

# 1000 BASE –T MAGNETICS MODULES

## P/N: GST5009BM LF DATA SHEET

### Feature

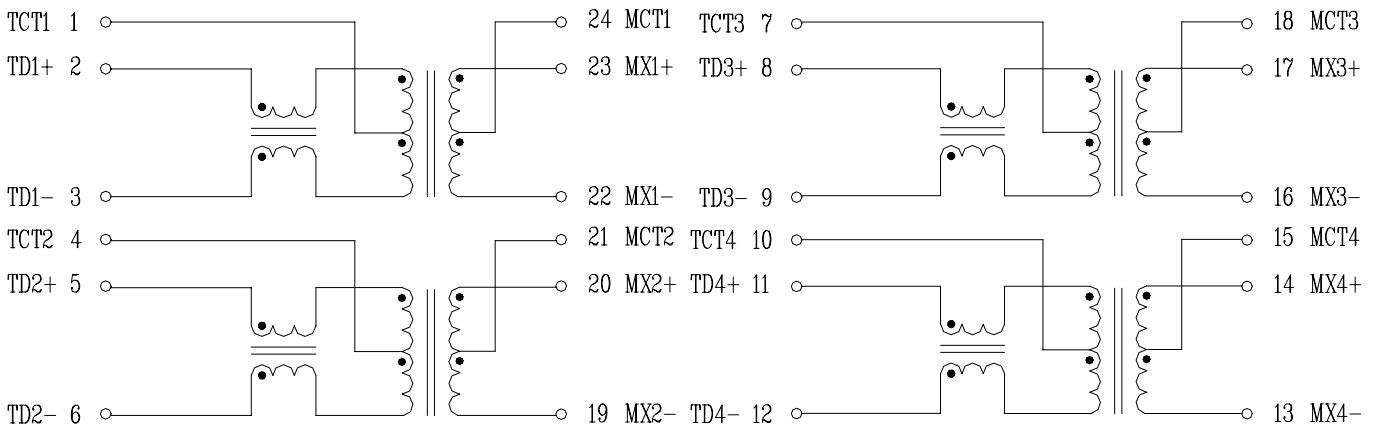


- Designed for long haul gigabit Ethernet 1000 BASE-T, full duplex applications.
- Supports 4 pairs of category 5 UTP cable.
- Cable interface for isolation and low common mode emissions.
- Compliant with IEEE 802.3ab standard for 1000 BASE-T.
- Comply with RoHS & Halogen Free requirements.
- Operating Temperature range: -40 to +85 .
- Storage temperature range: -40 to +85 .

| Electrical Specifications @ 25°C |                   |         |  |                                 |       |        |               |
|----------------------------------|-------------------|---------|--|---------------------------------|-------|--------|---------------|
| Part Number                      | Turns Ratio (±5%) |         | OCL (uH Min) @100KHz/0.1V with 8mA DC Bias | Cross talk Attenuation (dB Min) |       |        | HI-POT (Vrms) |
|                                  | TX                | RX      |  | 30MHz                           | 60MHz | 100MHz |               |
| GST5009BM LF                     | 1CT:1CT           | 1CT:1CT | 350  | -45                             | -40   | -35    | 1500          |

| Continue     |                         |                                |         |       |       |          |               |       |       |
|--------------|-------------------------|--------------------------------|---------|-------|-------|----------|---------------|-------|-------|
| Part Number  | Insertion Loss (dB Max) | Return Loss (dB Min)@ Load 100 |         |       |       |          | DCMR (dB Min) |       |       |
|              |                         | 1-100MHz                       | 1-30MHz | 40MHz | 50MHz | 60-80MHz | 100MHz        | 30MHz | 60MHz |
| GST5009BM LF | -1.0                    | -18                            | -14.4   | -13.1 | -12   | -10      | -40           | -35   | -30   |

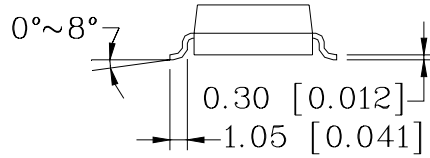
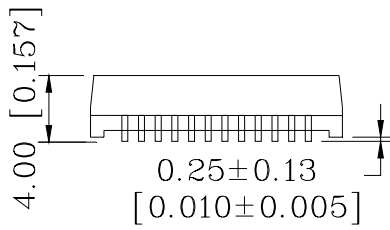
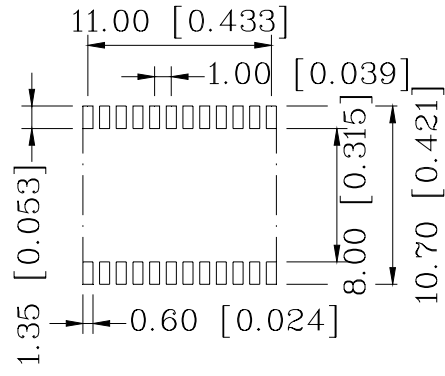
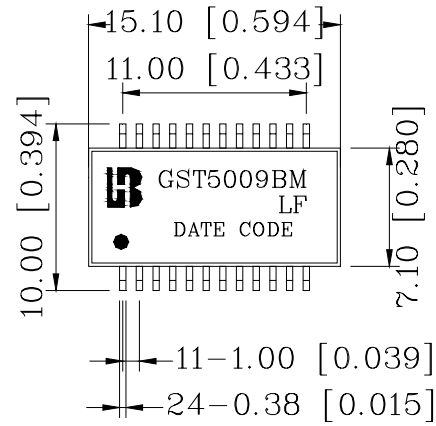
### Schematic



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### Mechanical



Units: mm [Inches] Tolerances: xx.x0 ± 0.25 [0.010]  
0.xx ± 0.05 [0.002]