

**FEATURES**

- 5 Configurations
- Inductance to 10mH
- SMD and DIP Versions
- Toroidal Construction
- Fully Encapsulated
- Isolation to 1kVrms
- UL 94V-0 Package Materials

**DESCRIPTION**

The 786 series is a comprehensive range of general purpose pulse transformers. Common applications include line coupling, matching or isolating. The devices can also be used in small isolated power supplies and also as common-mode chokes in filtering applications.

**SELECTION GUIDE**

| Order Code <sup>1</sup> | Turns Ratio<br>±2% | Primary Inductance | Primary E <sub>r</sub> Constant | Leakage Inductance | Interwinding Capacitance | DC Resistance | Isolation Voltage Max | Pin Connection Style |
|-------------------------|--------------------|--------------------|---------------------------------|--------------------|--------------------------|---------------|-----------------------|----------------------|
|                         |                    | Min<br>µH          | Min<br>Vµs                      | Max<br>µH          | Max<br>pF                |               |                       |                      |
| 78601/4                 | 1:1                | 100                | 4                               | 0.19               | 8                        | 0.17          | 1000                  | 1                    |
| 78601/3                 | 1:1                | 200                | 6                               | 0.20               | 14                       | 0.25          |                       |                      |
| 78601/2                 | 1:1                | 500                | 10                              | 0.25               | 22                       | 0.34          |                       |                      |
| 78601/8                 | 1:1                | 1000               | 15                              | 0.29               | 35                       | 0.45          |                       |                      |
| 78601/1                 | 1:1                | 2000               | 20                              | 0.47               | 49                       | 0.60          |                       |                      |
| 78601/16                | 1:1                | 5000               | 28                              | 0.47               | 78                       | 0.84          |                       |                      |
| 78601/9                 | 1:1                | 10000              | 56                              | 0.86               | 121                      | 1.30          | 1000                  | 2                    |
| 78602/4                 | 1:1:1              | 100                | 4                               | 0.11               | 12                       | 0.18          |                       |                      |
| 78602/3                 | 1:1:1              | 200                | 6                               | 0.17               | 19                       | 0.24          |                       |                      |
| 78602/2                 | 1:1:1              | 500                | 10                              | 0.27               | 32                       | 0.34          |                       |                      |
| 78602/8                 | 1:1:1              | 1000               | 15                              | 0.35               | 47                       | 0.46          |                       |                      |
| 78602/1                 | 1:1:1              | 2000               | 20                              | 0.60               | 72                       | 0.66          |                       |                      |
| 78602/16                | 1:1:1              | 5000               | 28                              | 0.71               | 116                      | 0.92          | 1000                  | 1                    |
| 78602/9                 | 1:1:1              | 10000              | 56                              | 0.71               | 167                      | 1.34          |                       |                      |
| 78604/4                 | 2:1                | 100                | 4                               | 0.41               | 4                        | 0.18          |                       |                      |
| 78604/3                 | 2:1                | 200                | 6                               | 0.49               | 9                        | 0.25          |                       |                      |
| 78604/2                 | 2:1                | 500                | 10                              | 0.65               | 13                       | 0.34          |                       |                      |
| 78604/8                 | 2:1                | 1000               | 15                              | 0.76               | 20                       | 0.46          |                       |                      |
| 78604/1                 | 2:1                | 2000               | 20                              | 0.99               | 29                       | 0.60          | 1000                  | 3                    |
| 78604/16                | 2:1                | 5000               | 28                              | 1.61               | 50                       | 0.85          |                       |                      |
| 78604/9                 | 2:1                | 10000              | 56                              | 1.64               | 72                       | 1.23          |                       |                      |
| 78613/4                 | 1CT:1              | 100                | 4                               | 0.30               | 7                        | 0.20          |                       |                      |
| 78613/3                 | 1CT:1              | 200                | 6                               | 0.65               | 12                       | 0.25          |                       |                      |
| 78613/2                 | 1CT:1              | 500                | 10                              | 1.07               | 20                       | 0.36          |                       |                      |
| 78613/8                 | 1CT:1              | 1000               | 15                              | 1.13               | 35                       | 0.48          | 1000                  | 4                    |
| 78613/1                 | 1CT:1              | 2000               | 20                              | 1.53               | 47                       | 0.63          |                       |                      |
| 78613/16                | 1CT:1              | 5000               | 28                              | 1.98               | 64                       | 0.88          |                       |                      |
| 78613/9                 | 1CT:1              | 10000              | 56                              | 3.83               | 72                       | 1.33          |                       |                      |
| 78615/4                 | 1CT:1CT            | 100                | 4                               | 1.21               | 3                        | 0.17          |                       |                      |
| 78615/3                 | 1CT:1CT            | 200                | 6                               | 3.64               | 5                        | 0.24          |                       |                      |
| 78615/2                 | 1CT:1CT            | 500                | 10                              | 6.86               | 7                        | 0.34          |                       |                      |
| 78615/8                 | 1CT:1CT            | 1000               | 15                              | 11.9               | 10                       | 0.45          | 1000                  | 4                    |
| 78615/1                 | 1CT:1CT            | 2000               | 20                              | 16.0               | 16                       | 0.60          |                       |                      |
| 78615/16                | 1CT:1CT            | 5000               | 28                              | 37.7               | 20                       | 0.87          |                       |                      |
| 78615/9                 | 1CT:1CT            | 10000              | 56                              | 44.5               | 19                       | 1.33          |                       |                      |

**ABSOLUTE MAXIMUM RATINGS**

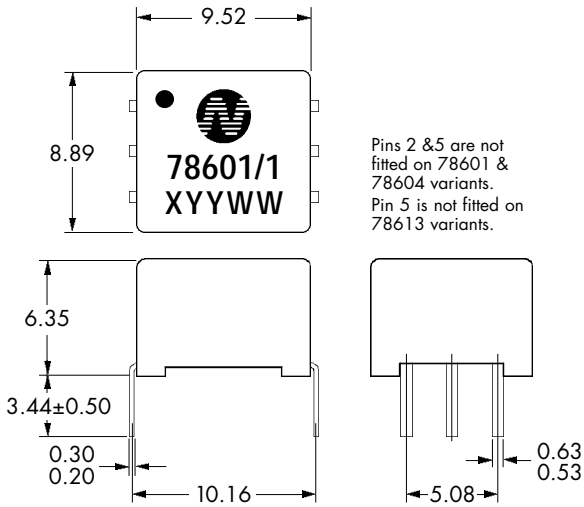
|   |                |
|---|----------------|
| Operating free air temperature range            | 0°C to 70°C    |
| Storage temperature range                       | -60°C to 125°C |
| Lead Temperature 1.5mm from case for 10 seconds | 300°C          |

# 786 SERIES

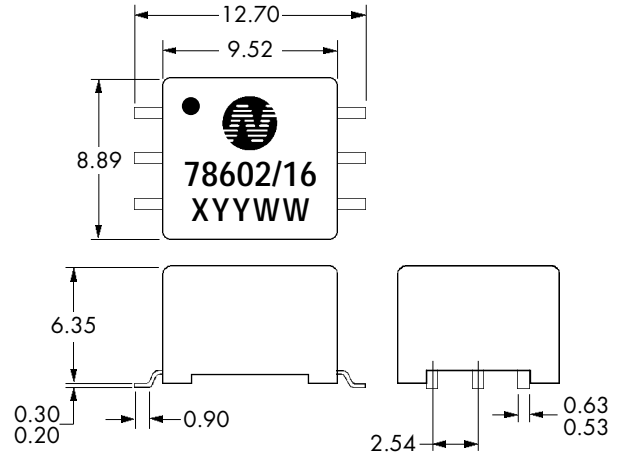
## Pulse Transformers

### MECHANICAL DIMENSIONS

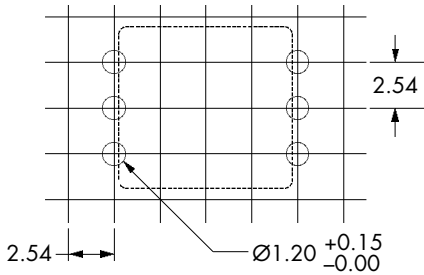
#### 6 Pin DIP Package Style



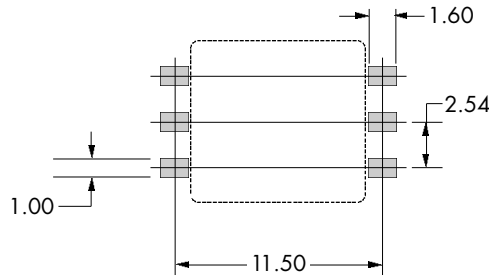
#### 6 Pin SMD Package Style



#### Recommended Footprint Details 6 Pin DIP Package Style

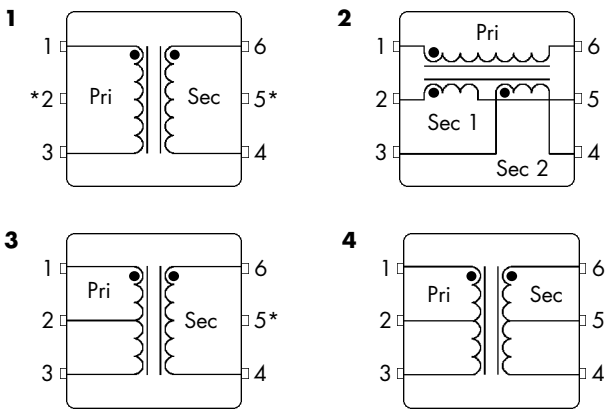


#### 6 Pin SMD Package Style



All pins on a 2.54mm pitch and within  $\pm 0.25$ mm of true pin pitch position.  
Unless otherwise stated all dimensions in mm  $\pm 0.25$ mm.  
Package Weight 1.0g TYP.

### PIN CONNECTION STYLE - 6 PIN DIP/SMD (TOP VIEW)



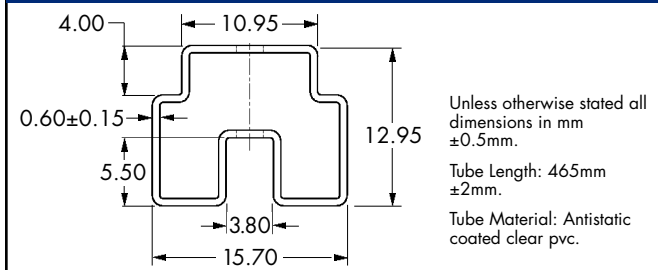
\* Pins only fitted on 786XX/XM-R variants.

### PACKAGING DETAILS

| Order Code | Packaging Style                         | QTY |
|------------|---|-----|
| 786XX/X    | Tube                                    | 50  |
| 786XX/XM-R | Tape & Reel to IEC 286-3 Specifications | 500 |

For tape and reeling packaging details refer to datasheet NDCAN002.

### TUBE OUTLINE DIMENSIONS



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NMP 786.1

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