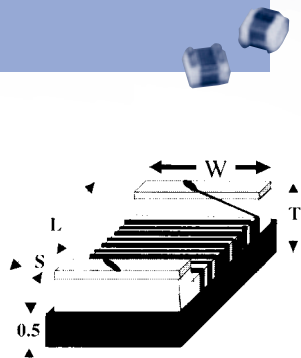


# Wire Wound Chip

Surface Mount

ADWIA Series

## ADWIA



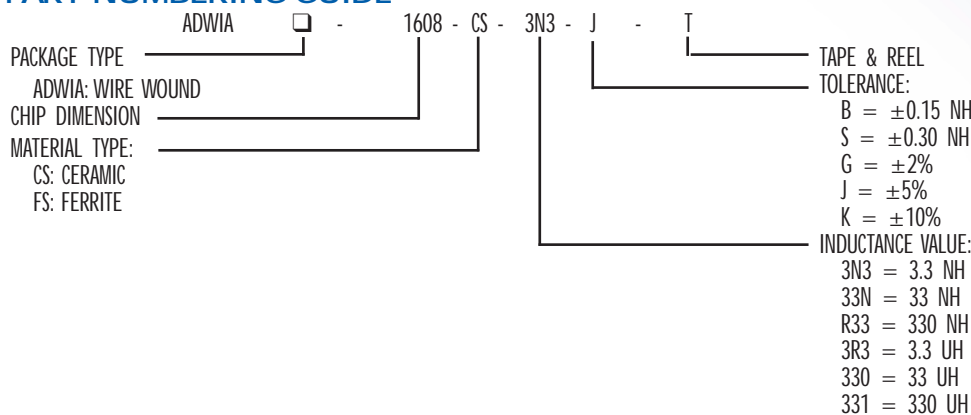
### INTRODUCTION

The ADWIA series are wire wound type chip inductors widely used in the communication applications such as cellular phones, pagers, television tuners, radios, and other electronic devices. The wire wound features advance in higher self resonate frequency, better Q factor, and much stabler performance.

### FEATURES

- Operating Temperature: -40°C to 85°C.
- Excellent solderability and resistance to soldering heat.
- Suitable for flow and reflow soldering.
- Good dimensions, high reliability, and easy surface mount assembly.
- 3 types of materials provide wide range of induction value for flexible needs.

### PART NUMBERING GUIDE



### SPECIFICATIONS

| SIZE       | LENGTH (L)      | WIDTH (W)       | THICKNESS (T)   | TERMINAL (S)    |
|------------|-----------------|-----------------|-----------------|-----------------|
|            | (inch)<br>mm    | (inch)<br>mm    | (inch)<br>mm    | (inch)<br>mm    |
| ADWIA-0603 | (0.063 ± 0.008) | (0.041 ± 0.008) | (0.041 ± 0.008) | (0.014 ± 0.004) |
|            | 1.60 ± 0.2      | 1.05 ± 0.2      | 1.05 ± 0.2      | 0.35 ± 0.1      |
| ADWIA-0805 | (0.080 ± 0.008) | (0.050 ± 0.008) | (0.048 ± 0.008) | (0.016 ± 0.004) |
|            | 2.00 ± 0.2      | 1.25 ± 0.2      | 1.20 ± 0.2      | 0.40 ± 0.1      |
| ADWIA-1008 | (0.098 ± 0.008) | (0.063 ± 0.008) | (0.063 ± 0.008) | (0.020 ± 0.004) |
|            | 2.5 ± 0.2       | 2.00 ± 0.2      | 1.60 ± 0.2      | 0.50 ± 0.1      |
| ADWIA-1210 | (0.126 ± 0.008) | (0.098 ± 0.008) | (0.087 ± 0.008) | (0.020 ± 0.004) |
|            | 3.20 ± 0.2      | 2.50 ± 0.2      | 2.20 ± 0.2      | 0.50 ± 0.1      |

# Wire Wound Chip

Surface Mount

ADWIA Ceramic Series



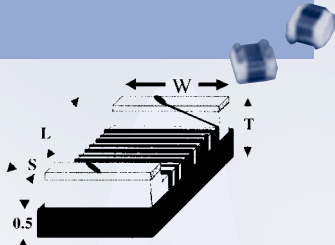
## ADWIA-1008CS

### INTRODUCTION

The ADWIA series are wire wound type chip inductors widely used in the communication applications such as cellular phones, pagers, television tuners, radios, and other electronic devices. The wire wound features advance in higher self resonate frequency, better Q factor, and much stabler performance.

### FEATURES

- Operating Temperature: -40°C to 85°C.
- Excellent solderability and resistance to soldering heat.
- Suitable for flow and reflow soldering.
- Good dimensions, high reliability, and easy surface mount assembly.
- 3 types of materials provide wide range of induction value for flexible needs.



### SPECIFICATIONS

| Size       | Length (L)<br>(inch)<br>mm   | Width (W)<br>(inch)<br>mm     | Thickness (T)<br>(inch)<br>mm | Terminal (S)<br>(inch)<br>mm  |
|------------|------------------------------|-------------------------------|-------------------------------|-------------------------------|
| ADWIA-1008 | (0.098 ± 0.008)<br>2.5 ± 0.2 | (0.063 ± 0.008)<br>2.00 ± 0.2 | (0.063 ± 0.008)<br>1.60 ± 0.2 | (0.020 ± 0.004)<br>0.50 ± 0.1 |

### ADWIA-1008CS (2520) SERIES STANDARD SPECIFICATIONS

| PACKAGE TYPE        | INDUCTANCE <sup>1</sup><br>(nH) | PERCENT<br>TOLERANCE | Q <sup>2</sup><br>min. | S.R.F. <sup>3</sup><br>min. (MHz) | RDC <sup>4</sup><br>max. (Ω) | IDC <sup>5</sup><br>max. (mA) |
|---------------------|---------------------------------|----------------------|------------------------|-----------------------------------|------------------------------|-------------------------------|
| ADWIA-1008CS 030 □T | 3.3 @ 100 MHz                   | B,S                  | 50 @ 1000 MHz          | 6000                              | 0.06                         | 600                           |
| ADWIA-1008CS 060 □T | 6.8 @ 100 MHz                   | K,J,G                | 50 @ 1000 MHz          | 5500                              | 0.06                         | 600                           |
| ADWIA-1008CS 080 □T | 8.2 @ 100 MHz                   | K,J,G                | 50 @ 1000 MHz          | 5500                              | 0.06                         | 600                           |
| ADWIA-1008CS 100 □T | 10 @ 100 MHz                    | K,J,G                | 50 @ 1000 MHz          | 4300                              | 0.08                         | 600                           |
| ADWIA-1008CS 120 □T | 12 @ 100 MHz                    | K,J,G                | 60 @ 500 MHz           | 3600                              | 0.08                         | 600                           |
| ADWIA-1008CS 150 □T | 15 @ 100 MHz                    | K,J,G                | 60 @ 500 MHz           | 2700                              | 0.08                         | 600                           |
| ADWIA-1008CS 180 □T | 18 @ 100 MHz                    | K,J,G                | 60 @ 350 MHz           | 2700                              | 0.10                         | 600                           |
| ADWIA-1008CS 220 □T | 22 @ 100 MHz                    | K,J,G                | 60 @ 350 MHz           | 2500                              | 0.10                         | 600                           |
| ADWIA-1008CS 270 □T | 27 @ 100 MHz                    | K,J,G                | 60 @ 350 MHz           | 1800                              | 0.10                         | 600                           |
| ADWIA-1008CS 330 □T | 33 @ 100 MHz                    | K,J,G                | 60 @ 350 MHz           | 1700                              | 0.10                         | 600                           |
| ADWIA-1008CS 390 □T | 39 @ 100 MHz                    | K,J,G                | 60 @ 350 MHz           | 1500                              | 0.10                         | 600                           |
| ADWIA-1008CS 470 □T | 47 @ 100 MHz                    | K,J,G                | 60 @ 350 MHz           | 1500                              | 0.10                         | 600                           |
| ADWIA-1008CS 560 □T | 56 @ 100 MHz                    | K,J,G                | 60 @ 350 MHz           | 1350                              | 0.12                         | 600                           |
| ADWIA-1008CS 680 □T | 68 @ 100 MHz                    | K,J,G                | 60 @ 350 MHz           | 1300                              | 0.15                         | 600                           |
| ADWIA-1008CS 820 □T | 82 @ 100 MHz                    | K,J,G                | 60 @ 350 MHz           | 1100                              | 0.18                         | 600                           |
| ADWIA-1008CS 101 □T | 100 @ 100 MHz                   | K,J,G                | 60 @ 350 MHz           | 1100                              | 0.18                         | 500                           |
| ADWIA-1008CS 121 □T | 120 @ 25 MHz                    | K,J,G                | 50 @ 100 MHz           | 950                               | 0.20                         | 500                           |
| ADWIA-1008CS 151 □T | 150 @ 25 MHz                    | K,J,G                | 50 @ 100 MHz           | 880                               | 0.22                         | 500                           |
| ADWIA-1008CS 181 □T | 180 @ 25 MHz                    | K,J,G                | 50 @ 100 MHz           | 800                               | 0.33                         | 500                           |
| ADWIA-1008CS 221 □T | 220 @ 25 MHz                    | K,J,G                | 45 @ 100 MHz           | 730                               | 0.45                         | 500                           |
| ADWIA-1008CS 271 □T | 270 @ 25 MHz                    | K,J,G                | 45 @ 100 MHz           | 650                               | 0.75                         | 500                           |
| ADWIA-1008CS 331 □T | 330 @ 25 MHz                    | K,J,G                | 45 @ 100 MHz           | 570                               | 0.90                         | 500                           |
| ADWIA-1008CS 391 □T | 390 @ 25 MHz                    | K,J,G                | 45 @ 100 MHz           | 530                               | 1.20                         | 400                           |
| ADWIA-1008CS 471 □T | 470 @ 25 MHz                    | K,J,G                | 45 @ 100 MHz           | 480                               | 1.30                         | 400                           |
| ADWIA-1008CS 561 □T | 560 @ 25 MHz                    | K,J,G                | 45 @ 100 MHz           | 430                               | 1.45                         | 300                           |
| ADWIA-1008CS 681 □T | 680 @ 25 MHz                    | K,J,G                | 45 @ 100 MHz           | 380                               | 2.45                         | 200                           |
| ADWIA-1008CS 751 □T | 750 @ 25 MHz                    | K,J,G                | 45 @ 100 MHz           | 360                               | 2.60                         | 150                           |
| ADWIA-1008CS 821 □T | 820 @ 25 MHz                    | K,J,G                | 45 @ 100 MHz           | 350                               | 2.75                         | 150                           |
| ADWIA-1008CS 911 □T | 910 @ 25 MHz                    | K,J,G                | 45 @ 100 MHz           | 330                               | 3.25                         | 90                            |
| ADWIA-1008CS 102 □T | 1000 @ 25 MHz                   | K,J,G                | 35 @ 50 MHz            | 310                               | 3.60                         | 90                            |

<sup>1</sup>Inductance is measured in HP-4291B impedance analyzer with HP-16192 fixture. <sup>2</sup>Q is measured in HP-4291B impedance analyzer with HP-16192 fixture.

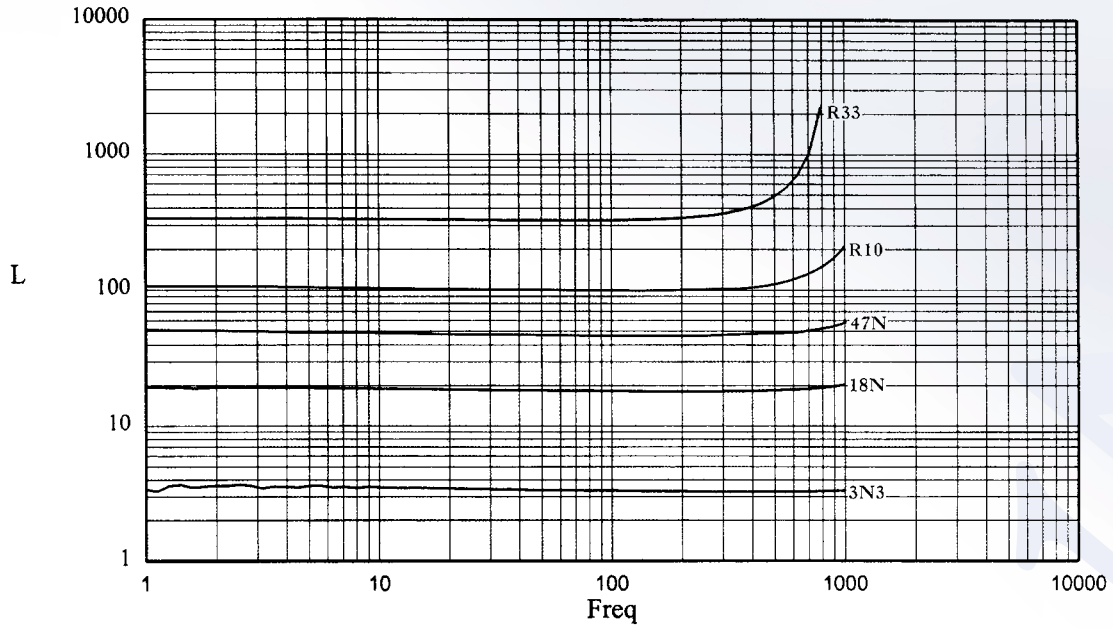
<sup>3</sup>SRF is measured in HP-8753E RF network analyzer with HP-16192 fixture. <sup>4</sup>RDC is measured in HP-4338B milliohmmeter. <sup>5</sup>For 15°C Rise.

# Wire Wound Chip

Surface Mount

ADWIA Ceramic Series — Continued

ELECTRICAL CHARACTERISTIC  
ADWIA-1008CS (2520)



ADWIA-1008CS (2520)

