







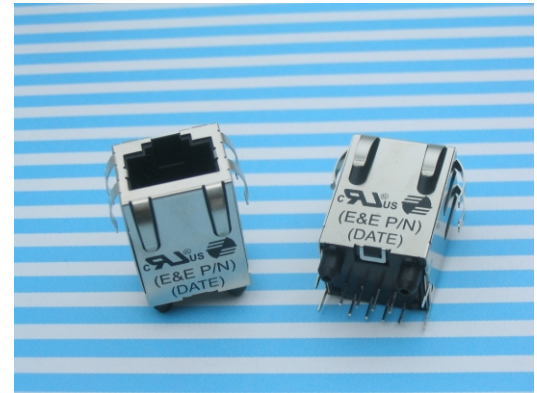


-  Magnetic Integrated Connector Modules
-  Compliant with IEEE802.3 standard including 350μH OCL with 8mA DC Bias
-  1500Vrms isolation voltage per IEEE802.3
-  Enhanced performance on EMI suppression with metal shield
-  Support various 10/100 transceiver ICs
-  Operating temperature 0°C to +70°C
-  UL 1863 listed
-  RoHS compliant versions are available



GENERAL ELECTRICAL SPECIFICATION @ 25°C

| Insertion Loss<br>(dB Max) | Return Loss<br>(dB Min) |       |       |          | CMRR<br>(dB Min) |       |        | Crosstalk<br>(dB Min) | Hipot<br>(Vrms) |
|----------------------------|-------------------------|-------|-------|----------|------------------|-------|--------|-----------------------|-----------------|
|                            | 1-30MHz                 | 40MHz | 50MHz | 60-80MHz | 32MHz            | 62MHz | 100MHz |                       |                 |
| 1.0                        | 16.0                    | 14.0  | 13.0  | 12.0     | 42.0             | 37.0  | 33.0   | 35.0                  | 1500            |

PART NUMBER TABLE

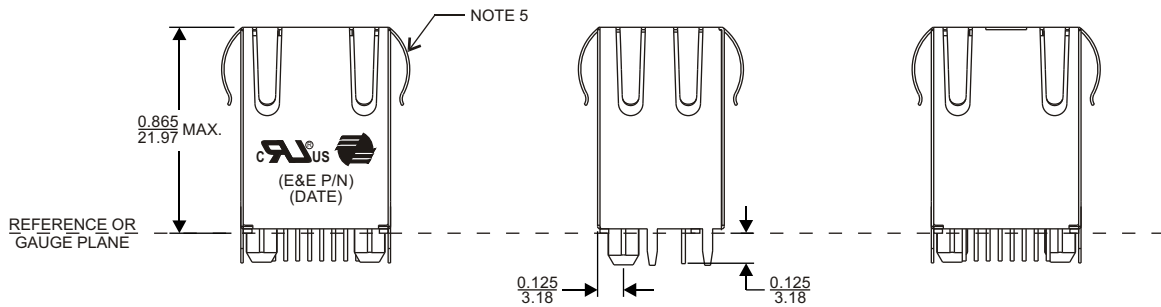
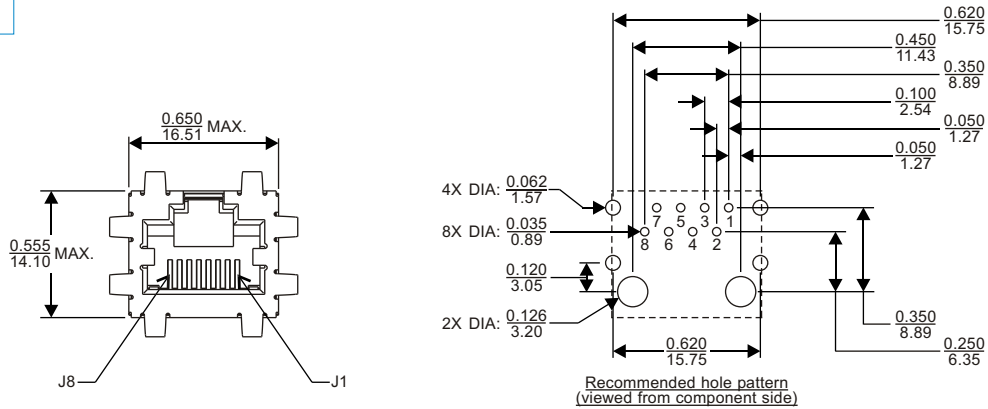
| Part Number <sup>1</sup>      | RoHS Part Number | Turn Ratio<br>(Chip : Cable) (±3%) |         | Configuration <sup>2</sup> |    | LED <sup>3</sup><br>(Left / Right) | Mechanical<br>Package | Schematic         |
|-------------------------------|------------------|------------------------------------|---------|----------------------------|----|------------------------------------|-----------------------|-------------------|
|                               |                  | Tx                                 | Rx      | Tx                         | Rx |                                    |                       |                   |
| MJ-11V2GYA0-H301              | MJR11V2GYA0-H301 | 1CT:1                              | 1CT:1CT | TCA                        | CT | G / Y                              | MJ11V-01B             | H301              |
| MJ-11V2GYA0-H30Y              | MJR11V2GYA0-H30Y | 1CT:1CT                            | 1CT:1CT | TC                         | TC | G / Y                              | MJ11V-01B             | H30Y <sup>4</sup> |
| MJ-11V2GYA0-K30Y <sup>7</sup> | MJR11V2GYA0-K30Y | 1CT:1CT                            | 1CT:1CT | TC                         | TC | G / Y                              | MJ11V-01B             | K30Y <sup>4</sup> |
| MJ-11V2NNA0-H301              | MJR11V2NNA0-H301 | 1CT:1                              | 1CT:1CT | TCA                        | CT | —                                  | MJ11V-01A             | H301              |
| MJ-11V2NNA0-H30Y              | MJR11V2NNA0-H30Y | 1CT:1CT                            | 1CT:1CT | TC                         | TC | —                                  | MJ11V-01A             | H30Y <sup>4</sup> |
| MJ-11V2NNA0-K30Y <sup>7</sup> | MJR11V2NNA0-K30Y | 1CT:1CT                            | 1CT:1CT | TC                         | TC | —                                  | MJ11V-01A             | K30Y <sup>4</sup> |

Notes:

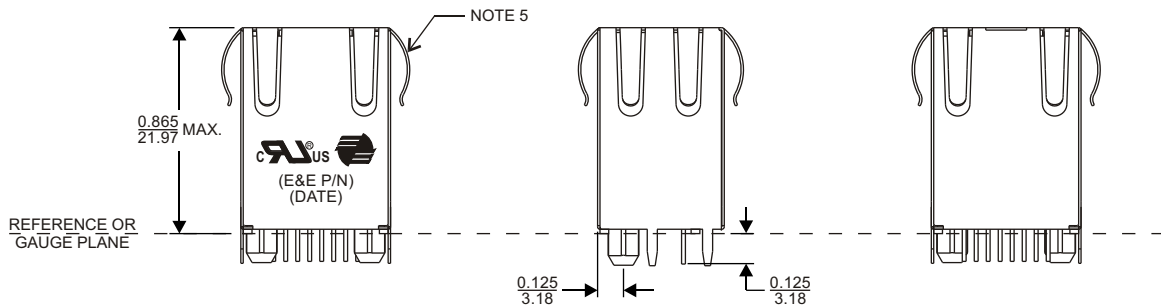
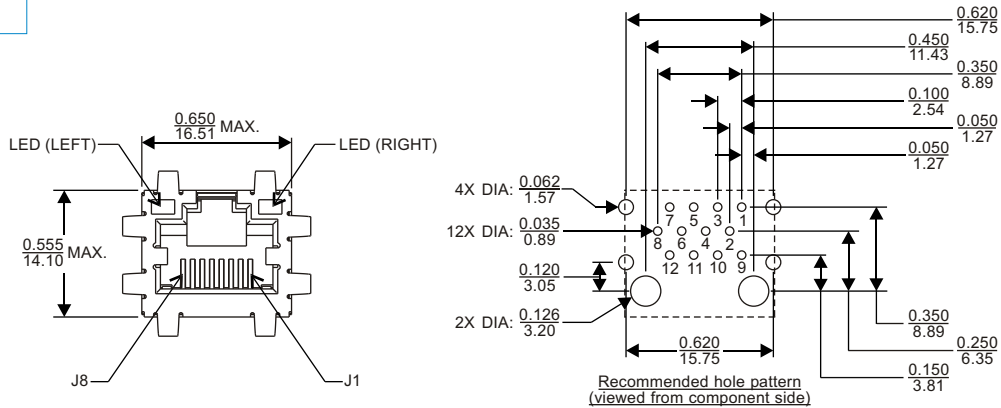
1. For different electrical and mechanical specifications, please contact E&E Magnetic Products Limited.
2. Core location are counted from PCB (Chip) side to Cable (Media) side, where:  
"T" = Isolation transformer ; "C" = Common-mode choke ; "A" = Auto-transformer
3. LEDs (Left / Right) : "G" = Green ; "Y" = Yellow ; "—" = None. For different LED color requirements, please contact E&E Magnetic Products Limited.
4. Schematic H30Y and K30Y are suitable for Auto MDI/MDIX applications.
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.
7. Operating temperature: -40°C to +85°C.

MECHANICAL DIMENSIONS

MJ11V-01A



MJ11V-01B

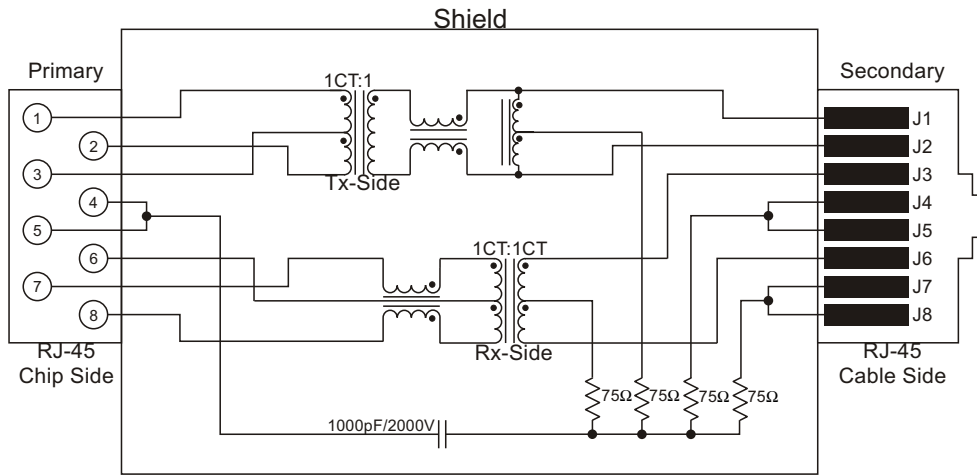


All dimensions are specified in  $\frac{\text{inch}}{\text{mm}}$  with higher precedence in inch.

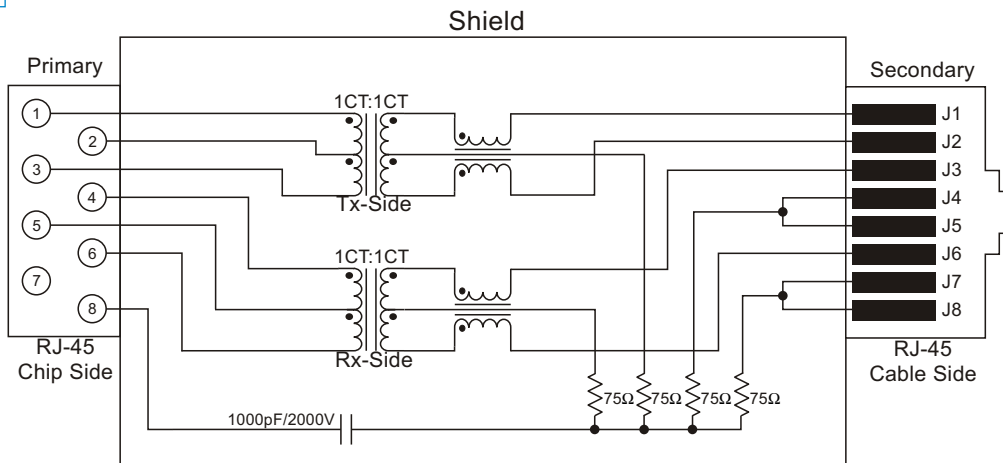
Unless otherwise specified, all tolerances are  $\pm \frac{0.010}{0.25}$ .

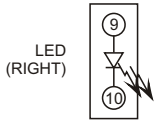
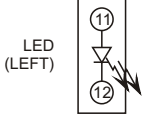
SCHMATICS

H301



H30Y / K30Y



| LEDs COLOR AND POLARITY  |            |          |        |             |          |        |
|--|------------|----------|--------|-------------|----------|--------|
| MJ11V-01B  | LED (LEFT) |          |        | LED (RIGHT) |          |        |
| <br>LED (RIGHT) | COLOR      | POLARITY |        | COLOR       | POLARITY |        |
|  |            | PIN 11   | PIN 12 |             | PIN 9    | PIN 10 |
| <br>LED (LEFT)  | GREEN      | +        | -      | YELLOW      | +        | -      |

| LED SPECIFICATION @25°C, FORWARD CURRENT = 20mA |                         |                        |         |
|---|-------------------------|------------------------|---------|
| Standard Color                                  | Typical Wavelength (nm) | Forward Voltage (volt) |         |
|   |                         | Typical                | Maximum |
| Green   | 565                     | 2.2                    | 2.5     |
| Yellow  | 590                     | 2.1                    | 2.5     |

| 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.    |

FOR MORE INFORMATION, PLEASE CONTACT

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