APPROVAL SHEET

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WLQC2222 Series
SMD Square Air Wound Coil Inductors

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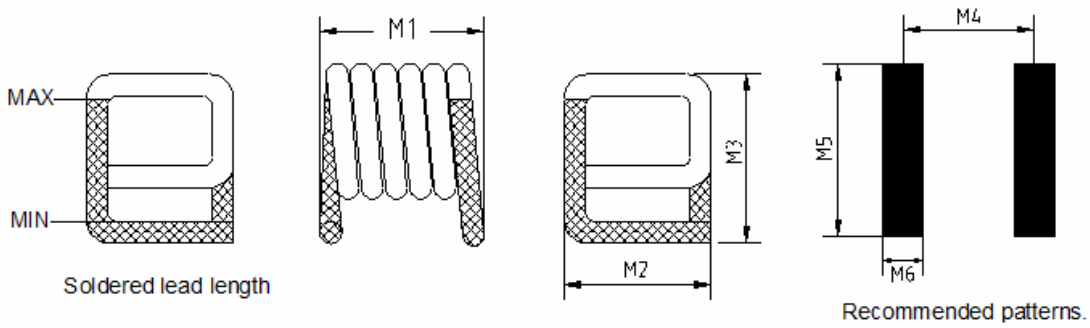
FEATURES

1. Excellence Q and SRF characteristics for RF application.
2. Wide range inductance and various tolerance options.
3. RoHS compliant

APPLICATIONS

1. Communication system front-end circuit: GSM/3G/LTE, Wi-Fi, GPS.
2. Cabel/Terrestrial/BS Tuner, Bluetooth, Wireless Audio, Remote control.
3. M2M: ZigBee, Proprietary wilreless.
4. EMI solustion in high frequency circuits.

Shape and Dimension



Unit: mm

WLQC2222 Series	M1	M2	M3	M4	M5	M6
WLQC2222H0□90NLB	5.21±0.381	5.46±0.254	5.69±0.254	4.70	6.35	2.16
WLQC2222H0□R11LB	6.35±0.381	5.59±0.254	5.69±0.254	5.84	6.73	2.16
WLQC2222H0□R13LB	6.73±0.381	5.59±0.254	5.69±0.254	6.22	6.73	2.16
WLQC2222H0□R16LB	7.37±0.381	5.59±0.254	5.69±0.254	6.60	6.73	2.16
WLQC2222H0□R18LB	8.13±0.381	5.59±0.254	5.69±0.254	7.37	6.73	2.16
WLQC2222H0□R22LB	9.91±0.381	5.59±0.254	5.69±0.254	9.14	6.73	2.16
WLQC2222H0□R27LB	11.68±0.381	5.59±0.254	5.69±0.254	10.67	6.73	2.16
WLQC2222H0□R30LB	11.94±0.381	5.72±0.254	5.69±0.254	11.18	6.73	2.16

Ordering Information

WL	QC	2222	H0	J	90N	L	B
Product Code WL: Inductor	**Series** Square air wound coil inductor.	**Dimensions** 2222	**Series extension** H0	**Tolerance** G: ± 2% J: ± 5%	**Value** 90N = 90nH R11 = 110nH	**Packing Code** L=13" Reeled (Embossed Tape)	B:STD

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Electrical Characteristics

WLQC2222 Series	Tolerance	L (nH)	Q (Typ)	Test Freq (MHz)	DCR (mΩ)Max	SRF (GHz) Min	Rated Current (A) Max
WLQC2222H0□90NLB	G、J	90	140	50	5.50	1.15	5.0
WLQC2222H0□R11LB	G、J	110	140	50	6.50	1.00	5.7
WLQC2222H0□R13LB	G、J	130	140	50	7.50	1.00	5.4
WLQC2222H0□R16LB	G、J	160	140	50	8.25	1.00	5.7
WLQC2222H0□R18LB	G、J	180	140	50	9.50	1.10	5.0
WLQC2222H0□R22LB	G、J	220	140	50	11.0	1.00	5.0
WLQC2222H0□R27LB	G、J	270	140	50	12.5	0.80	4.3
WLQC2222H0□R30LB	G、J	300	150	50	13.8	0.72	3.7

TEST INSTRUMENT： HP4291B / FIXTURE HP16193A

NOTE :

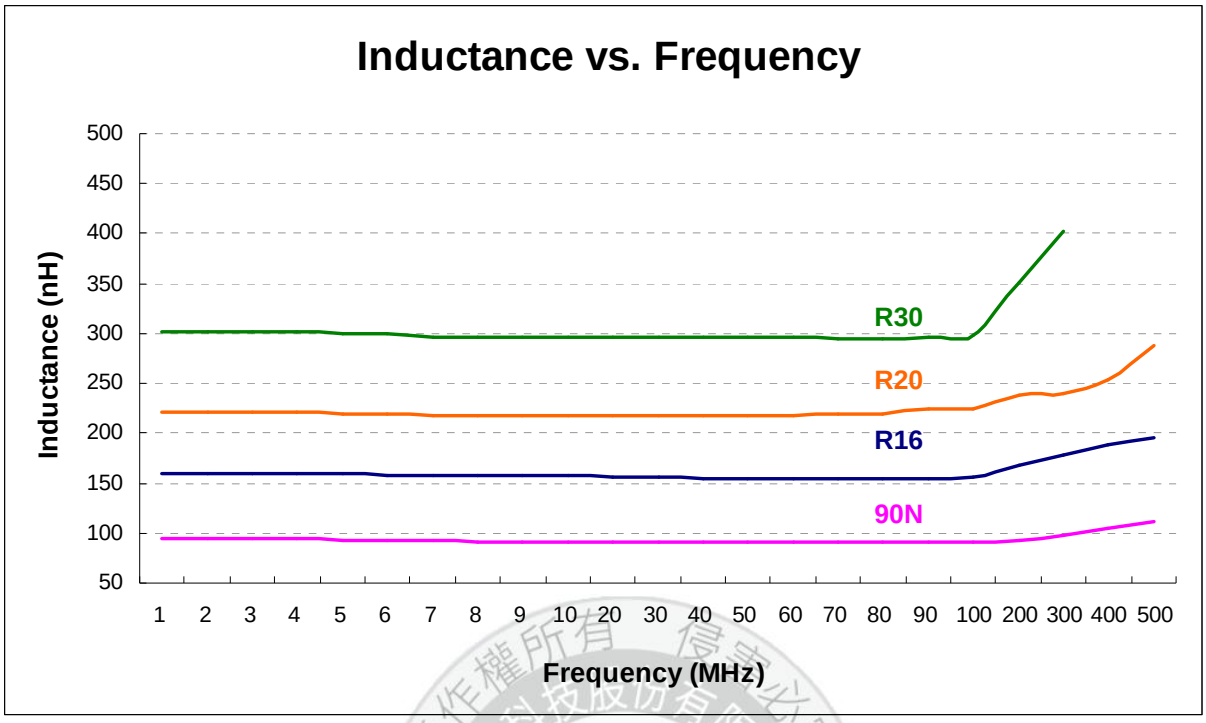
1. **Inductance & Q measured on the HP4291B. With HP16193A test fixture.**
2. **Ambient temperature: -40℃ to +125℃ with Irms current, +125℃ to +145℃ with derated current.**
3. **Storage temperature Component:-40℃. TO +145℃, Packaging : -40℃. TO +80℃.**
4. **SRF measured using an Agilent/HP 8753 network analyzer.**
5. **Current that causes a 20℃ temperature rise from 25℃ ambient.**
6. **Tolerance:G=2%,J=5%**

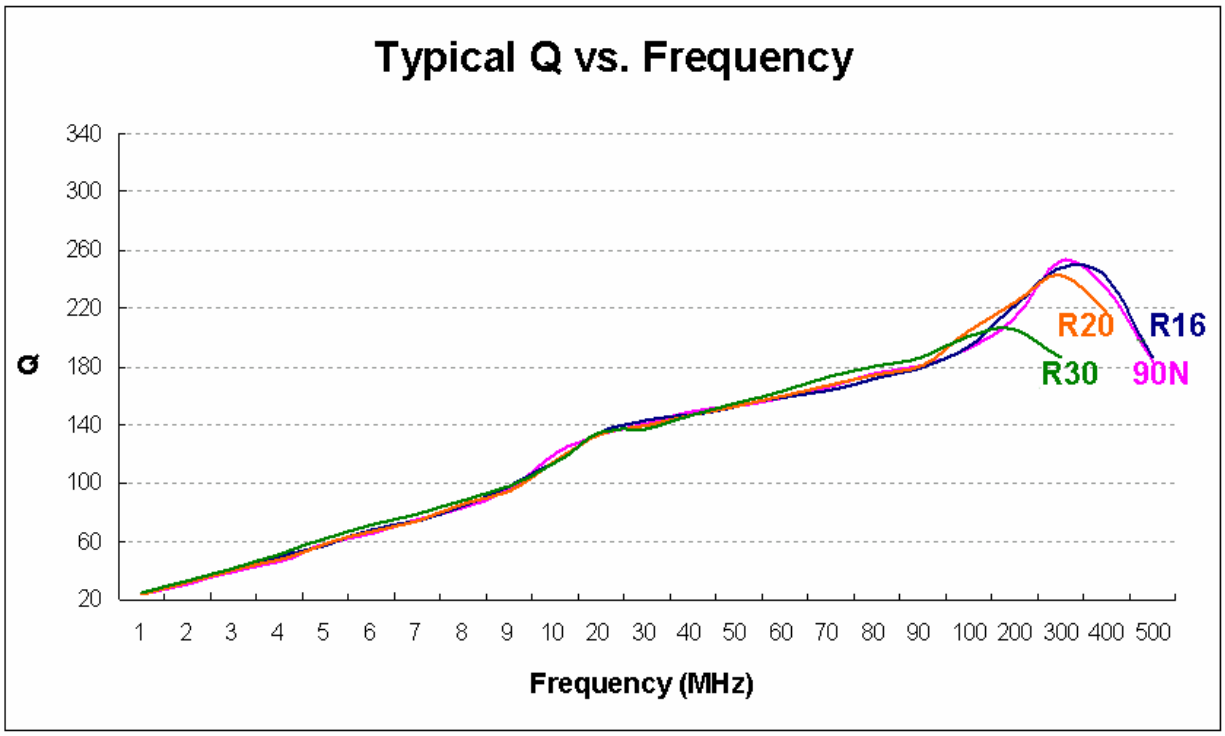
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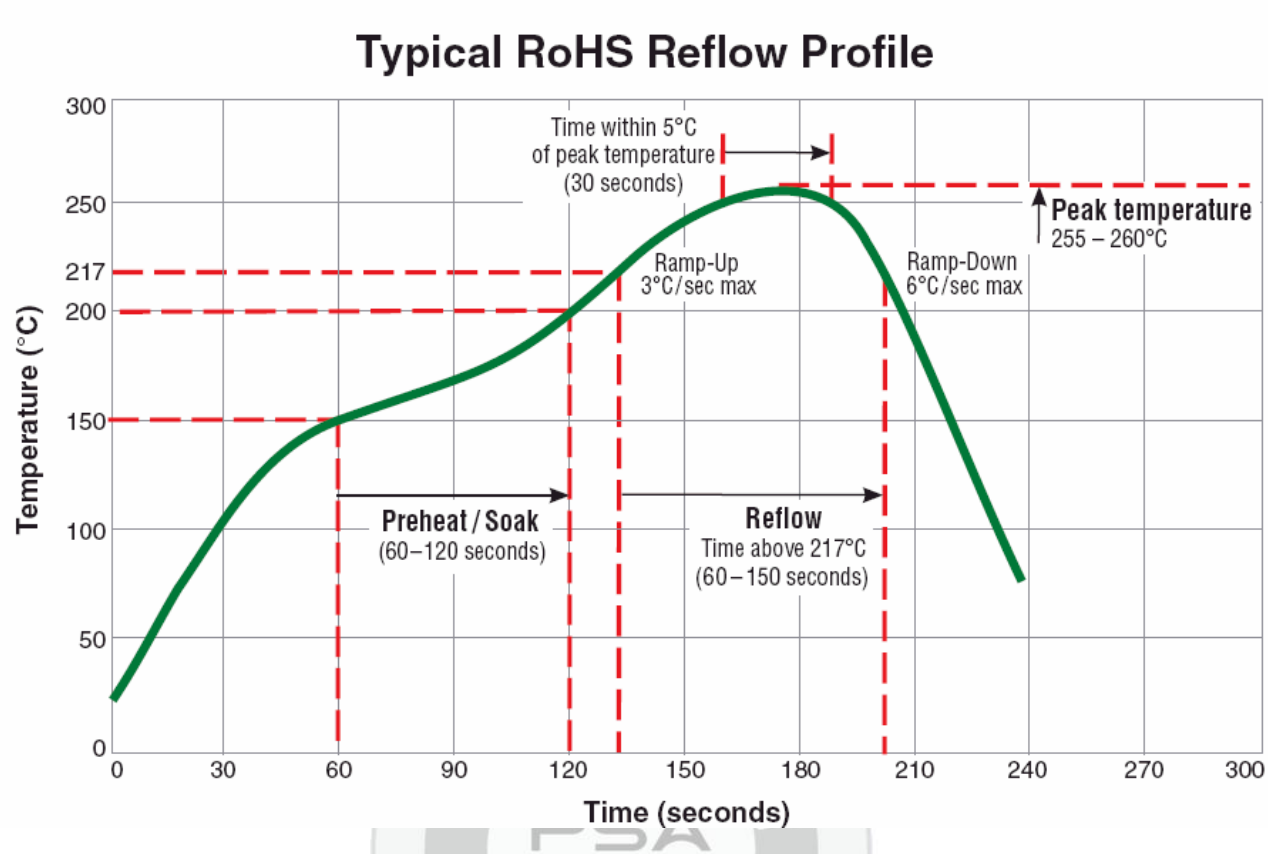
Characteristic Curve





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TYPICAL RoHS REFLOW PROFILE



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RELIABILITY PERFORMANCE

Reliability Experiment For Electrical

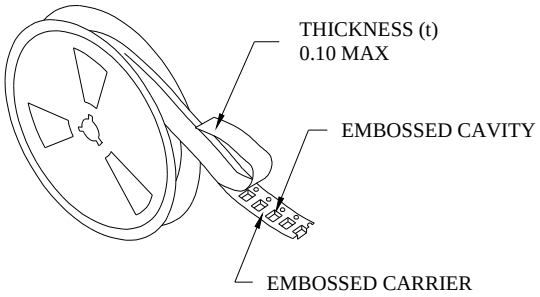
Test Item	Test Condition	Standard Source
Humidity Test	+40℃± 2℃, humidity of 90% ± 5% (total 96 hours).	MIL-STD-202G Method 103B Test Condition B
High Temperature Test	1.Temperature: +125℃±2℃ 2.Test time: 48±2hrs	IEC 68-2 Test Condition B
Low Temperature Test	1.Temperature: -40℃±2℃ 2.Test time: 48±2hrs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

Reliability Experiment For Physical

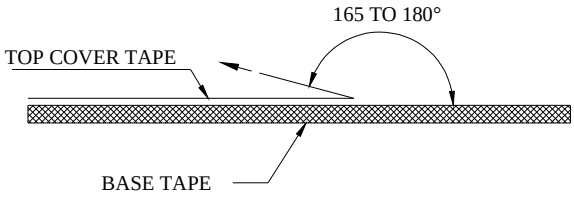
Test Item	Test Condition	Standard Source
Vibration Test	10-55-10HZ, amplitude: 1.5mm, direction: X, Y, Z axes, each axis 2 hours (total 6 hours).	MIL-STD-202G Method 201A
Solder Heat Resistance Test	IR/convection reflow:Peak Temp 250±5℃ for 5Sec in air, Through 2 Cycle. Temperature Ramp:+1~4℃/sec; Above1 83℃, must keep 90 s - 120 s	MIL-STD-202G Method 210F Test Condition (Reflow)
Solder Ability Test	Soak in 245 ℃ solder pot of 3Sec, PAD must have 95% above coverage.	J-STD-003B

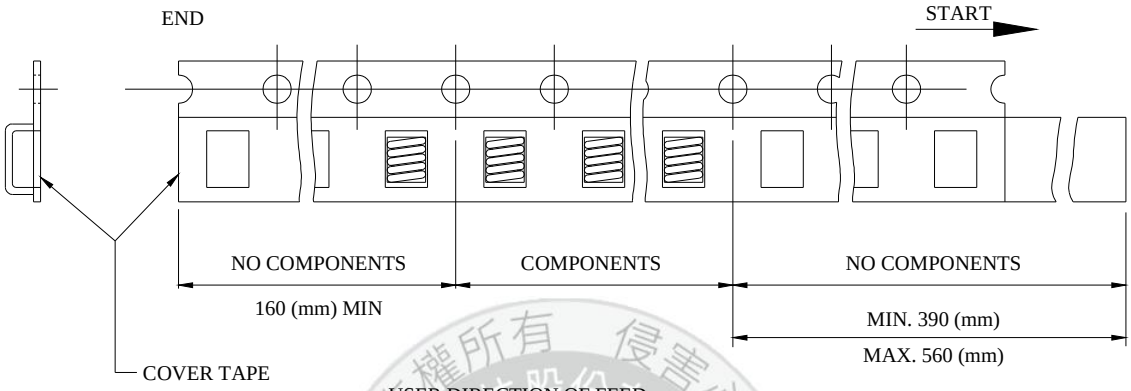
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Packaging Specification



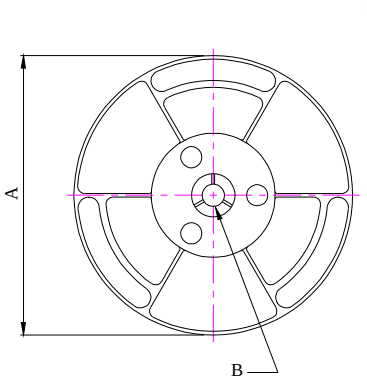
- THE FORCE FOR TEARING OFF COVER TAPE IS 10 TO 130 GRAMS IN THE ARROW DIRECTION.



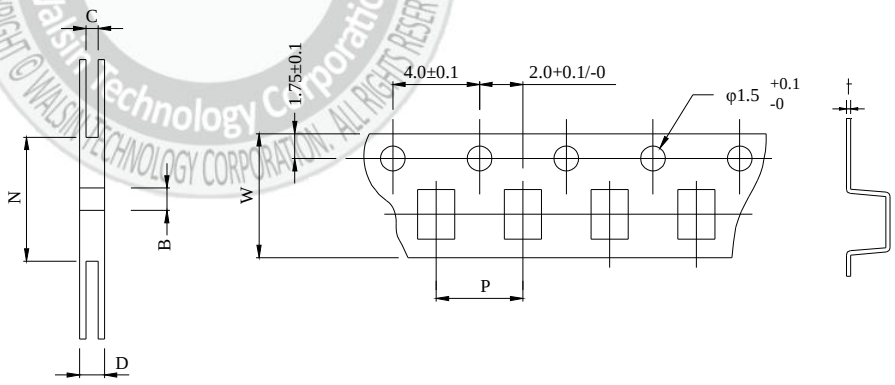


■ CARRIER TAPE REELS (mm)

MATERIAL: PLASTIC



■ DIMENSIONS OF CARRIER TAPE (mm)



Unit: mm

ITEM	A	B	C	D	N	P	W	t
DIM.	330	13.0	16.4	22.4	100	12.0	16.0	0.4
TOL.	MAX.	±0.2	±0.2	MAX.	±0.5	±0.1	±0.3	±0.05

Quantity per reel：750 pcs

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