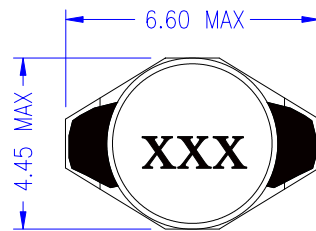
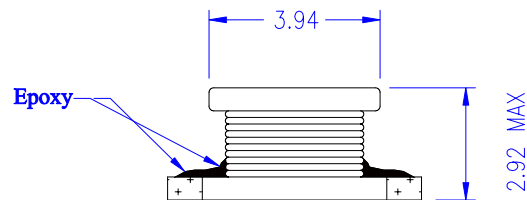


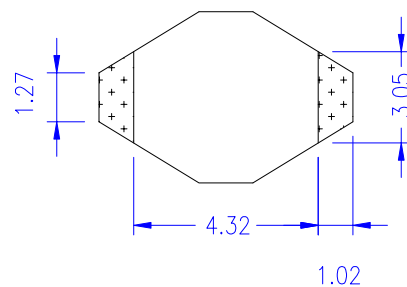
## TOP VIEW



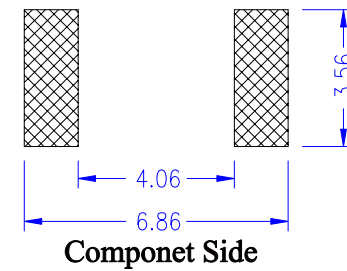
## FRONT VIEW



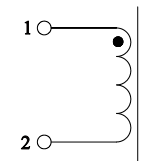
## BOTTOM VIEW



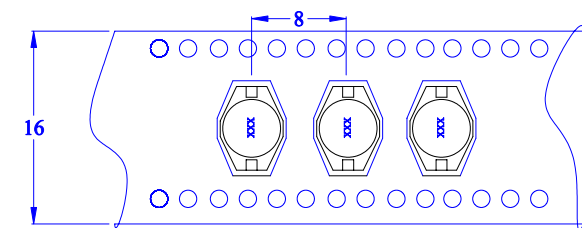
## RECOMMENDED PCB LAYOUT



## SCHEMATIC



## TAPE AND REEL ORIENTATION



User Direction Feed  
2,500 parts per 13" Dia Reel

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### Notes:

- 1) All Dimensions are in millimeters unless otherwise specified.
- 2) Stamp as Shown above--  
Line 1- xxx (xxx=inductance value per family chart)
- 3) Tolerances are +/-0.381mm unless otherwise specified.
- 4) RoHS Compliant

### Cooper Electronic Technologies

3601 Quantum Boulevard, Boynton Beach, FL 33426

Unipac 0.4UC (UP0.4UC) Inductor Line  
SMD, 2.92mm max ht, Drum core/header

Size  
A

Drawing Number: UP0.4UC-R Inductor Line

Revision Level: B

Sheet 3 of 4

| CUSTOMER INFORMATION                                                                   |                       |                        |                                                                                   |  |                                                                              |                           |               |
|----------------------------------------------------------------------------------------|-----------------------|------------------------|-----------------------------------------------------------------------------------|--|------------------------------------------------------------------------------|---------------------------|---------------|
|                                                                                        |                       |                        |                                                                                   |  |                                                                              |                           |               |
| Part Number                                                                            | Rated Inductance (μH) | OCL nominal (μH) @20°C | <u>I<sub>RMS</sub> Amperes</u> for approximately a ΔT of 30°C. above 85°C ambient |  | <u>I<sub>SAT</sub> Amperes Peak</u> for approximately 10 % rolloff (@ 20°C). | DCR milli-(Ω) max @ 20°C. | SRF typ (MHz) |
| <a href="#">UP0.4UC-1R0</a>                                                            | 1.0                   | 1.0+/-20%              | 2.9                                                                               |  | 2.9                                                                          | 50.0                      | 130           |
| <a href="#">UP0.4UC-1R5</a>                                                            | 1.5                   | 1.5 +/-20%             | 2.8                                                                               |  | 2.6                                                                          | 50.0                      | 115           |
| <a href="#">UP0.4UC-2R2</a>                                                            | 2.2                   | 2.2+/-20%              | 2.4                                                                               |  | 2.3                                                                          | 70.0                      | 90            |
| <a href="#">UP0.4UC-3R3</a>                                                            | 3.3                   | 3.3+/-20%              | 2.0                                                                               |  | 2.0                                                                          | 80.0                      | 70            |
| <a href="#">UP0.4UC-4R7</a>                                                            | 4.7                   | 4.7+/-20%              | 1.5                                                                               |  | 1.5                                                                          | 90.0                      | 50            |
| <a href="#">UP0.4UC-6R8</a>                                                            | 6.8                   | 6.8+/-20%              | 1.4                                                                               |  | 1.2                                                                          | 130                       | 45            |
| <a href="#">UP0.4UC-100</a>                                                            | 10.0                  | 10.0+/-20%             | 1.1                                                                               |  | 1.1                                                                          | 160                       | 35            |
| <a href="#">UP0.4UC-150</a>                                                            | 15.0                  | 15.0+/-20%             | 1.0                                                                               |  | 0.9                                                                          | 230                       | 30            |
| <a href="#">UP0.4UC-220</a>                                                            | 22.0                  | 22.0+/-20%             | 0.80                                                                              |  | 0.7                                                                          | 370                       | 20            |
| <a href="#">UP0.4UC-330</a>                                                            | 33.0                  | 33.0+/-20%             | 0.60                                                                              |  | 0.58                                                                         | 510                       | 15            |
| <a href="#">UP0.4UC-470</a>                                                            | 47.0                  | 47.0+/-20%             | 0.50                                                                              |  | 0.5                                                                          | 640                       | 14            |
| <a href="#">UP0.4UC-680</a>                                                            | 68.0                  | 68.0+/-20%             | 0.40                                                                              |  | 0.4                                                                          | 860                       | 11            |
| <a href="#">UP0.4UC-101</a>                                                            | 100                   | 100+/-20%              | 0.30                                                                              |  | 0.31                                                                         | 1270                      | 9             |
| <a href="#">UP0.4UC-151</a>                                                            | 150                   | 150+/-20%              | 0.25                                                                              |  | 0.27                                                                         | 2000                      | 6             |
| <a href="#">UP0.4UC-221</a>                                                            | 220                   | 220+/-20%              | 0.20                                                                              |  | 0.22                                                                         | 3110                      | 5.5           |
| <a href="#">UP0.4UC-331</a>                                                            | 330                   | 330+/-20%              | 0.16                                                                              |  | 0.18                                                                         | 3800                      | 5             |
| <a href="#">UP0.4UC-471</a>                                                            | 470                   | 470+/-20%              | 0.15                                                                              |  | 016                                                                          | 5060                      | 4             |
| <a href="#">UP0.4UC-681</a>                                                            | 680                   | 680+/-20%              | 0.12                                                                              |  | 0.14                                                                         | 9200                      | 3             |
| <a href="#">UP0.4UC-102</a>                                                            | 1000                  | 1000+/-20%             | 0.07                                                                              |  | 0.10                                                                         | 13800                     | 2             |
|                                                                                        |                       |                        |                                                                                   |  |                                                                              |                           |               |
|                                                                                        |                       |                        |                                                                                   |  |                                                                              |                           |               |
|                                                                                        |                       |                        |                                                                                   |  |                                                                              |                           |               |
|                                                                                        |                       |                        |                                                                                   |  |                                                                              |                           |               |
|                                                                                        |                       |                        |                                                                                   |  |                                                                              |                           |               |
| <b>Electrical Requirement Notes:</b> 1) Test Frequency: 100KHz,0.1V      2) DCR @ 20°C |                       |                        |                                                                                   |  |                                                                              |                           |               |
| <b>This Document Is Subject To Change Without Notice.</b>                              |                       |                        |                                                                                   |  |                                                                              |                           |               |

**Electrical Requirement Notes:** 1) Test Frequency: 100KHz,0.1V      2) DCR @ 20°C

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|                                                                                                                                                                                                                                                                                                                                    |             |                                                                                                                                                                     |                                         |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------|
| <b>General Specifications:</b><br>a) Temp. Rise: 30°C typ at Irms<br>b) Inductance drop is approx. 10% at Isat.<br>c) Operating Ambient Temp: -25°C ~ +85°C<br>d) Storage Temp.: -40°C ~ +125°C<br>e) Resistance to Solder Heat: 260°C for 10 secs.<br>Parts available in Tape and Reel. 13” diameter reel : 2,500 parts per reel. |             | <b>Cooper Electronic Technologies</b><br>3601 Quantum Blvd, Boynton Beach, FL 33426<br>Unipac 0.4UC (UP0.4UC) Inductor Line<br>SMD, 2.92mm max ht, Drum core/header |                                         |
| Option Code (Suffix)                                                                                                                                                                                                                                                                                                               | Description | SIZE                                                                                                                                                                | Drawing Number: UP0.4UC-R Inductor Line |