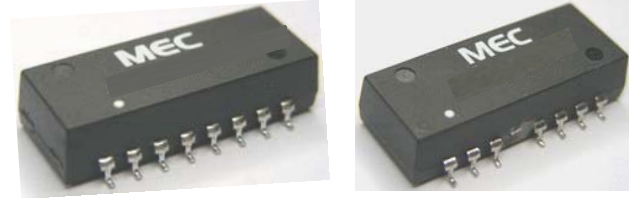


### FEATURES

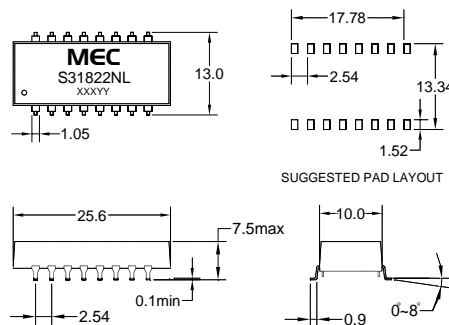
- Designed to meet I EEE 802.3u requirement
- IC grade transfer-molded package withstands 255-265°C IR reflow
- Primary inductance 350uH min. with 8mA DC Bias
- Isolation Voltage : 1500 Vrms



Part Number	Turns Ratio Pri:Sec(± 3%)		Insertion Loss (dB MAX) 0.1~100 MHz	Return Loss (dB TYP)			Crosstalk (dB TYP)			Differential to Common Mode Rejection (dB TYP)			Common to common Rejection Ratio (dB TYP) 0.1~100 MHz
	TX	RX		30 MHz	60 MHz	80 MHz	30 MHz	60 MHz	100 MHz	30 MHz	60 MHz	100 MHz	
S31801N	1:1	1:1	-1.15	-16	-13	-12	-45	-40	-38	-45	-40	-35	-30
S31803N	1:1	1:1	-1.00	-16	-13	-10	-45	-40	-38	-40	-35	-30	-35
S31804N	1:1	1:1	-1.00	-18	-14	-10	-50	-38	-35	-45	-40	-35	-30
S31805N	1:1	1:1	-1.00	-16	-12	-10	-50	-45	-45	-40	-35	-30	-30
S31808N	1.414:1	1:1	-2.00	-18	-12	-11	-45	-38	-34	-40	-35	-30	-30
S31809N	1:1	1:1	-1.10	-18	-12	-11	-45	-40	-35	-40	-35	-30	-30
S31810N	1:1	1:1	-1.15	-16	-13	-10	-45	-40	-38	-42	-40	-35	-30
S31811N	1:1	1:1	-1.15	-16	-13	-10	-45	-40	-38	-42	-40	-35	-30
S31812N	1:1	1:1	-1.15	-16	-13	-10	-45	-40	-38	-42	-40	-35	-30
S31814N	1:1	1:1	-1.00	-20	-17	-12	-50	-40	-40	-45	-40	-35	-30
S31822NL	1:1	1:1	-1.00	-18	-16	-12	-55	-50	-50	-50	-45	-40	-30
TM1818MN	1:1	1:1	-1.15	-16	-13	-10	-45	-40	-38	-42	-40	-35	-30

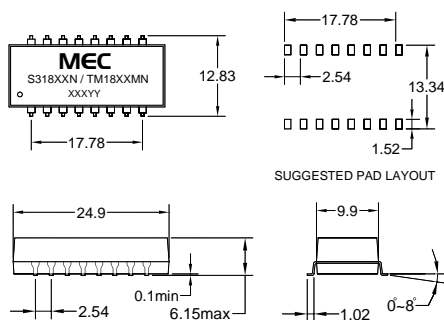
- Electrical Specifications @25°C-Operating Temperature 0°C to 70°C.

### Mechanicals



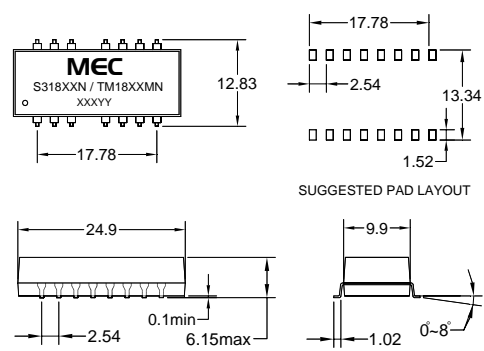
Dimensions:mm Unless otherwise specified , all tolerances ± 0.25

#### S31801N、S31803N、S31808N、S31809N、 S31810N、S31812N、S31814N、TM1818MN



Dimensions:mm Unless otherwise specified , all tolerances ± 0.25

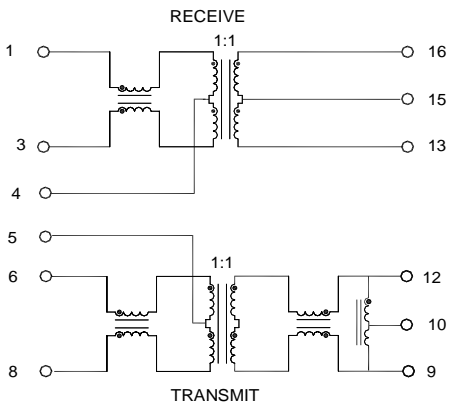
#### S31804N、S31805N、S31811N



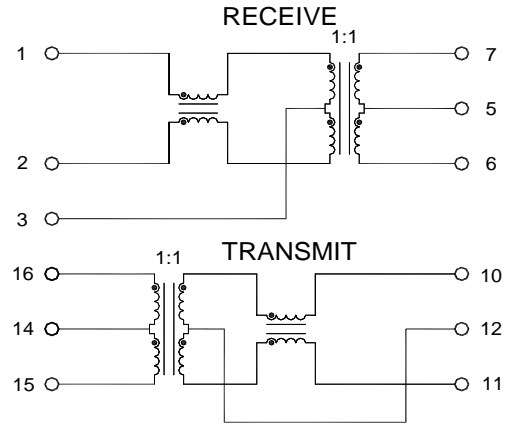
Dimensions:mm Unless otherwise specified , all tolerances ± 0.25

### Schematics

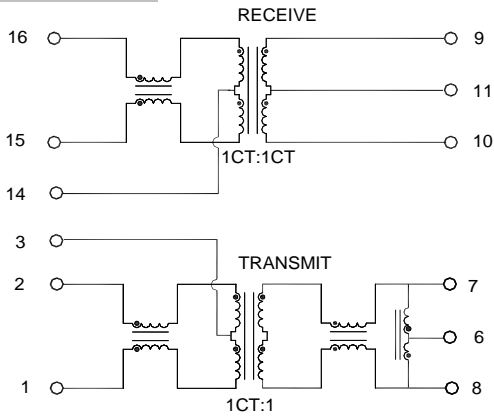
**S31801N**



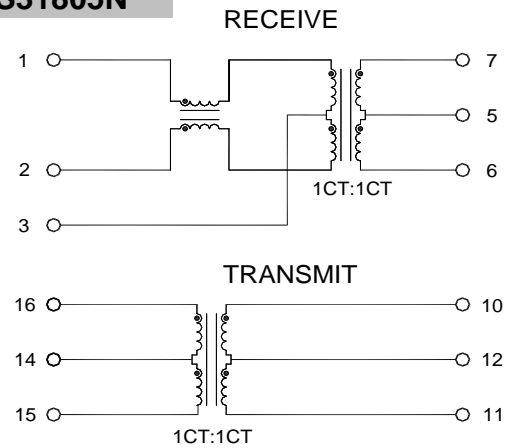
**S31803N**



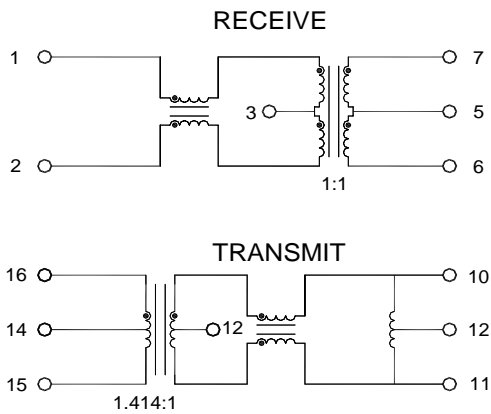
**S31804N**



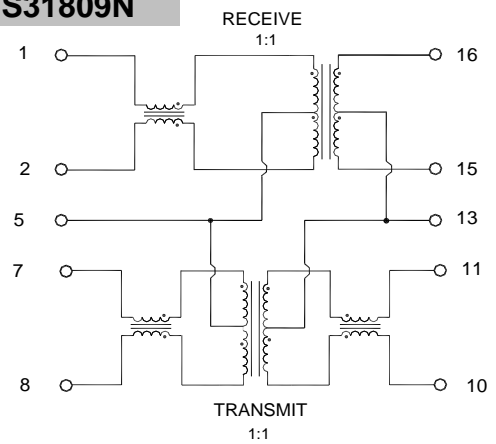
**S31805N**



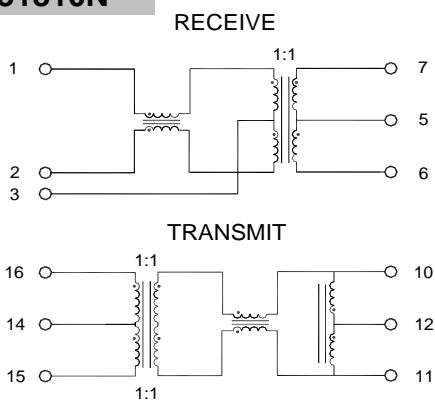
**S318708N**



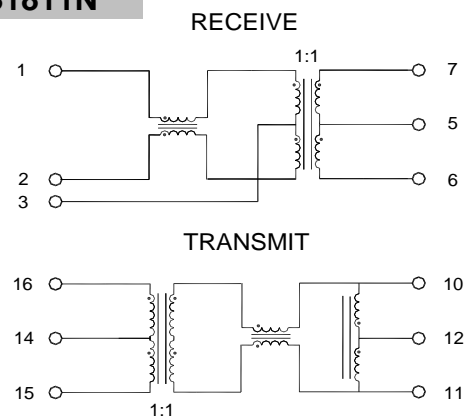
**S31809N**



**S31810N**



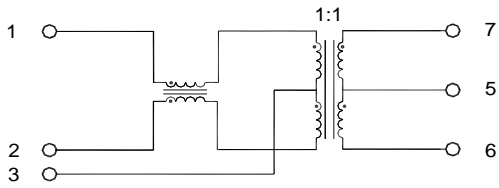
**S31811N**



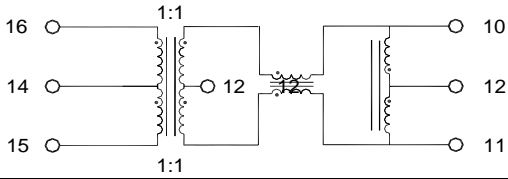
### Schematics

**S31812N**

RECEIVE

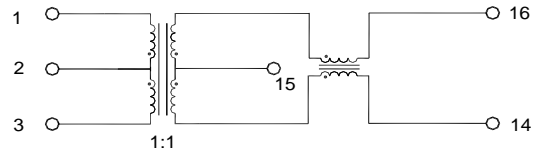


TRANSMIT

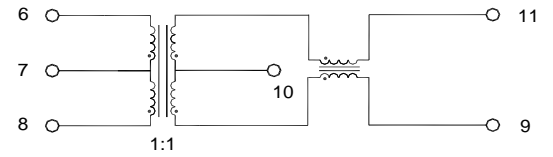


**S31814N**

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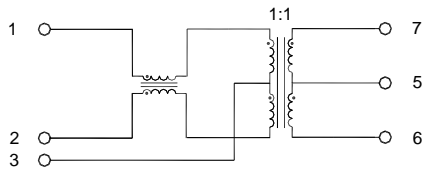


TRANSMIT

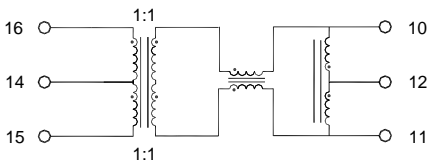


**S31822NL**

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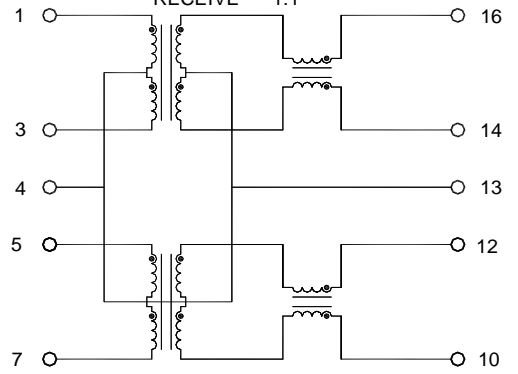


TRANSMIT



**TM1818MN**

RECEIVE 1:1



TRANSMIT 1:1