

# WITMAG

## SPECIFICATION FOR APPROVAL

CUSTOMER \_\_\_\_\_

CUSTOMER'S PART NO. \_\_\_\_\_

DESCRIPTION **Magnetic Modules(10/100M Base-T)**

WITMAG'S PART NO. \_\_\_\_\_

**HF-84020**

REV. \_\_\_\_\_

**A**

WITMAG'S OLD P/N \_\_\_\_\_

ISSUE NO. \_\_\_\_\_

ISSUE DATE. \_\_\_\_\_

**JUN.6,2019**

APPROVED

REJECTED

APPROVED UNDER  
THE CONDITIONS:

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**Note:**

- 1. This specification is the proprietary of Shenzhen witmag Electronics Co.,ltd and is not allowed to be revealed to third party without any written approval.**
- 2. This specification is valid within 1 year before approval, and for any updated specification information required, please contact with Witmag's sales window before order releases.**



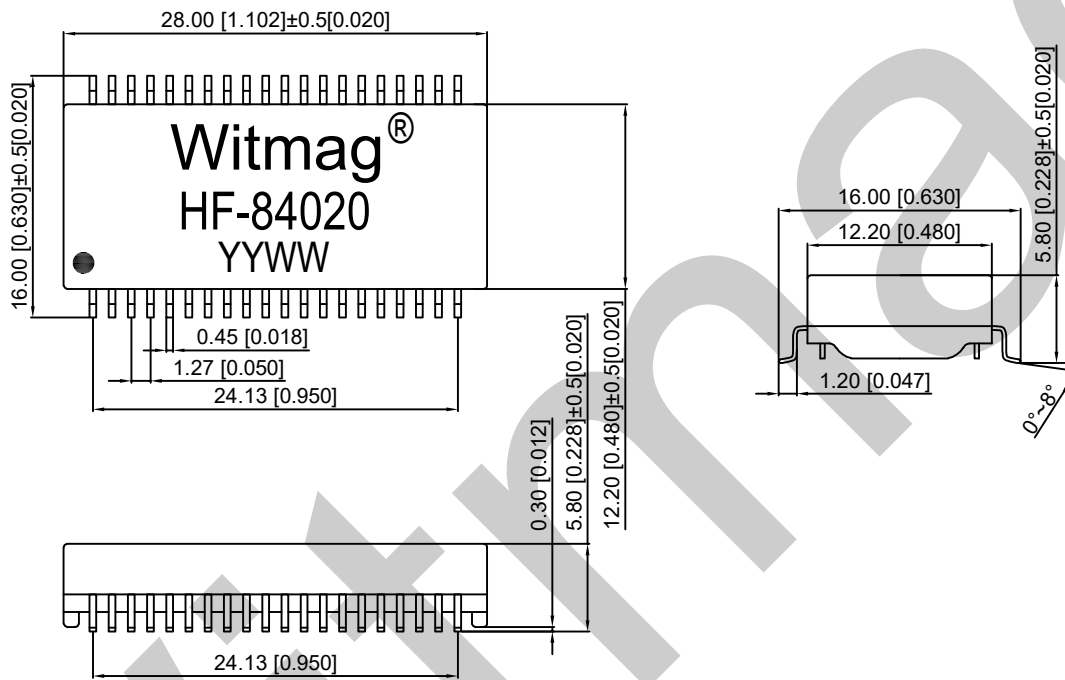
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|   |  |
|---|--|
| <b>CUSTOMER PART NO:</b><br><b>WITMAG PART NO:HF-84020</b><br><b>PART NAME:Magnetic Modules(10/100M Base-T)</b> | Rev.:A   |
|   | <br><b>ROHS</b> |

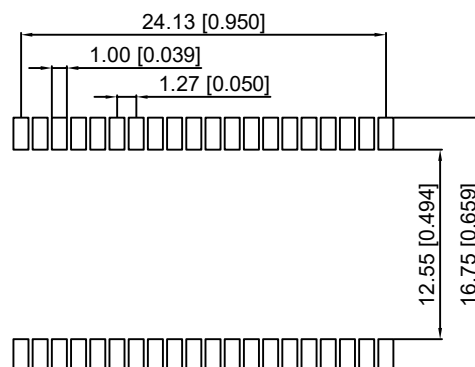
### Mechanical Dimension and Suggested PWB Layout

#### ◆ Mechanical Dimension



Dimensions:mm[Inchs]  
 Unless otherwise specified,All dimensions tolerance is ±0.25[0.010]

#### ◆ Suggested PWB Layout



Dimensions:mm[Inchs]  
 Unless otherwise specified,All dimensions tolerance is ±0.25[0.010]

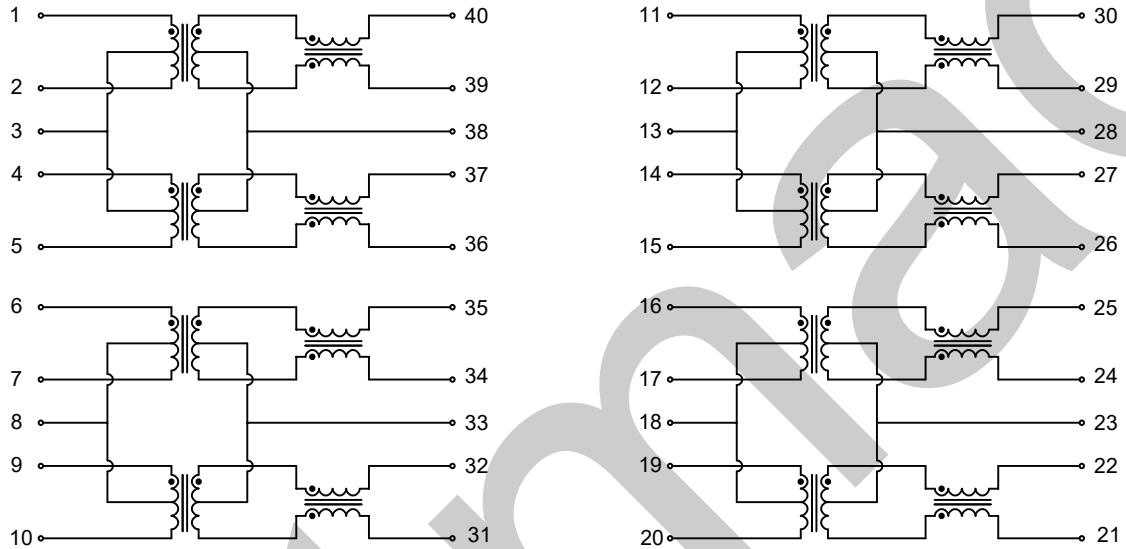
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### Circuit Schematic and Electrical Specifications

#### ◆ Circuit Schematic



#### ◆ Electrical Specifications

|   |                        |            |            |
|---|------------------------|------------|------------|
| Turn Ratio                                      | TX:RX=1:1±5%           |            |            |
| Primary Inductance<br>(100KHz 0.1V 8mA DC Bias) | 350μH MIN              |            |            |
| Leakage Inductance                              | 0.5μH MAX              |            |            |
| Cw/w  | 35pF MAX               |            |            |
| DC Resistance                                   | 1.2Ω MAX               |            |            |
| Insertion Loss                                  | 1-100MHz               |            |            |
|   | -1.2 dB MAX            |            |            |
| Return Loss<br>(100Ω±15Ω)                       | 1-30MHz                | 30-60MHz   | 60-80MHz   |
|   | -14 dB MIN             | -12 dB MIN | -10 dB MIN |
| Cross talk                                      | 1-100MHz               |            |            |
|   | -30 dB MIN             |            |            |
| Common Mode Rejection                           | 1-100MHz               |            |            |
|   | -30 dB MIN             |            |            |
| Isolation Voltage                               | 1500VAC @ 1mA for 1sec |            |            |

#### NOTE:

- Operating Temperature:0°C to +70°C
- Storage Temperature:0°C to +85°C