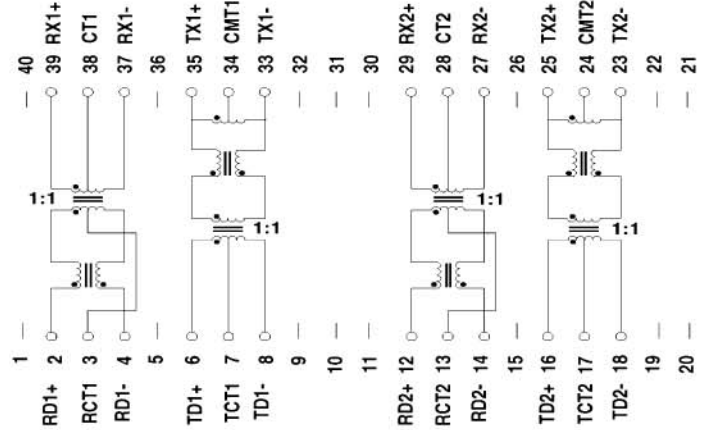
NOTE: 81F-05 has input common mode choke on pins 6-7 and pins 19-20.  
81F-08 does not have the additional choke.

**SCHEMATICS**

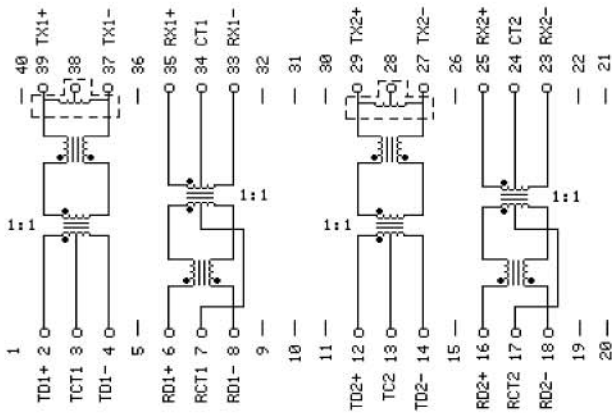
**ST-81F07**



**ST-81F09**

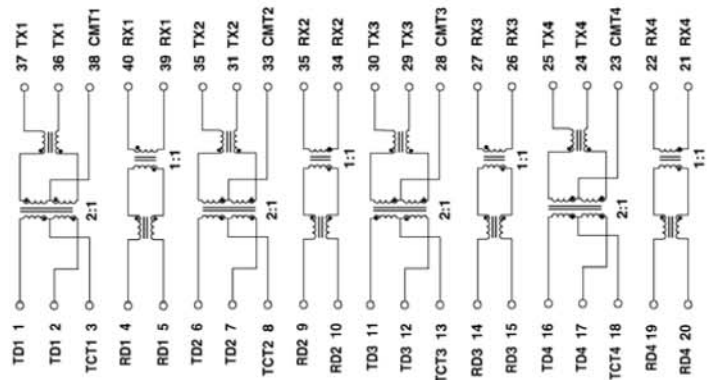


**ST-81F10/ST-81F14**

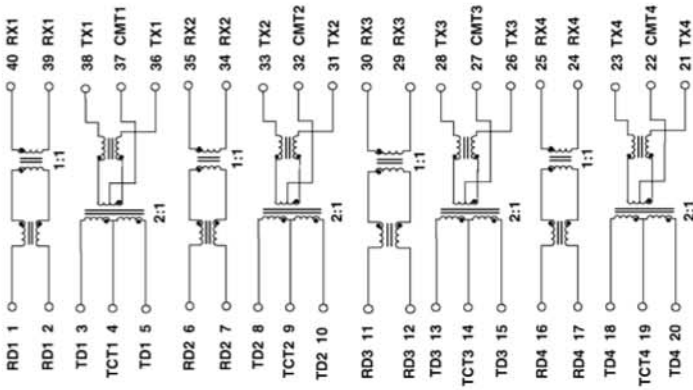


NOTE : 81F-14 INCLUDES THE SHUNT CHOKE.

**ST-81F11**



**ST-81F12**



**ST-81F13**

