

## 10/100BASE-T LAN MAGNETICS

### Single Port Transformer Modules

LM00406

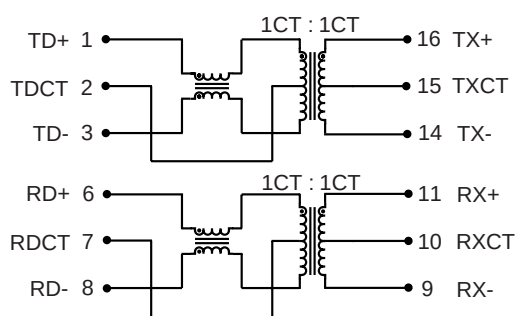
- Meets all IEEE 802.3 standards including 350μH with 8mA bias
- Low profile, surface mount packaging rated to 225° C peak IR reflow temperature
- Small form factor for board layout efficiency
- Operating temperature 0° to 70° C
- Minimum interwinding breakdown voltage of 1500 Vrms

### ELECTRICAL SPECIFICATIONS AT 25° C

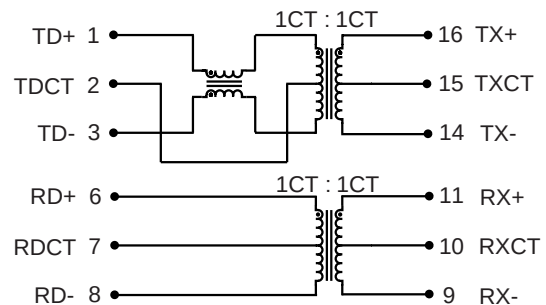
| Part Number  | Turns Ratio  |           | Insertion Loss dB max | Return Loss dB min |                      |                |  | Common to Differential Mode Rejection dB min | Common to Common Mode Rejection dB min | Crosstalk dB min |       |       |        |
|--------------|--------------|-----------|-----------------------|--------------------|----------------------|----------------|--|----------------------------------------------|----------------------------------------|------------------|-------|-------|--------|
|              | TX           | RX        | 100kHz to 100MHz      | 100kHz to 30MHz    | 30MHz to 60MHz       | 60MHz to 80MHz |  | 100kHz to 100MHz                             |                                        | 1MHz             | 30MHz | 60MHz | 100MHz |
| S558-5999-J1 | 1CT : 1CT    | 1CT : 1CT | -1.0                  | -16                | 16 - 20log (f/30MHz) | -10            |  | -40                                          | -30                                    | -65              | -55   | -45   | -35    |
| S558-5999-J2 | 1CT : 1CT    | 1CT : 1CT | -1.0                  | -16                | 16 - 20log (f/30MHz) | -10            |  | -38                                          | -30                                    | -60              | -50   | -40   | -30    |
| S558-5999-K9 | 2CT : 1CT    | 1CT : 1CT | -1.1                  | -16                | 16 - 20log (f/30MHz) | -10            |  | -40                                          | -30                                    | -65              | -55   | -45   | -40    |
| S558-5999-N3 | 1CT : 1.41CT | 1CT : 1CT | -2.0                  | -16                | 16 - 20log (f/30MHz) | -10            |  | -40                                          | -30                                    | -65              | -55   | -45   | -35    |
| S558-5999-T7 | 1CT : 1CT    | 1CT : 1CT | -1.0                  | -18                | 18 - 20log (f/30MHz) | -12            |  | -40                                          | -30                                    | -65              | -55   | -45   | -35    |
| S558-5999-U7 | 1CT : 1CT    | 1CT : 1CT | -1.0                  | -18                | 18 - 20log (f/30MHz) | -12            |  | -40                                          | -30                                    | -65              | -55   | -45   | -35    |

### SCHEMATICS

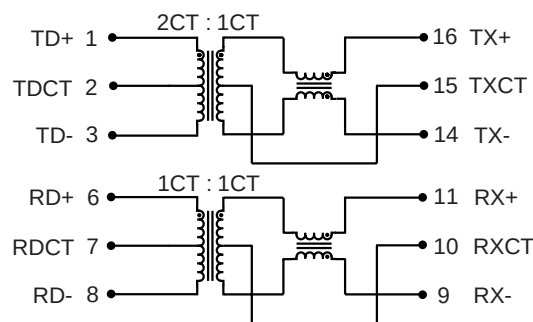
S558-5999-J1



S558-5999-J2



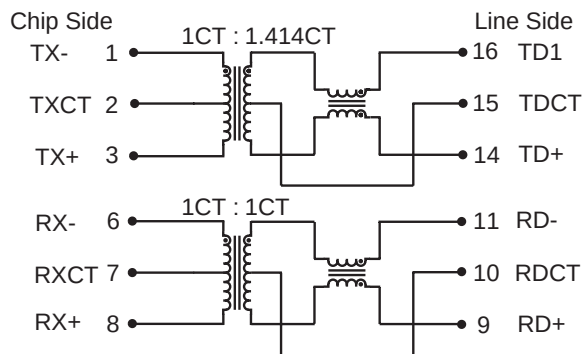
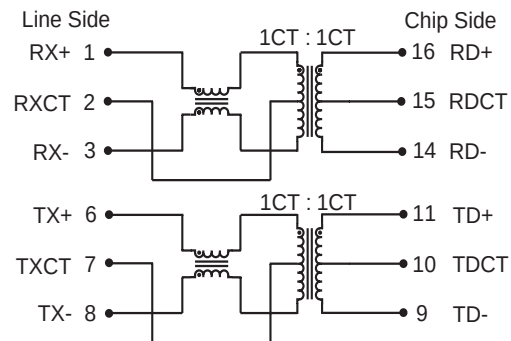
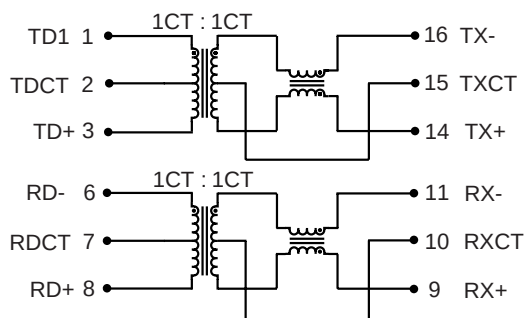
S558-5999-K9



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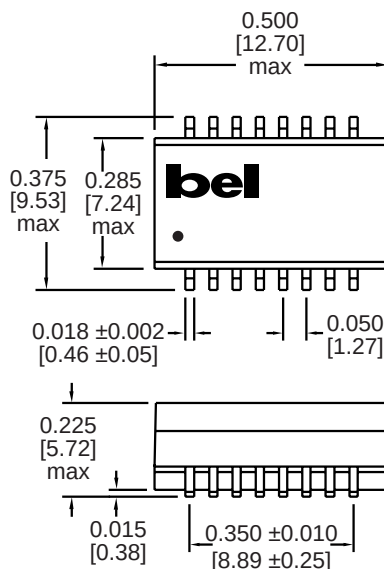
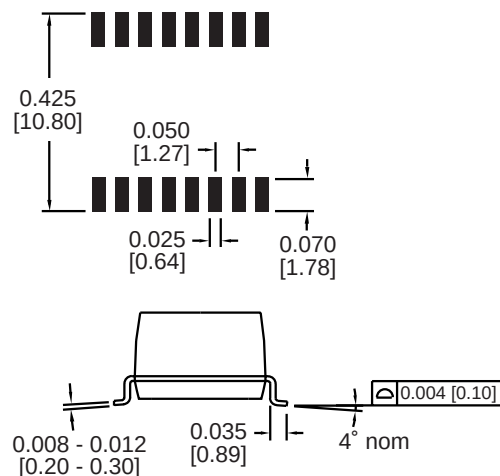
### Single Port Transformer Modules

#### SCHEMATICS

**S558-5999-N3**

**S558-5999-T7**

**S558-5999-U7**


#### MECHANICAL

S558-5999-J1  
S558-5999-J2  
S558-5999-K9  
S558-5999-N3  
S558-5999-T7  
S558-5999-U7


**Suggested PCB Pad Layout**


Dimensions are in inches [millimeters].  
Standard dimension tolerance is  $\pm 0.005$  [0.13] unless otherwise noted.

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#### CORPORATE

**Bel Fuse Inc.**  
206 Van Vorst Street  
Jersey City, NJ 07302  
Tel 201-432-0463  
Fax 201-432-9542  
www.belfuse.com

#### FAR EAST

**Bel Fuse Ltd.**  
8F / 8 Luk Hop Street  
San Po Kong  
Kowloon, Hong Kong  
Tel 852-2328-5515  
Fax 852-2352-3706  
www.belfuse.com

#### EUROPE

**Bel Fuse Europe Ltd.**  
Preston Technology Management Centre  
Marsh Lane, Suite G7, Preston  
Lancashire, PR1 8UD, U.K.  
Tel 44-1772-556601  
Fax 44-1772-888366  
www.belfuse.com