ASIM

Molded Wire Wound Ferrite Chip Inductor

鑄模繞線式鐵氧體電感

NTRODUCTION 產品介紹

These revolutionary, highly reliable wire wound chip inductors for automatic mounting have been developed in response to the trend toward high density in electronic equipment. With metal terminals and a body of heat resistant resin, these inductors offer many superior features.

為了因應電子設備漸趨高密度黏著之趨式，我們開發了 AWFI 這一系列高信賴度繞線電感，由於本體由耐熱樹脂做成加上金屬電極端，本系列電感提供更優越之特性。

FEATURE 特色

1. Operating temperature： -40℃ to +80℃.

   操作溫度：-40℃至+80℃。

2. Excellent solderability and resistance to soldering heat.

   優越之焊錫性及焊錫熱阻抗。

3. Suitable for flow and reflow soldering.

   適合 Flow 及 Reflow 兩種焊錫方式。

4. JIS/EIA dimensions, high reliability, and easy for surface mount assembly.

   標準 JIS/EIA 尺寸、高信賴性、易於表面黏著組裝。

5. Wide range of inductance values is available for flexible needs.

   涵蓋之感值範圍相當寬，適合各種彈性需求。

6. Consisting of 1608、2012.

   包含 1608、2012 尺寸。

APPLICATION 適用產品

1. Personal computer.

   個人電腦。

2. Disk drivers and Computer peripherals.

   各式磁碟及電腦週邊設備。

3. Communication.

   通訊設備。

4. VCD,DVD, and TV-circuit

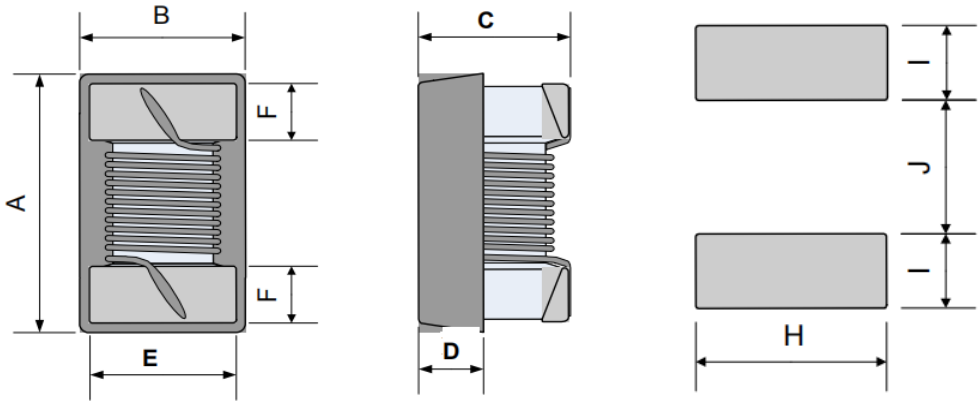
   VCD、DVD 及 TV 電路。

5. Test equipment.

   測試設備。

SIZE AND DIMENSION 尺寸及邊長

Land Pattern



Unit:mm

SIZE 尺寸	A Max.	B Max.	C Max.	D Ref.	E Typ.	F Typ.	H Typ.	I Typ.	J Typ.
1608(0603)	1.80	1.32	1.12	0.38	0.76	0.33	1.02	0.64	0.94
2012(0805)	2.29	1.73	1.3	0.61	1.27	0.51	1.78	1.02	1.06

PART NUMBER SYSTEM 編碼系統

AWLI 1608 1R0 □ T

Packing

Inductance Toierance
M – ±20% K– ±10%

Expressed in nH or μH 以 nH 或μH 表示
Example: μ例如：
R12 – 0.12μH
3R3 – 3.3 H

Size Code 尺寸碼

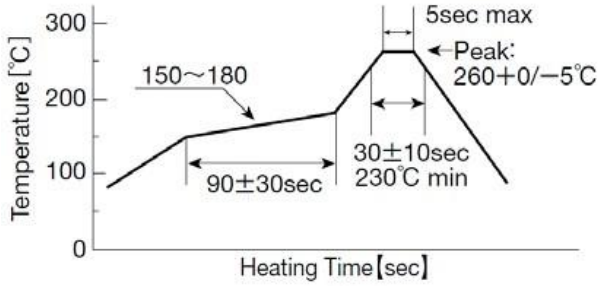
Dimensions L×W×T mm 尺寸 長×寬×厚 mm

1608 1.6 × 0.8

Product Series Code 產品系列碼

RECOMMENDED SOLDERING CONDITION 建议焊锡方式

REFLOW SOLDERING 回流焊



1)For reflow soldering with either leaded or lead-free solder,the profile specifiedin "point for controlling" is recommended.

2)Put the soldering iron on the land-pattern. Soldering iron'stemperature-Below 350 ℃ Duration-3 seconds or less. The soldering iron should not come in contact with inductor directly.

◆CLEANING

In the case of ultrasonic cleaning, too much power output can cause excessive vibration of the PC board which may lead to the cracking of the inductor or the soldered portion, or decrease the terminal electrodes' strength. Thus the following conditions should be carefully checked;

Ultrasonic output Below 20W/ℓ

Ultrasonic frequency Below 40kHz

Ultrasonic washing period 5 min. or less

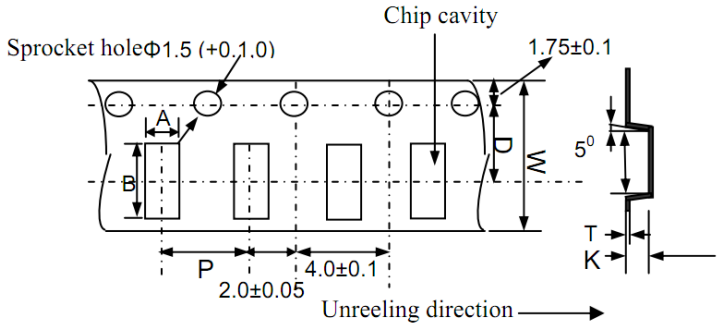
Note:

Washing by supersonic waves shall be avoided for AWLI series.

If washed by supersonic waves, the products might be broken.

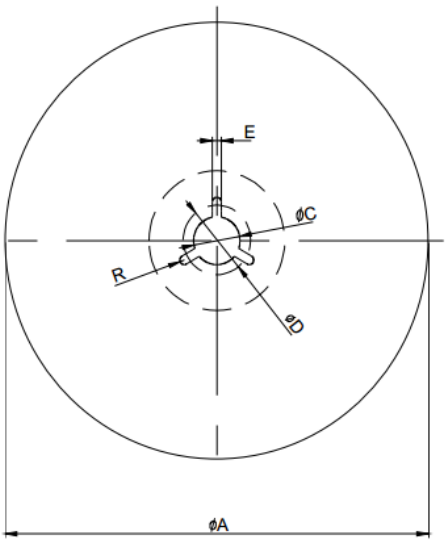
PACKING STANDARD 包装标准

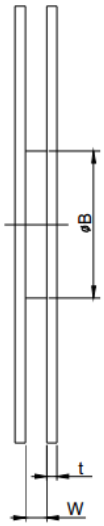
◆Embossed Tape



Type	Chip Thickness	W	A	B	D	P	K max.	T max.	Quantity (pcs/reel)
	(mm)								ø178mm
AWLI1608	1.12	8.0	1.45	1.9	3.5	4.0	1.32	0.32	2000
AWLI2012	1.3	8.0	1.88	2.4	3.5	4.0	1.55	0.32	2000

◆Reel Dimensions





Symbol	ø178mm Reel	Ø330mm Reel
A	Ø178±2	Ø330±2
B	Ø60±2	Ø100±2
C	Ø13±0.8	Ø13±0.8
D	Ø21±0.8	Ø21±0.8
E	2	2
W8	10±1.5	10±1.5
W12	14.5±1.5	14.5±1.5
W16	--	17.4(Typ.)
W24	--	24.4(Typ.)
T	2±0.5	2±0.5
R	1	1

ASIM

AWLI 1608 (0603) TYPE 類型
Electrical Characteristics 電氣特性

Part Number 型号	Inductance 电感量 L	Tolerance 公差	Quality Factor 品质因数 Q	L/Q Test Freq 测试频率 Freq.	Self-resonant Freq 共振频率 S.R.F	DC Resistance 直流电阻 RDC	Rated Current 额定电流 Ir
Units 单位	uH	--	--	MHz	MHz	Ω±30%	mA
AWLI1608-1R0☐T	1.0	K,M	16	7.9	390	0.32	700
AWLI1608-1R5☐T	1.5	K,M	16	7.9	160	0.40	600
AWLI1608-1R8☐T	1.8	K,M	16	7.9	121	0.43	580
AWLI1608-2R2☐T	2.2	K,M	16	7.9	103	0.56	580
AWLI1608-2R7☐T	2.7	K,M	16	7.9	72	0.62	500
AWLI1608-3R3☐T	3.3	K,M	16	7.9	66	0.70	500
AWLI1608-3R9☐T	3.9	K,M	16	7.9	61	0.83	460
AWLI1608-4R7☐T	4.7	K,M	16	7.9	51	0.97	420
AWLI1608-5R6☐T	5.6	K,M	16	7.9	47	1.10	380
AWLI1608-6R8☐T	6.8	K,M	16	7.9	43	1.50	340
AWLI1608-8R2☐T	8.2	K,M	16	7.9	40	1.68	300
AWLI1608-100☐T	10	K,M	14	2.5	36	1.85	280
AWLI1608-120☐T	12	K,M	14	2.5	32	2.28	260
AWLI1608-150☐T	15	K,M	14	2.5	29	2.60	240
AWLI1608-180☐T	18	K,M	14	2.5	28	2.90	220
AWLI1608-220☐T	22	K,M	14	2.5	24	3.61	200

AWLI 2012 (0805) TYPE 類型
Electrical Characteristics 電氣特性

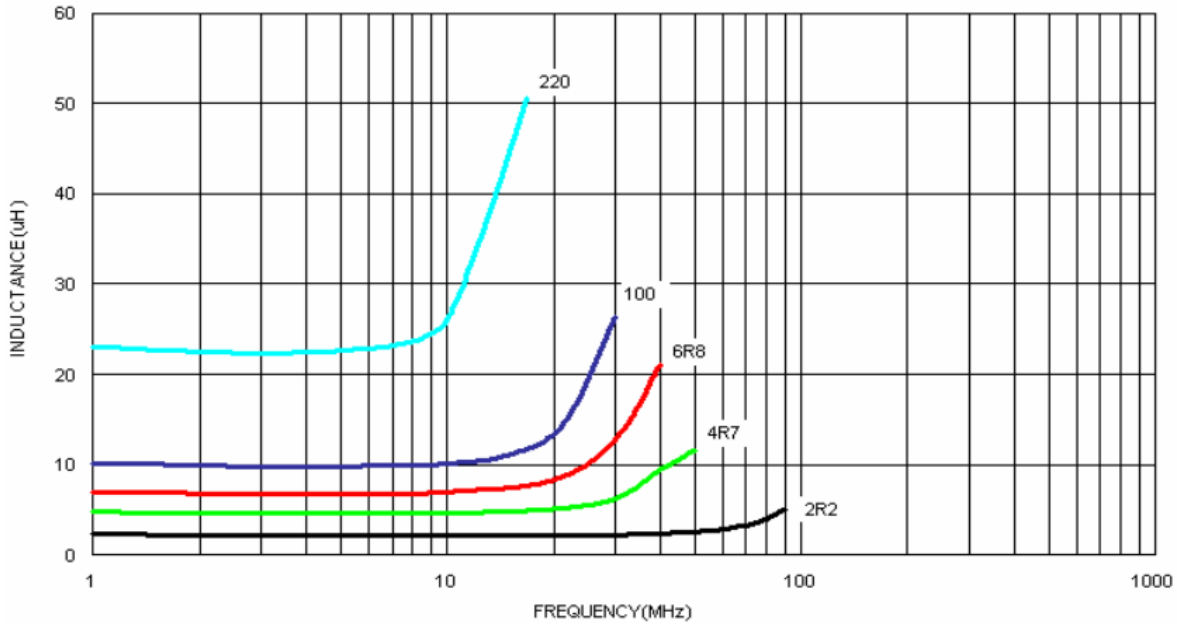
Part Number 型号	Inductance 电感量 L	Tolerance 公差	Quality Factor 品质因数 Q	L/Q Test Freq 测试频率 Freq.	Self-resonant Freq 共振频率 S.R.F	DC Resistance 直流电阻 RDC	Rated Current 额定电流 Ir
Units 单位	uH	--	--	MHz	MHz	Ω±30%	mA
AWLI2012-R47☐T	0.47	K,M	14	7.9	850	0.12	1500
AWLI2012-R68☐T	0.68	K,M	14	7.9	765	0.15	1300
AWLI2012-1R0☐T	1.0	K,M	14	7.9	208	0.13	1300
AWLI2012-1R2☐T	1.2	K,M	14	7.9	159	0.16	1270
AWLI2012-1R5☐T	1.5	K,M	14	7.9	159	0.17	1260
AWLI2012-1R8☐T	1.8	K,M	14	7.9	112	0.20	1080
AWLI2012-2R2☐T	2.2	K,M	13	7.9	87	0.22	1040
AWLI2012-2R7☐T	2.7	K,M	13	7.9	72	0.25	1040
AWLI2012-3R3☐T	3.3	K,M	12	7.9	70	0.28	1020
AWLI2012-3R9☐T	3.9	K,M	14	7.9	61	0.38	960
AWLI2012-4R7☐T	4.7	K,M	14	7.9	51	0.43	840
AWLI2012-5R6☐T	5.6	K,M	12	7.9	47	0.50	800

AWLI2012-6R8☐T	6.8	K,M	14	7.9	46	0.68	700
AWLI2012-8R2☐T	8.2	K,M	13	7.9	33	0.73	680
AWLI2012-100☐T	10	K,M	14	2.5	31	0.85	560
AWLI2012-120☐T	12	K,M	14	2.5	30	0.90	460
AWLI2012-150☐T	15	K,M	15	2.5	28	1.40	380
AWLI2012-180☐T	18	K,M	15	2.5	27	1.55	360
AWLI2012-220☐T	22	K,M	15	2.5	20	1.76	340

TYPICAL ELECTRICAL CHARACTERISTICS 典型电气特性

INDUCTANCE vs. FREQUENCY

AWLI 1608(0603)



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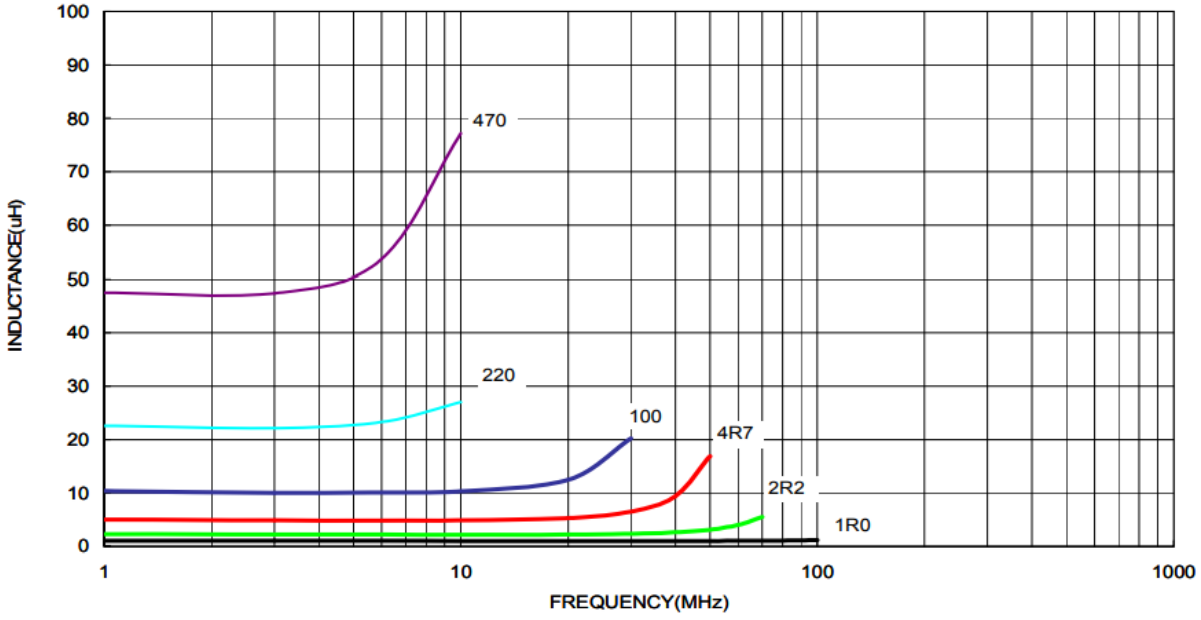
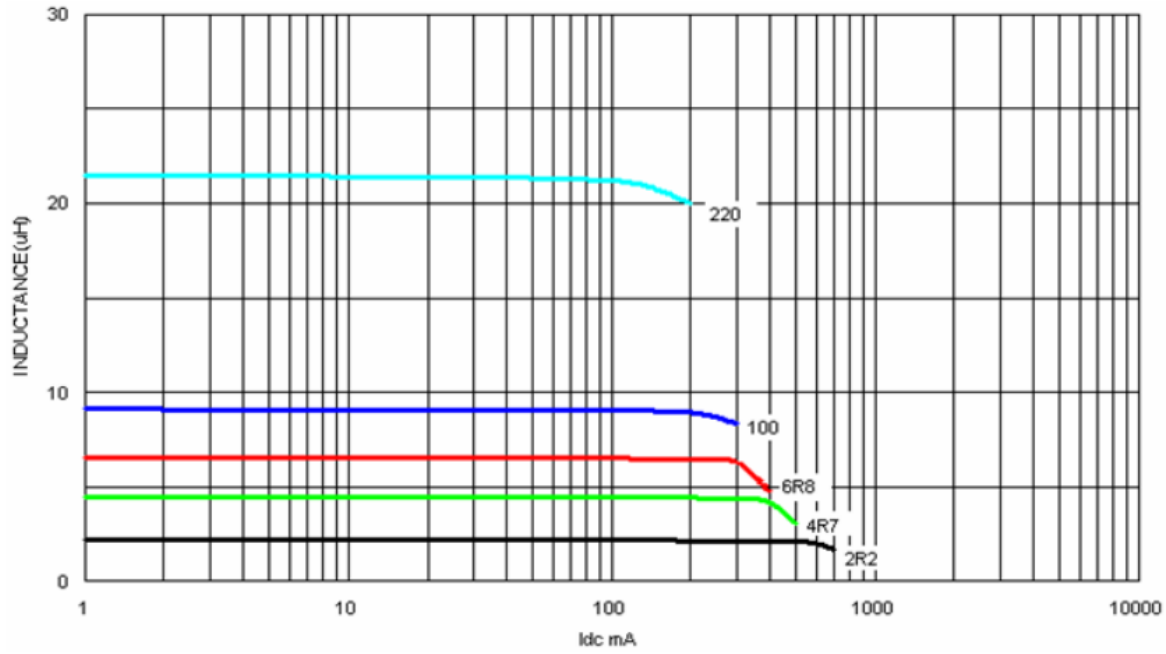


TYPICAL ELECTRICAL CHARACTERISTICS 典型电气特性

INDUCTANCE vs. DC BIAS CURRENT

AWLI 1608(0603)



AWLI 2012(0805)