



# AMORPHOUS CHOKE COIL

## TM Series

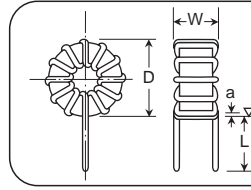
### ◆ MAJOR USES

- For switching mode power supplies.
- For DC-DC converter.
- For normal mode line filter.

### ◆ FEATURES

- Great reduction of core loss enabling low temperature rise at high frequency.
- Miniaturization and reduction of DC resistance.
- Low leakage flux due to gap-less structure.
- Excellent frequency and temperature features.

### ◆ GENERAL SPECIFICATION



(Reference sample)

D : Maximum outer diameter  
 W : Maximum width  
 Total lead length (L)\* : 30mm (+3mm, -3mm)  
 Soldering boundary (a)\* : 0mm (+4mm, -0mm)  
 \* The bottom of the core or coil (▽) is defined as the base surface.  
 The specification value of the soldering boundary varies depending on the number of windings of the wire.

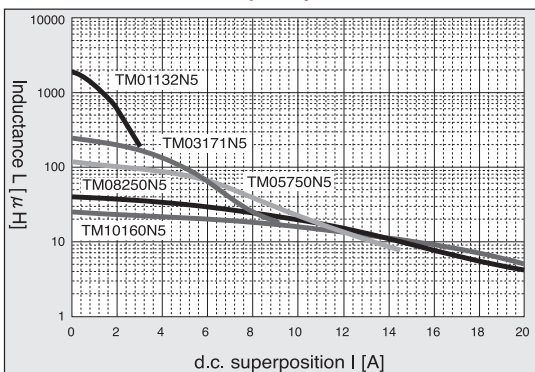
| P/N       | Rated current A | Inductance (200kHz) |           | D.C.R. mΩ (max) | Winding *2 mmφ×lines-turns | Outside dimension |      |
|-----------|-----------------|---------------------|-----------|-----------------|----------------------------|-------------------|------|
|           |                 | O[A]*1 μH           | Rating μH |                 |                            | D mm              | W mm |
| TM01201N1 | 1               | 270                 | 200       | 150             | 0.5x1p -49T                | 18.0              | 10.5 |
| TM01251N1 | 1               | 350                 | 250       | 170             | 0.5x1p -58T                | 18.0              | 11.0 |
| TM01301N1 | 1               | 410                 | 300       | 170             | 0.5x1p -60T                | 18.0              | 11.0 |
| TM02101N1 | 2               | 155                 | 100       | 70              | 0.6x1p -37T                | 18.0              | 10.5 |
| TM03400N1 | 3               | 65                  | 40        | 27              | 0.8x1p -24T                | 18.5              | 11.0 |
| TM04250N1 | 4               | 40                  | 25        | 18              | 0.9x1p -19T                | 19.0              | 11.5 |
| TM05150N1 | 5               | 22                  | 15        | 11              | 1.0x1p -14T                | 19.5              | 11.5 |
| TM01401N2 | 1               | 500                 | 400       | 210             | 0.5x1p -70T                | 19.5              | 11.0 |
| TM01501N2 | 1               | 720                 | 500       | 230             | 0.5x1p -81T                | 20.0              | 11.0 |
| TM02151N2 | 2               | 200                 | 150       | 89              | 0.6x1p -45T                | 20.0              | 10.5 |
| TM02201N2 | 2               | 270                 | 200       | 110             | 0.6x1p -55T                | 20.0              | 11.0 |
| TM02211N2 | 2               | 330                 | 210       | 110             | 0.6x1p -58T                | 20.5              | 11.5 |
| TM03700N2 | 3               | 95                  | 70        | 36              | 0.8x1p -31T                | 20.5              | 11.5 |
| TM04450N2 | 4               | 60                  | 45        | 24              | 0.9x1p -24T                | 21.0              | 11.5 |
| TM04500N2 | 4               | 75                  | 50        | 24              | 0.9x1p -28T                | 21.0              | 11.5 |
| TM05300N2 | 5               | 45                  | 30        | 17              | 1.0x1p -21T                | 21.0              | 12.0 |
| TM06200N2 | 6               | 29                  | 20        | 11              | 0.8x2p -16T                | 21.0              | 12.0 |
| TM01132N5 | 1               | 1900                | 1300      | 400             | 0.5x1p -128T               | 26.0              | 12.0 |
| TM03800N5 | 3               | 120                 | 80        | 41              | 0.8x1p -30T                | 26.5              | 11.0 |
| TM03171N5 | 3               | 260                 | 170       | 59              | 0.8x1p -48T                | 26.5              | 12.0 |
| TM05750N5 | 5               | 120                 | 75        | 27              | 1.0x1p -35T                | 27.0              | 13.5 |
| TM06450N5 | 6               | 80                  | 45        | 18              | 0.8x2p -26T                | 27.0              | 13.0 |
| TM08250N5 | 8               | 43                  | 25        | 11              | 0.9x2p -19T                | 27.0              | 13.5 |
| TM10160N5 | 10              | 26                  | 16        | 7               | 1.1x2p -15T                | 28.0              | 14.0 |
| TM15080N5 | 15              | 14                  | 8         | 4               | 1.1x3p -11T                | 27.5              | 14.5 |
| TM02621NP | 2               | 1090                | 620       | 150             | 0.7x1p -76T                | 24.5              | 16.5 |
| TM03291NP | 3               | 490                 | 290       | 76              | 0.8x1p -51T                | 24.5              | 16.0 |
| TM04161NP | 4               | 280                 | 160       | 46              | 0.9x1p -39T                | 25.0              | 16.5 |
| TM05101NP | 5               | 170                 | 100       | 29              | 1.0x1p -30T                | 25.0              | 16.5 |
| TM06700NP | 6               | 120                 | 70        | 19              | 0.8x2p -25T                | 24.5              | 16.0 |
| TM08400NP | 8               | 70                  | 40        | 12              | 0.9x2p -19T                | 25.0              | 16.5 |
| TM10270NP | 10              | 48                  | 27        | 7               | 1.1x2p -16T                | 26.0              | 17.0 |
| TM15120NP | 15              | 23                  | 12        | 4               | 1.1x3p -11T                | 26.0              | 17.5 |

| P/N       | Rated current A | Inductance (200kHz) |           | D.C.R. mΩ (max) | Winding *2 mmφ×lines-turns | Outside dimension |      |
|-----------|-----------------|---------------------|-----------|-----------------|----------------------------|-------------------|------|
|           |                 | O[A]*1 μH           | Rating μH |                 |                            | D mm              | W mm |
| TM02701N6 | 2               | 1150                | 700       | 150             | 0.7x1p -73T                | 27.5              | 16.5 |
| TM03181N6 | 3               | 260                 | 180       | 50              | 0.8x1p -33T                | 27.5              | 15.0 |
| TM03351N6 | 3               | 600                 | 350       | 82              | 0.8x1p -53T                | 27.5              | 16.5 |
| TM04101N6 | 4               | 145                 | 100       | 33              | 0.9x1p -25T                | 27.5              | 16.0 |
| TM04201N6 | 4               | 330                 | 200       | 48              | 0.9x1p -39T                | 28.0              | 16.5 |
| TM05131N6 | 5               | 230                 | 130       | 34              | 1.0x1p -33T                | 28.5              | 17.0 |
| TM06850N6 | 6               | 155                 | 85        | 22              | 0.8x2p -27T                | 28.0              | 17.0 |
| TM08450N6 | 8               | 75                  | 45        | 13              | 0.9x2p -19T                | 28.0              | 17.0 |
| TM10300N6 | 10              | 50                  | 30        | 7               | 1.1x2p -15T                | 29.0              | 17.5 |
| TM15160N6 | 15              | 30                  | 16        | 5               | 1.1x3p -12T                | 28.5              | 18.5 |
| TM20100N6 | 20              | 21                  | 10        | 4               | 1.3x3p -10T                | 29.5              | 19.0 |
| TM02901N7 | 2               | 1500                | 900       | 240             | 0.6x1p -72T                | 32.0              | 15.5 |
| TM02112N7 | 2               | 1700                | 1100      | 190             | 0.7x1p -85T                | 32.5              | 16.5 |
| TM03481N7 | 3               | 770                 | 480       | 94              | 0.8x1p -57T                | 32.5              | 16.5 |
| TM05141N7 | 5               | 230                 | 140       | 34              | 1.0x1p -31T                | 33.0              | 16.0 |
| TM05211N7 | 5               | 360                 | 210       | 42              | 1.0x1p -39T                | 33.0              | 17.5 |
| TM10300N7 | 10              | 45                  | 30        | 7               | 1.6x1p -13T                | 35.5              | 18.5 |
| TM10500N7 | 10              | 95                  | 50        | 11              | 1.1x2p -20T                | 34.0              | 18.0 |
| TM15260N7 | 15              | 46                  | 26        | 6               | 1.1x3p -14T                | 33.5              | 18.0 |
| TM25100N7 | 25              | 19                  | 10        | 3               | 1.6x2p -9T                 | 35.5              | 19.0 |
| TM03501N9 | 3               | 780                 | 500       | 120             | 0.8x1p -63T                | 38.5              | 18.5 |
| TM05281N9 | 5               | 470                 | 280       | 61              | 1.0x1p -50T                | 39.5              | 19.0 |
| TM05301N9 | 5               | 510                 | 300       | 62              | 1.0x1p -51T                | 39.5              | 19.0 |
| TM10600N9 | 10              | 100                 | 60        | 12              | 1.6x1p -23T                | 41.5              | 20.0 |
| TM10800N9 | 10              | 140                 | 80        | 15              | 1.1x2p -27T                | 41.0              | 20.5 |
| TM15400N9 | 15              | 70                  | 40        | 8               | 1.1x3p -19T                | 39.5              | 20.0 |
| TM20130N9 | 20              | 20                  | 13        | 4               | 1.3x3p -10T                | 41.0              | 19.5 |
| TM20200N9 | 20              | 39                  | 20        | 5               | 1.3x3p -14T                | 40.5              | 20.5 |

\*1 The inductance at current 0 [A] indicates the reference value.  
 \*2 The number of turns indicates the reference value. The specification of the inductance takes precedence over that of the number of turns.  
 The coils of the lying type are also provided for all the items listed in the table above. For a coil of the type, symbol E should be added to the end of the part number shown in the table (e.g. TM05211N7E).  
 The items preceded by symbol ⊙ include two types, or the depth type with pedestal and the bed type with pedestal. To order the item of the depth or bed type, add D or B at the end of the item of the item name respectively, as shown in the examples below: (TM05211N7D for the depth type with pedestal) (TM05211N7B for the bed type with pedestal)  
 \*Order the auxiliary pins separately if they are required for the pedestal.

### ◆ dc-current pre-loadability (1) <Example>

● Core : T211205N, Frequency : 200kHz



### ◆ dc-current pre-loadability (2) <Example>

● Core : T191210N, Frequency : 200kHz

