

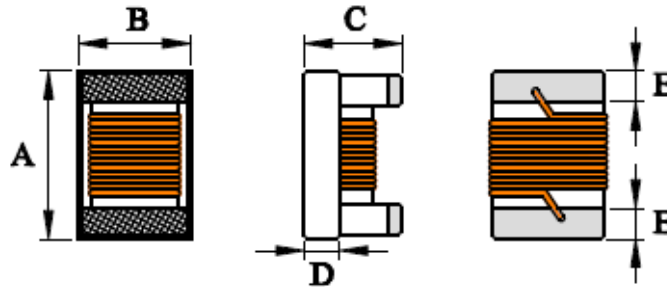
# WHI2012U-xxxx Series Specification

## SMD Wire Wound Chip Inductor

### APPLICATION

Smart phones, tablet terminals, tuners, LCD-TVs, PDP-TVs, audio equipment, computers, signal processing for modules etc.

### 1. Shapes and Dimensions



Unit: mm

Type	A	B	C	D	E
WHI2012U	2.30 (Max.)	1.75 (Max.)	1.55 (Max.)	0.51 (Ref.)	0.44±0.1

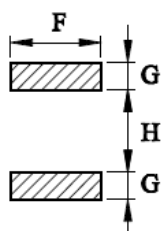
### 2. Ordering / Part Number Information

WHI 2012 U - 2N8 □  
(1) (2) (3) (4) (5)

- (1) Product Group
  - (2) Dimension Code
  - (3) Type Code
  - (4) Inductance Code
  - (5) Inductance Tolerance
- C= ±0.2nH, G= ±2%

### 3. Recommended Soldering Condition

#### 3-1. Recommended Land Pattern

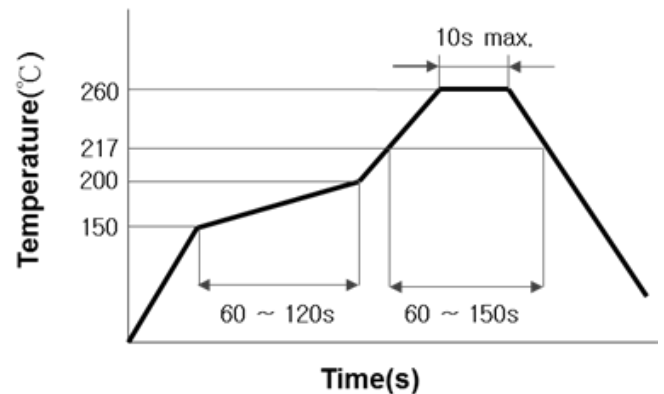


Unit : mm

Symbol	Dimension
F	1.78
G	1.00
H	0.80

The Recommended Land pattern is for reference only.  
Please consult your manufacturing partners to ensure your company's PCB design guidelines are met

#### 3-2. Recommended Soldering Profile



## 4. Electrical Characteristics

### 4-1. Electrical Specification

Part Number	Inductance	Test Frequency	DC Resistance (RDC) Max.	Rated Current (IDC) Max.	Q / Test Freq. Min.	Self-Resonant Frequency (Min.)
WHI2012U-2N8C	2.8nH ±0.2nH	250MHz	0.06Ω	800mA	80/1500	7900MHz
WHI2012U-3N0C	3.0nH ±0.2nH	250MHz	0.06Ω	800mA	65/1500	7900MHz
WHI2012U-3N3C	3.3nH ±0.2nH	250MHz	0.08Ω	600mA	50/1500	7900MHz
WHI2012U-5N6C	5.6nH ±0.2nH	250MHz	0.08Ω	600mA	65/1000	5500MHz
WHI2012U-6N8C	6.8nH ±0.2nH	250MHz	0.11Ω	600mA	50/1000	5500MHz
WHI2012U-7N5C	7.5nH ±0.2nH	250MHz	0.14Ω	600mA	50/1000	4500MHz
WHI2012U-8N2C	8.2nH ±0.2nH	250MHz	0.12Ω	600mA	50/1000	4700MHz
WHI2012U-10NG	10.0nH ±2%	250MHz	0.10Ω	600mA	60/500	4200MHz
WHI2012U-12NG	12.0nH ±2%	250MHz	0.15Ω	600mA	50/500	4000MHz
WHI2012U-15NG	15.0nH ±2%	250MHz	0.17Ω	600mA	50/500	3400MHz
WHI2012U-18NG	18.0nH ±2%	250MHz	0.20Ω	600mA	50/500	3300MHz
WHI2012U-22NG	22.0nH ±2%	250MHz	0.22Ω	500mA	55/500	2600MHz
WHI2012U-24NG	24.0nH ±2%	250MHz	0.22Ω	500mA	50/500	2000MHz
WHI2012U-27NG	27.0nH ±2%	250MHz	0.25Ω	500mA	55/500	2500MHz
WHI2012U-33NG	33.0nH ±2%	250MHz	0.27Ω	500mA	60/500	2050MHz
WHI2012U-36NG	36.0nH ±2%	250MHz	0.27Ω	500mA	55/500	1700MHz
WHI2012U-39NG	39.0nH ±2%	250MHz	0.29Ω	500mA	60/500	2000MHz
WHI2012U-43NG	43.0nH ±2%	200MHz	0.34Ω	500mA	60/500	1650MHz
WHI2012U-47NG	47.0nH ±2%	200MHz	0.33Ω	500mA	60/500	1650MHz
WHI2012U-56NG	56.0nH ±2%	200MHz	0.34Ω	500mA	60/500	1550MHz
WHI2012U-68NG	68.0nH ±2%	200MHz	0.38Ω	500mA	60/500	1450MHz
WHI2012U-82NG	82.0nH ±2%	150MHz	0.42Ω	400mA	65/500	1300MHz
WHI2012U-91NG	91.0nH ±2%	150MHz	0.48Ω	400mA	65/500	1200MHz
WHI2012U-R10G	100.0nH ±2%	150MHz	0.48Ω	400mA	65/500	1200MHz
WHI2012U-R11G	110.0nH ±2%	150MHz	0.48Ω	400mA	50/250	1000MHz
WHI2012U-R12G	120.0nH ±2%	150MHz	0.51Ω	400mA	50/250	1100MHz
WHI2012U-R15G	150.0nH ±2%	100MHz	0.56Ω	400mA	50/250	920MHz
WHI2012U-R18G	180.0nH ±2%	100MHz	0.64Ω	400mA	50/250	870MHz
WHI2012U-R20G	200.0nH ±2%	100MHz	0.68Ω	400mA	50/250	860MHz
WHI2012U-R22G	220.0nH ±2%	100MHz	0.70Ω	400mA	50/250	850MHz
WHI2012U-R24G	240.0nH ±2%	100MHz	1.00Ω	350mA	44/250	690MHz
WHI2012U-R25G	250.0nH ±2%	100MHz	1.20Ω	350mA	45/250	660MHz
WHI2012U-R27G	270.0nH ±2%	100MHz	1.00Ω	350mA	48/250	650MHz
WHI2012U-R33G	330.0nH ±2%	100MHz	1.40Ω	310mA	48/250	600MHz

The specifications are subject to change or our products in it may be discontinued without advance notice.  
Please check with our sales representatives or product engineers before ordering.  
Version: 1.4

WHI2012U-R39G	390.0nH ±2%	100MHz	1.50Ω	290mA	48/250	560MHz
WHI2012U-R47G	470.0nH ±2%	50MHz	1.70Ω	250mA	33/100	375MHz
WHI2012U-R56G	560.0nH ±2%	25MHz	1.90Ω	230mA	23/50	340MHz
WHI2012U-R62G	620.0nH ±2%	25MHz	2.20Ω	210mA	23/50	220MHz
WHI2012U-R68G	680.0nH ±2%	25MHz	2.20Ω	190mA	23/50	188MHz
WHI2012U-R82G	820.0nH ±2%	25MHz	2.35Ω	180mA	23/50	215MHz
WHI2012U-1R0G	1000.0nH ±2%	25MHz	2.50Ω	170mA	20/50	100MHz

Note1. Applied the current to coils, the inductance change shall be less than 20% to initial value

#### 4-2. Operating Temperature Range

-40°C to +125°C (Including self - temperature rise)

#### 4-3. Storage Temperature Range

Store this product under the condition of 5°C to 40°C, 20% to 70%RH and use within 6 months

### 5. Packaging Information

Standard Quantity for Packaging: 2,000 pcs/Reel

#### Note

1. Please make sure that your product is has been evaluated and confirmed against your specifications when our product is mounted to your product.
2. Do not knock nor drop.
3. All the items and parameters in this product specification have been prescribed on the premise that our product is used for the purpose, under the condition and in the environment agreed upon between you and us. You are requested not to use our product deviating from such agreement.
4. Please keep the distance between transformer/coil and other components (refer to the standard IEC 950)