

# Mini Drum Core Inductor

AIUR-02H Series



RoHS/RoHS II compliant



12.0 x  $\phi$ 8.5 mm

## FEATURES:

- Ferrite core with heat shrink tube
- High Reliability

## APPLICATIONS:

- Switching Power Supplies
- Noise Filtering
- DC to DC Converters
- Electronic Household Appliances
- Buzzers and Alarm Systems
- Television and Audio Equipment

## STANDARD SPECIFICATIONS:

### PARAMETERS

|                        |                 |
|------------------------|-----------------|
| ABRACON P/N:           | AIUR-02H Series |
| Operating temperature: | -25°C to + 85°C |
| Storage temperature:   | -25°C to + 85°C |

| Part Number  | Inductance | Tolerance | Q (Min) | Test Frequency | DCR (Max) | Saturation Current (Max) | Temperature Rise Current (Max) | Inductance Code |
|--------------|------------|-----------|---------|----------------|-----------|--------------------------|--------------------------------|-----------------|
| Units        | $\mu$ H    | %         |         | MHz            | $\Omega$  | A                        |                                |                 |
| Symbol       | L          | J, K, M   |         |                | DCR       | Isat                     | I <sub>DC</sub>                |                 |
| AIUR-02H-1R0 | 1.0        | M         | 15      | 7.96           | 0.021     | 8.60                     | 3.5                            | 1R0M            |
| AIUR-02H-2R2 | 2.2        | M         | 15      | 7.96           | 0.026     | 6.30                     | 3.2                            | 2R2M            |
| AIUR-02H-3R3 | 3.3        | M         | 15      | 7.96           | 0.030     | 5.40                     | 2.7                            | 3R3M            |
| AIUR-02H-4R7 | 4.7        | M         | 15      | 7.96           | 0.034     | 4.60                     | 2.5                            | 4R7M            |
| AIUR-02H-6R8 | 6.8        | M         | 15      | 7.96           | 0.037     | 4.10                     | 2.3                            | 6R8M            |
| AIUR-02H-100 | 10         | J, K      | 20      | 2.52           | 0.044     | 3.40                     | 2.0                            | 100J/100K       |
| AIUR-02H-120 | 12         | J, K      | 20      | 2.52           | 0.049     | 3.10                     | 1.9                            | 120J/120K       |
| AIUR-02H-150 | 15         | J, K      | 20      | 2.52           | 0.054     | 2.90                     | 1.8                            | 150J/150K       |
| AIUR-02H-180 | 18         | J, K      | 20      | 2.52           | 0.058     | 2.66                     | 1.6                            | 180J/180K       |
| AIUR-02H-220 | 22         | J, K      | 20      | 2.52           | 0.065     | 2.40                     | 1.4                            | 220J/220K       |
| AIUR-02H-270 | 27         | J, K      | 20      | 2.52           | 0.072     | 2.20                     | 1.3                            | 270J/270K       |
| AIUR-02H-330 | 33         | J, K      | 20      | 2.52           | 0.080     | 2.05                     | 1.1                            | 330J/330K       |
| AIUR-02H-390 | 39         | J, K      | 20      | 2.52           | 0.101     | 1.85                     | 1.1                            | 390J/390K       |
| AIUR-02H-470 | 47         | J, K      | 20      | 2.52           | 0.121     | 1.77                     | 0.99                           | 470J/470K       |
| AIUR-02H-560 | 56         | J, K      | 20      | 2.52           | 0.145     | 1.48                     | 0.90                           | 560J/560K       |
| AIUR-02H-680 | 68         | J, K      | 20      | 2.52           | 0.161     | 1.36                     | 0.81                           | 680J/680K       |
| AIUR-02H-820 | 82         | J, K      | 20      | 2.52           | 0.174     | 1.30                     | 0.76                           | 820J/820K       |
| AIUR-02H-101 | 100        | J, K      | 20      | 0.79           | 0.21      | 1.40                     | 0.72                           | 101J/101K       |
| AIUR-02H-121 | 120        | J, K      | 20      | 0.79           | 0.24      | 1.25                     | 0.67                           | 121J/121K       |
| AIUR-02H-151 | 150        | J, K      | 20      | 0.79           | 0.27      | 1.15                     | 0.61                           | 151J/151K       |
| AIUR-02H-181 | 180        | J, K      | 20      | 0.79           | 0.30      | 1.08                     | 0.54                           | 181J/181K       |
| AIUR-02H-221 | 220        | J, K      | 20      | 0.79           | 0.34      | 1.00                     | 0.50                           | 221J/221K       |
| AIUR-02H-271 | 270        | J, K      | 20      | 0.79           | 0.39      | 0.90                     | 0.41                           | 271J/271K       |
| AIUR-02H-331 | 330        | J, K      | 20      | 0.79           | 0.62      | 0.78                     | 0.39                           | 331J/331K       |
| AIUR-02H-391 | 390        | J, K      | 20      | 0.79           | 0.69      | 0.74                     | 0.37                           | 391J/391K       |
| AIUR-02H-471 | 470        | J, K      | 20      | 0.79           | 0.77      | 0.68                     | 0.32                           | 471J/471K       |
| AIUR-02H-561 | 560        | J, K      | 20      | 0.79           | 0.83      | 0.64                     | 0.30                           | 561J/561K       |
| AIUR-02H-681 | 680        | J, K      | 15      | 0.79           | 0.94      | 0.59                     | 0.27                           | 681J/681K       |
| AIUR-02H-821 | 820        | J, K      | 15      | 0.79           | 1.03      | 0.56                     | 0.24                           | 821J/821K       |
| AIUR-02H-102 | 1000       | J, K      | 15      | 0.25           | 1.30      | 0.51                     | 0.22                           | 102J/102K       |
| AIUR-02H-222 | 2200       | J, K      | 15      | 0.25           | 3.00      | 0.20                     | 0.10                           | 222J/222K       |

## Test Conditions and equipments

DCR: QuadTech Milliohmmeter

Isat: 10% inductance drops from initial value

I<sub>DC</sub>: The DC current at which the temperature rise is 40°C max

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12.0 x  $\phi$ 8.5 mm

## ➤ OPTIONS & PART IDENTIFICATION:

AIUR-02H  -

### Lead Length

Blank: 5mm (0.197in)

L: 17mm (0.67in)

### Inductance Code

Please refer to the  
Electrical Spec Table

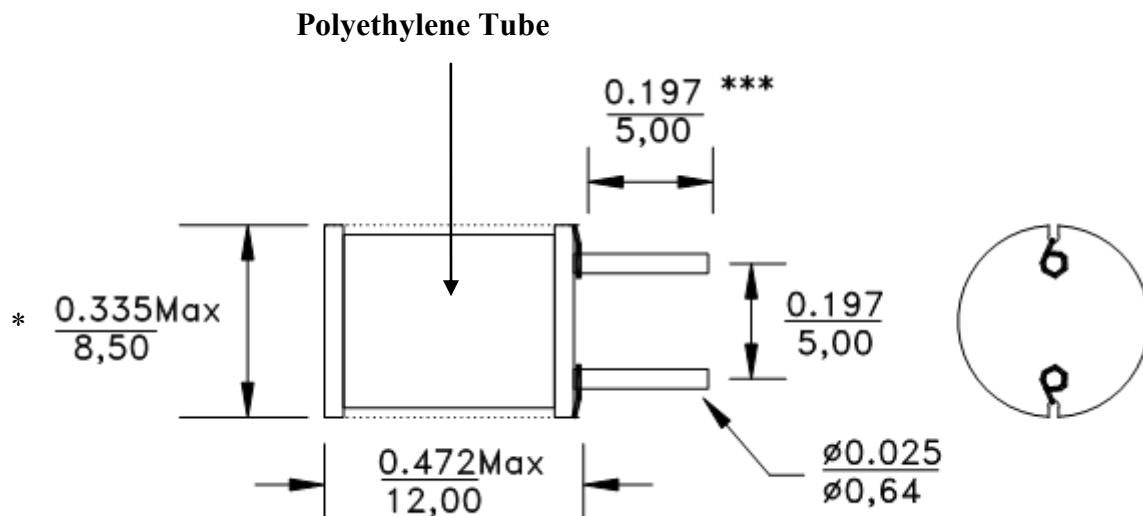
### Tolerance

J:  $\pm 5\%$

K:  $\pm 10\%$

M:  $\pm 20\%$

## ➤ OUTLINE DRAWING:



\*For 220 $\mu$ H and up, diameter = 0.354/9.0 Max

\*\*\* Optional lead length: L: 0.67/17

Dimension: inch/mm

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