



## ISDN S<sub>0</sub> Miniature SMD Interface Modules

### Features

- excellent output characteristics ensures compliance with CCITT.I.430 pulse waveform template when used with recommended IC pairing
- SMD modules are designed for pick and place compatibility
- excellent and consistent balance between windings
- manufactured in ISO-9001:2000, TS-16949:2002 and ISO-14001:2004 certified Talema facility
- meets lead free reflow level J-STD-020C
- fully RoHS compliant
- operating temperature: -40° to +85°C
- storage temperature: -40° to +125°C



### Electrical Specifications @ 25°C

Turns Ratio: **Bold** = IC side windings

#### Miniature Chip SMD Modules comply with EN60950, UL1950 and UL1459

| Part Number  | L <sub>P</sub><br>(mH Min) | Turns<br>Ratio | L <sub>L</sub><br>(μH Max) | C <sub>C</sub><br>(pF Max) | R <sub>CU</sub> P<br>(Ohms) | R <sub>CU</sub> S<br>(Ohms) | Quad Choke<br>(per winding) |       | V <sub>P</sub><br>(Vrms) | Schematic |
|--------------|----------------------------|----------------|----------------------------|----------------------------|-----------------------------|-----------------------------|-----------------------------|-------|--------------------------|-----------|
|              |                            |                |                            |                            |                             |                             | R <sub>CU</sub> (Ohms)      | L     |                          |           |
| MMJ-100B-501 | 25                         | <b>1:1:1:1</b> | 5                          | 50                         | 2.6                         | 2.7                         | 0.30                        | 500μH | 1500                     | B         |

### Test Conditions:

Polarity and Turns Ratio: ±1%

Inductance: 25mH minimum, line side windings in series @ 10kHz, 100mV

Leakage Inductance: Line side windings in series, IC side windings short circuited - measurement @ 100kHz, 100mV

Coupling capacitance: IC side windings in series to Line side windings in series @ 10kHz, 100mV

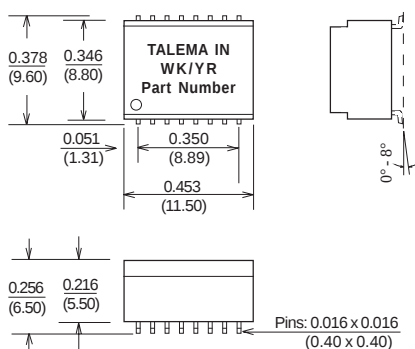
Common Mode Choke Inductance: 100kHz, 20mV

Test Voltage: 1.5kV for 2 Sec. - Line side windings in series to IC side windings in series

**Standard Packaging:** Tape and Reel

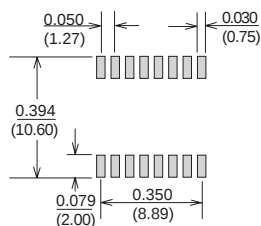
### Schematic

### MMJ Miniature Module

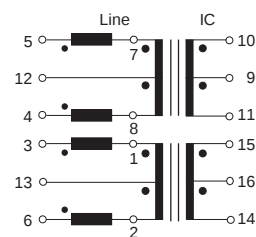


Surface Coplanarity will be 0.004 (0.10)

### Suggested Pad Layout



### B



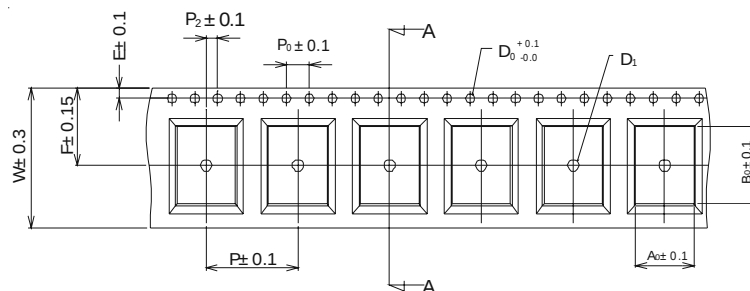
Dimensions: Inches (Millimeters)

Tolerance: ±0.010 (0.25) unless specified otherwise



## Packing and Dimensions

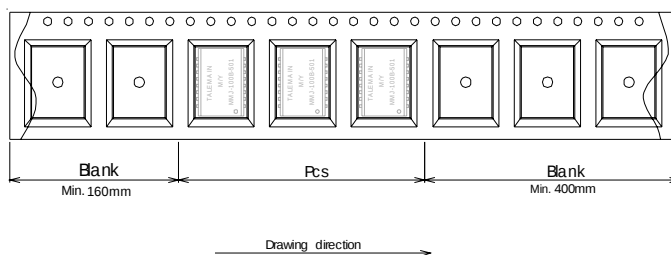
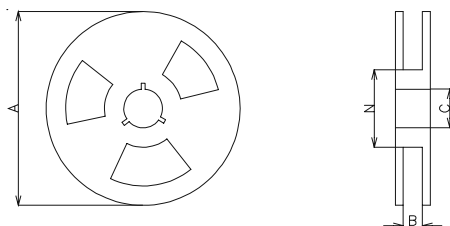
### Dimensions for carrier tape (Unit : mm)



Dimensions are in mm

| Type | Dimensions in mm |       |      |                |                |                |                |       |                |                |      |                | Reel Size | Quantity (Pcs/Reel) | Quantity (Reel/Cased) |
|------|------------------|-------|------|----------------|----------------|----------------|----------------|-------|----------------|----------------|------|----------------|-----------|---------------------|-----------------------|
|      | W                | F     | E    | P <sub>2</sub> | P <sub>0</sub> | D <sub>0</sub> | D <sub>1</sub> | P     | A <sub>0</sub> | B <sub>0</sub> | T    | K <sub>0</sub> |           |                     |                       |
| MMJ  | 24.00            | 11.50 | 1.75 | 2.00           | 4.00           | Ø1.5           | Ø1.50          | 16.00 | 10.20          | 12.05          | 0.35 | 7.05           | 330x24    | 600                 | 5/3000                |

### Reel dimensions



| Reel Dimensions in mm |     |    |      |     |
|-----------------------|-----|----|------|-----|
| Type                  | A   | B  | C    | N   |
| 330 x 24              | 330 | 24 | 20.2 | 100 |

### Outer Carton

#### Inner Carton

