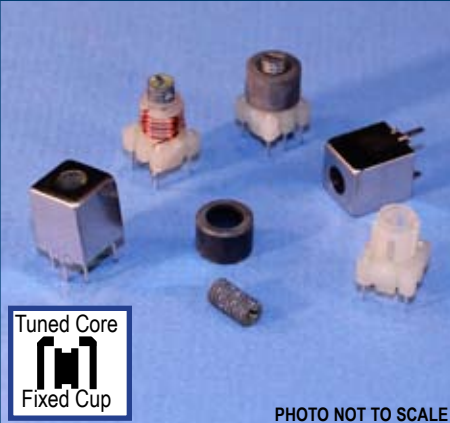


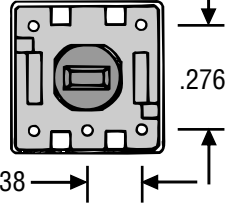
## L41 SERIES



Tuned Core  
Fixed Cup

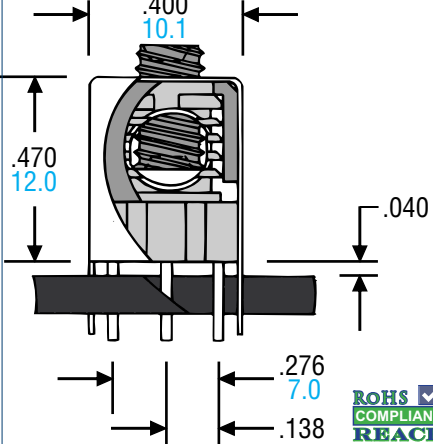
PHOTO NOT TO SCALE


Inches/[mm]  
±.010/[±.25]  
2 x size



- Stable Inductance
- High and Stable Q
- Superior Temperature Stability
- Q vs Frequency Graph on Page 5
- Winding Capacity Table on Page 6
- Available as: Un-wound Hardware Only
- Quality Inspection Level: MIL-STD-1916 Level IV

10mm





| ASSEMBLY PART NO. | COLOR CODE | MAGNETIC MATERIAL(1) | FREQUENCY RANGE(2) | MATERIAL PERMEABILITY | ASSEMBLY AL nH/turns <sup>2</sup> (3) | MAX μh 100 turns | MIN μh (4) 100 turns | TEMPERATURE STABILITY(5) |
|-------------------|------------|----------------------|--------------------|-----------------------|---------------------------------------|------------------|----------------------|--------------------------|
| L41-2-BT-F-5      | RED        | CARBONYL E           | .25-10 MHZ         | 10.0                  | 11.5                                  | 115              | 64                   | 95 ppm/°C                |
| L41-3-BT-F-5      | GREY       | CARBONYL HP          | .02-1.0 MHZ        | 35.0                  | 15                                    | 150              | 66                   | 370 ppm/°C               |
| L41-6-BT-F-5      | YELLOW     | CARBONYL SF          | 2.0-50 MHZ         | 8.5                   | 10.5                                  | 105              | 63                   | 35 ppm/°C                |
| L41-10-BT-F-5     | BLACK      | CARBONYL W           | 10-100 MHZ         | 6.0                   | 8                                     | 80               | 62                   | 150 ppm/°C               |
| L41-17-BT-F-5     | LAVENDER   | CARBONYL             | 20-200 MHZ         | 4                     | 6                                     | 60               | 50                   | 50 ppm/°C                |

1) The iron powder or ferrite materials are used in the tuning core and cup core.

2) This represents the frequency range for Q optimization in tuned or resonant circuits. The inductive properties of the material is effective over a considerably wider frequency range.

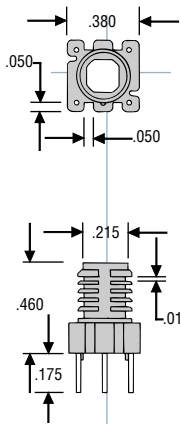
3) Nanohenries (10<sup>9</sup> Henries) per turn squared.

4) The minimum inductance is measured in microhenries (10<sup>6</sup> Henries) per 100 turns with the tuning core tuned out of the winding area but still a part of the assembly.

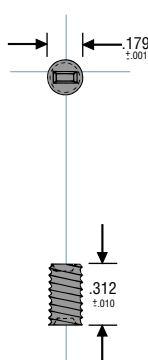
5) The temperature stability is of the magnetic material, measured in parts per million per degree Celsius (ppm/°C) on a toroidal core and winding. This is only an indication of the temperature stability for a complete wound assembly.

### Assembly Sub-components

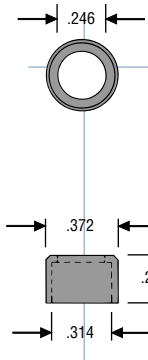
Actual Size



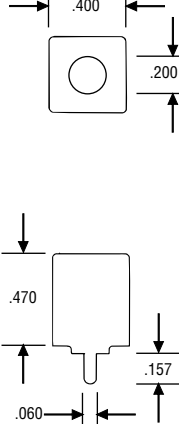
B325



TH35-3( )



C12-40( )



CN325BT

Inches/[mm]  
±.010/[±.25]

| 5 TERMINAL ASSEMBLY | BASE ONLY (6) | COLOR CODE | TUNING CORE (7) | CUP CORE | SHIELD CAN |
|---------------------|---------------|------------|-----------------|----------|------------|
| L41-2-BT-F-5        | B325          | RED        | TH35-302        | C12-4002 | CN325BT    |
| L41-3-BT-F-5        | B325          | GREY       | TH35-303        | C12-4003 | CN325BT    |
| L41-6-BT-F-5        | B325          | YELLOW     | TH35-306        | C12-4006 | CN325BT    |
| L41-10-BT-F-5       | B325          | BLACK      | TH35-310        | C12-4010 | CN325BT    |
| L41-17-BT-F-5       | B325          | LAVENDER   | TH35-317        | C12-4017 | CN325BT    |

6) The base and self threading segregated coil form are one piece, moulded from nylon 6/6 and will require careful heat management. The 5 terminals available are half hard brass, .025 inches in diameter, tin plated to MIL-STD 202 Method 208 for solderability.

7) The tuning core is 10-32 shallow thread coated with Teflon.