

# APPROVAL SHEET

## WLFW1608 Wire Wound Ferrite Chip Inductor



\*Contents in this sheet are subject to change without prior notice.

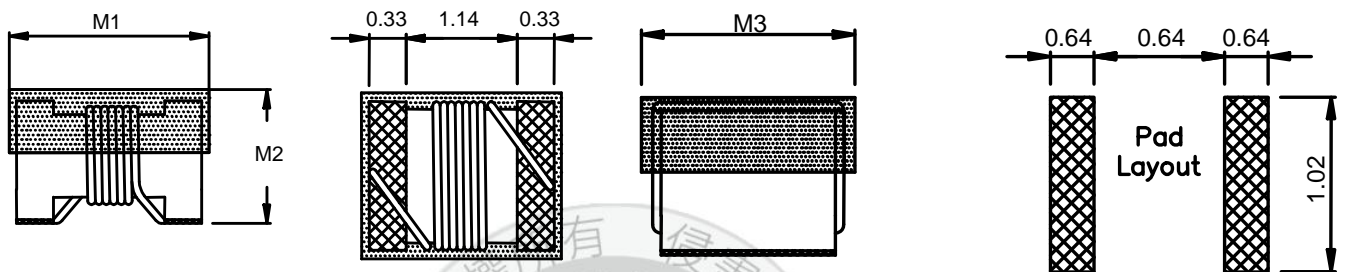
## FEATURES

1. General Purpose Inductor for any electronic device.
2. Wire Wound structure with Lower DCR High Q
3. Standard Chip size

## APPLICATIONS

1. General Purposes in Analog signal process
2. LC Filter, EMI rejection and Noise rejection notch.

## SHAPE and DIMENSION



Unit: mm

Series	M1	M2	M3
WLFW1608	1.80(MAX)	1.10(MAX)	1.20(MAX)



## ORDERING INFORMATION

WL	FW	1608	Z0	J	72N	P	B
<b>Product Code</b>	<b>Series</b>	<b>Dimensions</b>	<b>Series extension</b>	<b>Tolerance</b>	<b>Value</b>	<b>Packing Code</b>	<b>B</b>
WL: Inductor	Wire Wound Ferrite Chip inductor.	1.6 * 0.8 mm 1608 :EIA 0603	STD	J: ± 5% K: ± 10%	72N =72nH =0.072uH R12=0.12uH 1R0=1.0uH 100 = 10uH	P= 7" Plastic Tape	B:STD

## RATED TEMPERATURE

OPERATING TEMPERATURE RANGE : -40°C ~ +125°C

TEMPERATURE RISE : Below 15°C at Rated Current

## Electrical Characteristics

### ● WLFW1608 series

Walsin Part Number	L (uH)	Tolerance	Q (Min)	Measuring Frequency (MHz)	SRF (MHz) Min	RDC Max (Ω)	Isat (mA)	COLOR CODE
WLFW1608Z0□47NPB	0.047	J、K	12	7.9	2000	0.075	1600	White
WLFW1608Z0□51NPB	0.051	J、K	12	7.9	1500	0.075	1500	Violet
WLFW1608Z0□56NPB	0.056	J、K	7	7.9	1500	0.095	1600	Blue
WLFW1608Z0□68NPB	0.068	K	12	7.9	1500	0.12	1700	Gray
WLFW1608Z0□72NPB	0.072	K	12	7.9	1500	0.12	1600	Brown
WLFW1608Z0□R10PB	0.1	J、K	12	7.9	1150	0.13	1300	Black
WLFW1608Z0□R12PB	0.12	J、K	12	7.9	1100	0.15	1300	Orange
WLFW1608Z0□R15PB	0.15	J、K	15	7.9	1050	0.15	1100	Brown
WLFW1608Z0□R18PB	0.18	J、K	15	7.9	950	0.15	1100	Green
WLFW1608Z0□R22PB	0.22	J、K	15	7.9	900	0.30	990	Red
WLFW1608Z0□R24PB	0.24	J、K	15	7.9	850	0.16	1100	Green
WLFW1608Z0□R27PB	0.27	J、K	15	7.9	835	0.30	1000	Yellow
WLFW1608Z0□R33PB	0.33	J、K	15	7.9	725	0.40	1000	Orange
WLFW1608Z0□R36PB	0.36	J、K	15	7.9	720	0.41	990	Green
WLFW1608Z0□R39PB	0.39	J、K	15	7.9	680	0.41	990	Blue
WLFW1608Z0□R47PB	0.47	J、K	15	7.9	640	0.43	860	Black
WLFW1608Z0□R56PB	0.56	J、K	15	7.9	630	0.44	860	Brown
WLFW1608Z0□R65PB	0.65	J、K	15	7.9	510	0.52	810	Blue
WLFW1608Z0□R68PB	0.68	J、K	15	7.9	510	0.52	780	Red
WLFW1608Z0□R78PB	0.78	J、K	15	7.9	465	0.63	780	Orange
WLFW1608Z0□R82PB	0.82	J、K	15	7.9	460	0.69	760	Yellow
WLFW1608Z0□R90PB	0.90	J、K	15	7.9	350	0.81	700	Black
WLFW1608Z0□1R0PB	1	J、K	15	7.9	320	0.81	700	Green
WLFW1608Z0□1R2PB	1.2	J、K	15	7.9	270	0.87	590	Blue
WLFW1608Z0□1R5PB	1.5	J、K	15	7.9	230	0.96	570	Violet
WLFW1608Z0□1R8PB	1.8	J、K	15	7.9	210	1.10	540	Gray
WLFW1608Z0□2R2PB	2.2	J、K	15	7.9	115	1.20	540	White
WLFW1608Z0□2R7PB	2.7	J、K	15	7.9	100	1.38	460	Black
WLFW1608Z0□3R0PB	3.0	J、K	15	7.9	90	1.45	430	Black
WLFW1608Z0□3R3PB	3.3	J、K	15	7.9	84	1.50	480	Brown
WLFW1608Z0□3R9PB	3.9	J、K	15	7.9	75	1.50	480	Red
WLFW1608Z0□4R7PB	4.7	J、K	15	7.9	67	2.10	380	Orange
WLFW1608Z0□5R6PB	5.6	J、K	15	7.9	55	2.37	360	Yellow
WLFW1608Z0□6R8PB	6.8	J、K	15	7.9	48	3.10	350	Green
WLFW1608Z0□7R8PB	7.8	J、K	15	7.9	40	3.35	320	Blue
WLFW1608Z0□8R2PB	8.2	J、K	15	7.9	38	3.50	320	Violet
WLFW1608Z0□100PB	10	J、K	15	7.9	32	4.46	280	Gray

Tolerance : :K±10%、J±5%

※MSL : LEVEL1

## TEST INSTRUMENT

L · Q :TESTED BY AGILENT 4287A with 16197A or its equivalent

SRF : TESTED BY HP 8753E or HP4291B with 16193A or its equivalent

DCR: TESTED BY AGILENT 4338B or its equivalent

## RELIABILITY PERFORMANCE

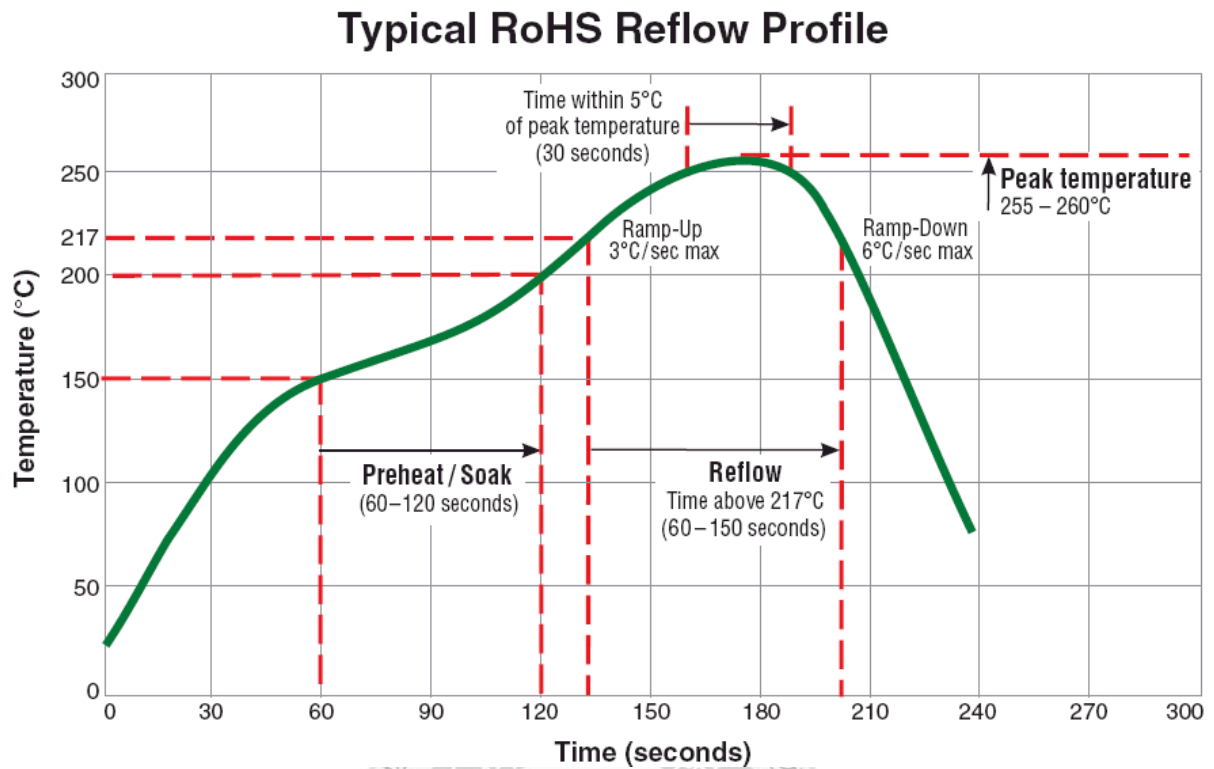
### Reliability Experiment For Electrical

Test Item	Test Condition	Standard Source
Humidity Test	+40°C ± 2°C, humidity of 90% ± 5% (total 96 hours).	MIL-STD-202G Method 103B Test Condition B
High Temperature Test	1.Temperature: +125°C ± 2°C 2.Test time: 48 ± 2hrs	IEC 68-2 Test Condition B
Low Temperature Test	1.Temperature: -40°C ± 2°C 2.Test time: 48 ± 2hrs	IEC 68-2 Test Condition A
Thermal Shock	+125°C ± 5°C (30 minutes) ~ -40 ± 5°C (30 minutes), temperature switch time: 5 minutes (total 50 cycles).	MIL-STD-202G Method 107G Test Condition B-2
Life Test	+70°C ± 5°C (250Hours)	MIL-STD-202G Method 108A Test Condition B

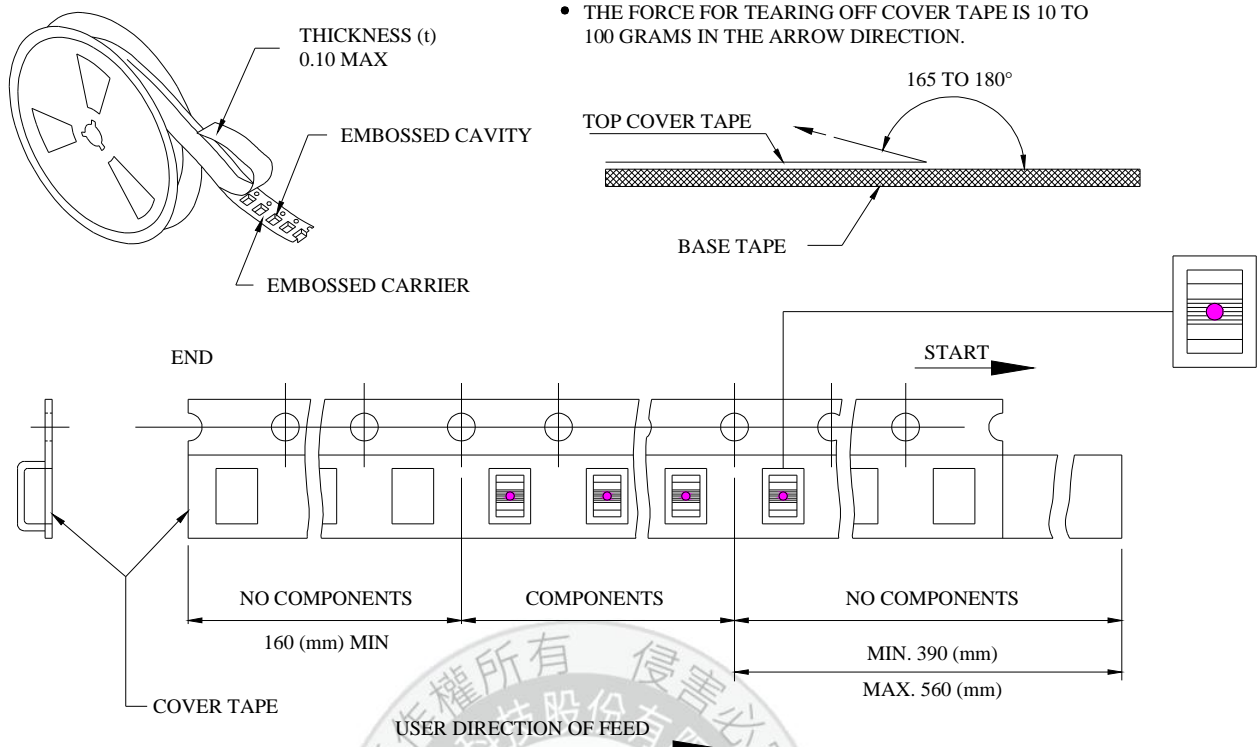
### Reliability Experiment For Physical

Test Item	Test Condition	Standard Source
Vibration Test	10-55-10HZ, amplitude: 1.5mm, direction: X, Y, Z axes, each axis 2 hours (total 6 hours).	MIL-STD-202G Method 201A
Solder Heat Resistance Test	IR/convection reflow:Peak Temp 250 ± 5°C for 5Sec in air, Through 2 Cycle. Temperature Ramp: +1 ~ 4°C/sec; Above 183°C, must keep 90 s - 120 s	MIL-STD-202G Method 210F Test Condition (Reflow)
Solder Ability Test	Soak in 245 °C solder pot of 3Sec, PAD must have 95% above coverage.	J-STD-003B

## TYPICAL RoHS REFLOW PROFILE



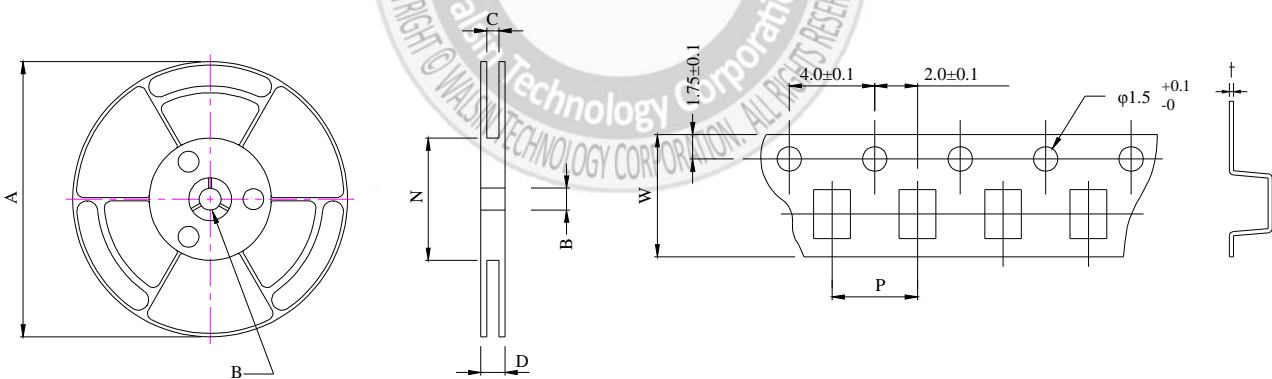
### PACKAGING SPECIFICATION



#### ■ CARRIER TAPE REELS (mm)

MATERIAL: PLASTIC

#### ■ DIMENSIONS OF CARRIER TAPE (mm)



UNIT : mm

	A	B	C	D	N	P	W	t
DIM.	178	13.0	8.4	14.4	50	4.0	8.0	0.25
TOL.	MAX.	+0.5-0.2	+2.0-0	MAX	MIN.	±0.1	±0.2	±0.10

Quantity per reel : 4K pcs / reel