



# RADIAL LEADED POWER LINE CHOKES

## AIRD 05 SERIES

### FEATURES:

- High Saturation Material
- Polyolefin Shrink Tubing
- Low DC Resistance
- High Reliability Low cost

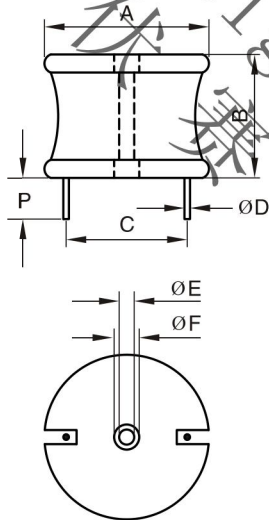
### OPTIONS:

- Packaging: Tape & Reel is Standard (Qty: 1000 pcs)  
Bulk packaging available for smaller quantities
- Tolerance: 10% is standard, tighter tolerances available.

### COMMON APPLICATIONS:

- Switching Regulators
- RFI Suppression Filters
- Power Amplifiers
- Power Supplies
- SCR and Triac Controls
- Speaker Crossover Networks
- Automotive Systems
- Filters

### PHYSICAL CHARACTERISTICS



DIMENSIONS: inches/mm

| A          | B          | P(min)    | ØE        | ØF        |
|------------|------------|-----------|-----------|-----------|
| 1.60/40.64 | 1.45/36.83 | 0.50/12.7 | 0.10/2.54 | 0.25/6.35 |

### ELECTRONICAL SCHEMATIC



### TECHNICAL INFORMATION:

The AIRD-05,06,07,08 Series of Power Line Choke is available in 367 standard values covering a wide range of inductance and current. The use of high saturation flux density material make these coils ideal for use in switching regulated power supply applications and wherever high current choke values in a small physical size are needed.

- Inductance Testing: HP4284A, HP4285A or equivalent
- RDC: QuadTech 1880 Milliohmeter
- Rated Current: L value drop 10% typ. at  $I_{DC}$  against its initial value
- Temperature rise 40°C Max Reference ambient temperature
- Solderability: 75% of the lead wire shall be covered
- Soldering Methods: Wave, Reflow
- Operating Temperature: -25°C to +85°C
- Storage Temperature: -55°C to +125°C
- Terminal bending strength: 24.5N Min
- Moisture resistance:  $\Delta L/L \leq \pm 10\%$

Note: All specifications subject to change without notice.

### STANDARD SPECIFICATIONS

| Part Number | L ( $\mu$ H) @1KHz | DCR ( $\Omega$ Max) | IDC (A Max) | Dim C (Inches/mm) Approx. | Dim Ø D (Inches/mm) Nom. |
|-------------|--------------------|---------------------|-------------|---------------------------|--------------------------|
| AIRD05-1R8M | 1.8                | 0.002               | 35.0        | 1.11/28.194               | 0.105/2.667              |
| AIRD05-2R2M | 2.2                | 0.002               | 35.0        | 1.11/28.194               | 0.105/2.667              |
| AIRD05-2R7M | 2.7                | 0.002               | 35.0        | 1.11/28.194               | 0.105/2.667              |
| AIRD05-3R3M | 3.3                | 0.002               | 35.0        | 1.11/28.194               | 0.105/2.667              |
| AIRD05-3R9M | 3.9                | 0.003               | 35.0        | 1.11/28.194               | 0.105/2.667              |
| AIRD05-4R7M | 4.7                | 0.003               | 35.0        | 1.11/28.194               | 0.105/2.667              |
| AIRD05-5R6M | 5.6                | 0.003               | 35.0        | 1.11/28.194               | 0.105/2.667              |
| AIRD05-6R8M | 6.8                | 0.003               | 35.0        | 1.11/28.194               | 0.105/2.667              |
| AIRD05-8R2M | 8.2                | 0.003               | 35.0        | 1.11/28.194               | 0.105/2.667              |
| AIRD05-100K | 10.0               | 0.004               | 35.0        | 1.11/28.194               | 0.105/2.667              |
| AIRD05-120K | 12.0               | 0.004               | 35.0        | 1.16/29.464               | 0.105/2.667              |
| AIRD05-150K | 15.0               | 0.005               | 35.0        | 1.16/29.464               | 0.105/2.667              |
| AIRD05-180K | 18.0               | 0.007               | 27.0        | 1.16/29.464               | 0.094/2.3876             |
| AIRD05-220K | 22.0               | 0.007               | 27.0        | 1.16/29.464               | 0.094/2.3876             |
| AIRD05-270K | 27.0               | 0.008               | 27.0        | 1.16/29.464               | 0.094/2.3876             |
| AIRD05-330K | 33.0               | 0.009               | 27.0        | 1.16/29.464               | 0.094/2.3876             |
| AIRD05-390K | 39.0               | 0.010               | 27.0        | 1.16/29.464               | 0.094/2.3876             |
| AIRD05-470K | 47.0               | 0.011               | 27.0        | 1.16/29.464               | 0.094/2.3876             |
| AIRD05-560K | 56.0               | 0.013               | 21.0        | 1.16/29.464               | 0.094/2.3876             |
| AIRD05-680K | 68.0               | 0.015               | 21.0        | 1.25/31.750               | 0.84/2.1336              |
| AIRD05-820K | 82.0               | 0.017               | 21.0        | 1.28/32.512               | 0.84/2.1336              |
| AIRD05-101K | 100.0              | 0.018               | 21.0        | 1.25/31.750               | 0.84/2.1336              |
| AIRD05-121K | 120.0              | 0.022               | 17.0        | 1.16/29.464               | 0.075/1.9152             |
| AIRD05-151K | 150.0              | 0.025               | 17.0        | 1.16/29.464               | 0.075/1.9152             |
| AIRD05-181K | 180.0              | 0.035               | 13.5        | 1.10/27.94                | 0.068/1.7272             |
| AIRD05-221K | 220.0              | 0.040               | 13.5        | 1.10/27.94                | 0.068/1.7272             |
| AIRD05-271K | 270.0              | 0.044               | 13.5        | 1.10/27.94                | 0.068/1.7272             |
| AIRD05-331K | 330.0              | 0.049               | 13.5        | 1.11/28.194               | 0.068/1.7272             |
| AIRD05-390K | 390.0              | 0.070               | 11.4        | 1.15/29.21                | 0.060/1.524              |
| AIRD05-471K | 470.0              | 0.078               | 11.4        | 1.07/27.178               | 0.060/1.524              |
| AIRD05-561K | 560.0              | 0.105               | 9.0         | 1.07/27.178               | 0.054/1.3716             |
| AIRD05-681K | 680.0              | 0.115               | 9.0         | 1.07/27.178               | 0.054/1.3716             |
| AIRD05-820K | 820.0              | 0.127               | 9.0         | 1.12/28.448               | 0.054/1.3716             |
| AIRD05-102K | 1000.0             | 0.176               | 7.2         | 1.12/28.448               | 0.048/1.2192             |
| AIRD05-122K | 1200.0             | 0.195               | 7.2         | 1.12/28.448               | 0.048/1.2192             |
| AIRD05-152K | 1500.0             | 0.274               | 5.5         | 1.12/28.448               | 0.043/1.0922             |
| AIRD05-182K | 1800.0             | 0.302               | 5.5         | 1.13/28.702               | 0.043/1.0922             |
| AIRD05-222K | 2200.0             | 0.338               | 5.5         | 1.16/29.464               | 0.043/1.0922             |
| AIRD05-272K | 2700.0             | 0.459               | 4.5         | 1.02/25.908               | 0.039/0.9906             |
| AIRD05-332K | 3300.0             | 0.642               | 4.0         | 1.02/25.908               | 0.035/0.8890             |
| AIRD05-392K | 3900.0             | 0.699               | 4.0         | 1.14/28.956               | 0.035/0.8890             |
| AIRD05-472K | 4700.0             | 0.775               | 4.0         | 1.14/28.956               | 0.035/0.8890             |
| AIRD05-562K | 5600.0             | 0.843               | 4.0         | 1.14/28.956               | 0.035/0.8890             |
| AIRD05-682K | 6800.0             | 1.15                | 2.8         | 1.06/26.924               | 0.031/0.7874             |
| AIRD05-822K | 8200.0             | 1.26                | 2.8         | 1.16/29.464               | 0.031/0.7874             |
| AIRD05-103K | 10000.0            | 1.74                | 2.0         | 1.13/28.702               | 0.028/0.7112             |
| AIRD05-123K | 12000.0            | 1.92                | 2.0         | 1.13/28.702               | 0.028/0.7112             |
| AIRD05-153K | 15000.0            | 2.17                | 2.0         | 1.13/28.702               | 0.028/0.7112             |

Note: K= ± 10%, M= ± 20%