



Magnetic Integrated Connector Modules



1500Vrms isolation voltage per IEEE802.3



350mA balanced DC line current capability



Designed for Power over Ethernet (PoE) enabled Switch / Router / Hub applications



Enhanced performance on EMI suppression with metal shield



Operating temperature 0°C to +70°C



RoHS compliant



| General Electrical Specification @25°C |            |                                      |                |                  |                       |   |  |
|--|------------|--------------------------------------|----------------|------------------|-----------------------|---|--|
| Insertion Loss<br>(dB Max)             |            | Return Loss <sup>1</sup><br>(dB Min) |                | CMRR<br>(dB Min) | Crosstalk<br>(dB Min) | Hipot<br>(Vrms)                         |  |
| 1-100MHz                               | 100-125MHz | 1-40MHz                              | 40-100MHz      | 0.1-100MHz       | 0.1-100MHz            | (************************************** |  |
| 1.0                                    | 1.5        | 18.0                                 | 12-20Log(F/80) | 30.0             | 30.0                  | 1500                                    |  |

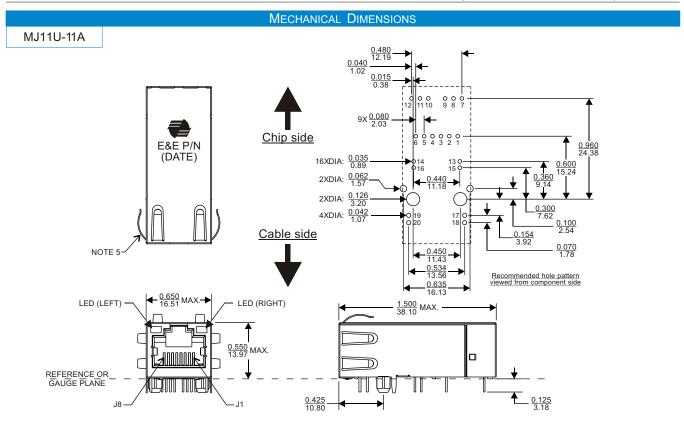
| Part Number Table  |  |    |                                    |                       |           |  |
|--------------------|--|----|------------------------------------|-----------------------|-----------|--|
| RoHS Part Number 2 | RoHS Part Number Turn Ratio (Chip : Cable) (±3%) Configuration Configuration |    | LED <sup>4</sup><br>(Left / Right) | Mechanical<br>Package | Schematic |  |
| MJF11U2GYAA-EB004  | 1CT:1CT  | СТ | G/Y                                | MJ11U-11A             | EB004     |  |
| MJF11U2GYAA-EBB05  | 1CT:1CT  | TS | G/Y                                | MJ11U-11A             | EBB05     |  |
| MJF11U2NNAA-EB004  | 1CT:1CT  | СТ | _                                  | MJ11U-11B             | EB004     |  |
| MJF11U2NNAA-EBB05  | 1CT:1CT  | TS | _                                  | MJ11U-11B             | EBB05     |  |

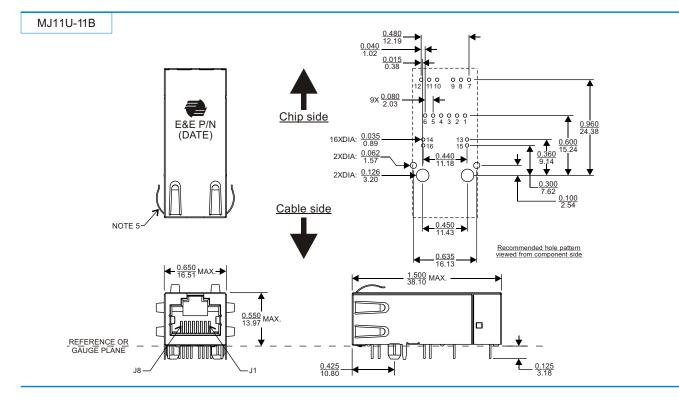
#### Notes:

- 1. "F" represents the test frequency specified in MHz.
- 2. For different electrical and mechanical specifications, please contact E&E Magnetic Products Limited.
- 3. Core location are counted from PCB (Chip) side to Cable (Media) side, where:
  - "T" = Isolation transformer; "C" = Common-mode choke; "S" = Shared Common-mode choke
- 4. LEDs (Left / Right): "G" = Green; "Y" = Yellow; "—" = None. For different LED color requirements, please contact E&E Magnetic Products Limited.
- 5. Panel tabs are optional.
- 6. All parts shown in this datasheet have gold plating thickness of 10 micro-inch (min.) over contact area. Advance options including 30 micro-inch (min.) and 50 micro-inch (min.) are also available.

| Materials Materials       |  |  |  |  |  |
|---------------------------|--|--|--|--|--|
| Housing                   | Consist of thermoset & thermoplastic materials, all of them are UL 94-V0 rated.    |  |  |  |  |
| Contact Pins <sup>6</sup> | Phosphor bronze, plated with nickel under-plating and hard gold over contact area. |  |  |  |  |
| PCB Pins                  | Copper wire which meets solderability requirements per MIL-STD-202, method 208.    |  |  |  |  |

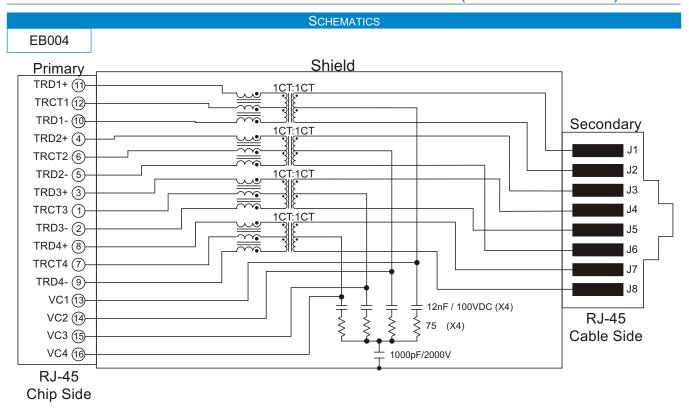




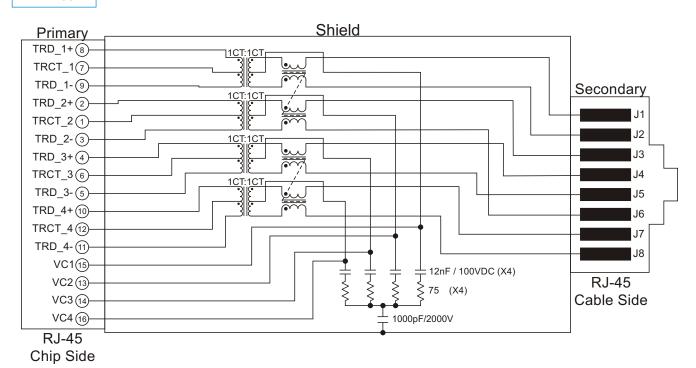


All dimensions are specified in  $\frac{\text{inch}}{\text{mm}}$  with higher precedence in inch.





### EBB05





| LEDs Color And Polarity |            |       |          |             |        |          |        |
|-------------------------|------------|-------|----------|-------------|--------|----------|--------|
| MJ11                    | LED (LEFT) |       |          | LED (RIGHT) |        |          |        |
| LED (RIGHT)             | (18)—(17)  | COLOR | POLARITY |             | COLOR  | POLARITY |        |
|                         |            |       | PIN 20   | PIN 19      | COLOR  | PIN 18   | PIN 17 |
| (,                      |            |       |          |             |        |          |        |
| LED (LEFT)              | 20-19      | GREEN | +        | _           | YELLOW | +        | _      |

| LED Specification @25°C, Forward Current = 20mA |                         |                        |  |  |  |
|---|-------------------------|------------------------|--|--|--|
| Charadand Calan                                 | Typical Wayalangth (pm) | Forward Voltage (volt) |  |  |  |
| Standard Color                                  | Typical Wavelength (nm) | Typical                |  |  |  |
| Green   | 565                     | 2.2                    |  |  |  |
| Yellow  | 590                     | 2.1                    |  |  |  |

#### FOR MORE INFORMATION, PLEASE CONTACT

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