APPROVAL SHEET

WLCW4532

SMD Wire Wound Ceramic Chip Inductors

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

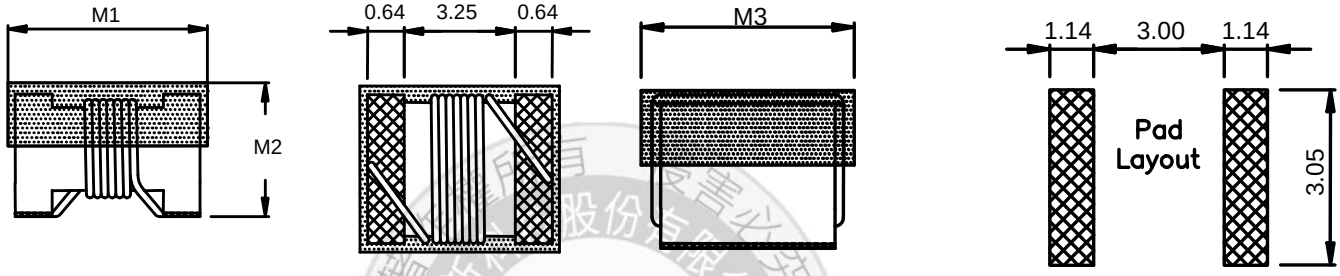
Features

1. Standard chip size bobbin with wire wound coil provides high reliability, productivity and performance.
2. Excellence Q and SRF characteristics for RF application, such as LO tank, antenna matching and filter.
3. Wide range inductance and various tolerance options.
4. RoHS compliant.

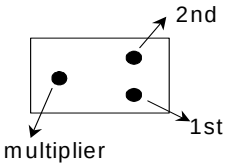
Applications

1. Communication: GSM/3G/LTE, Wi-Fi, GPS.
2. Consumer: Cabel/Terrestrial/BS Tuner, Bluetooth, Wireless Audio, Remote control.
3. M2M: ZigBee, Proprietary wilreless.

Shape and Dimension



Unit: mm



COLOR CODE

Example : WLCW4532Z0□R18PB

MARKING : Dots 1 and 2 indicate the inductance in nano Henries.

Example: DOTS 1：Brown=>1，DOTS 2：Gray=>8

Dots 3 indicates multiplier. Brown=>10*10¹

WLCW Series	M1	M2	M3
4532	4.55±0.40	3.23±0.20	3.61±0.20

Ordering Information

WL	CW	4532	Z0	J	R18	P	B
Product Code	**Series**	**Dimensions**	**Series extension**	**Tolerance**	**Value**	**Packing Code**	
WL: Inductor	SMD Wire Wound Ceramic Chip inductor.	4532 :EIA 1812	Z0:STD	G: ± 2% J: ± 5% K: ±10%	82N = 82nH R18 =180nH 1R2 =1200nH	P=7" Reeled (Embossed tape)	B:STD

Electrical Characteristics

WLCW4532 series

Walsin Part Number	L (nH) @50MHz	Tolerance	Q @50MHz Typical	SRF MHz Min.	DCR mOHM Max.	Irms (mA)	Color Code		
							1st	2nd	multiplier
WLCW4532Z0□82NPB	82	K , J , G	70	800	60	1500	Gray	Red	Black
WLCW4532Z0□R10PB	100	J , G	70	850	110	1150	Brown	Black	Brown
WLCW4532Z0□R12PB	120	K , J , G	70	800	110	1150	Brown	Red	Brown
WLCW4532Z0□R15PB	150	K , J , G	75	860	110	1150	Brown	Green	Brown
WLCW4532Z0□R18PB	180	K , J , G	80	850	110	1150	Brown	Gray	Brown
WLCW4532Z0□R22PB	220	K , J , G	80	700	105	940	Red	Red	Brown
WLCW4532Z0□R24PB	240	J ,	80	700	110	940	Red	Yellow	Brown
WLCW4532Z0□R27PB	270	K , J , G	85	730	120	940	Red	Violet	Brown
WLCW4532Z0□R33PB	330	K , J , G	80	600	135	850	Orange	Orange	Brown
WLCW4532Z0□R39PB	390	K , J , G	80	600	140	850	Orange	White	Brown
WLCW4532Z0□1R2PB	1200	K , J , G	62	230	1200	480	Brown	Red	Red

Tolerance：K：±10%、J：±5%、G：±2%
OPERATING TEMPERATURE : -40℃ ~ 125℃
※MSL：LEVEL 1
L、Q TEST BY AGILENT 4291B with 16193A or its equivalent
SRF TEST BY HP 8753E or HP4291B with 16193A or its equivalent
DCR AGILENT 4338B or its equivalent

RELIABILITY PERFORMANCE

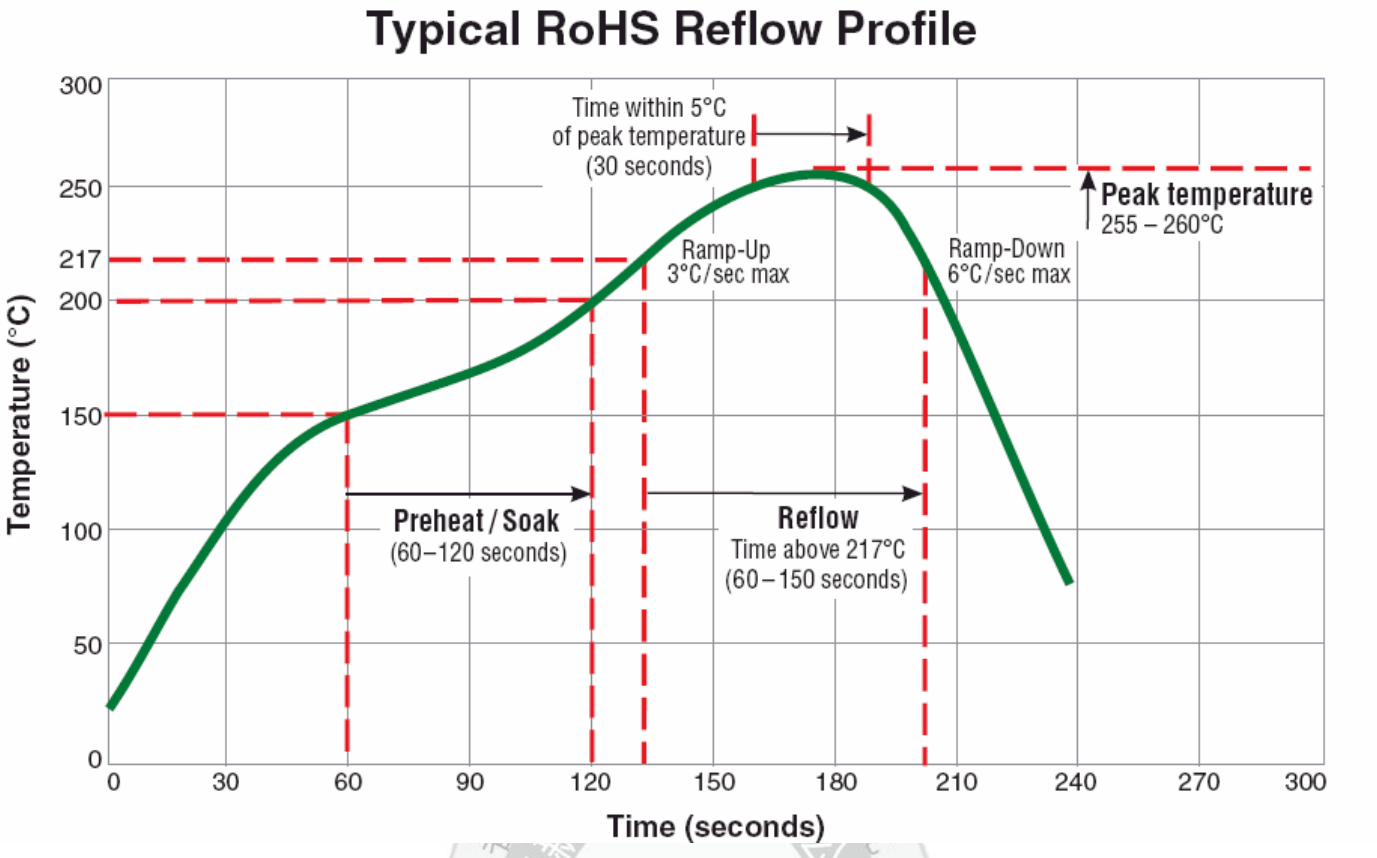
Reliability Experiment For Electrical

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

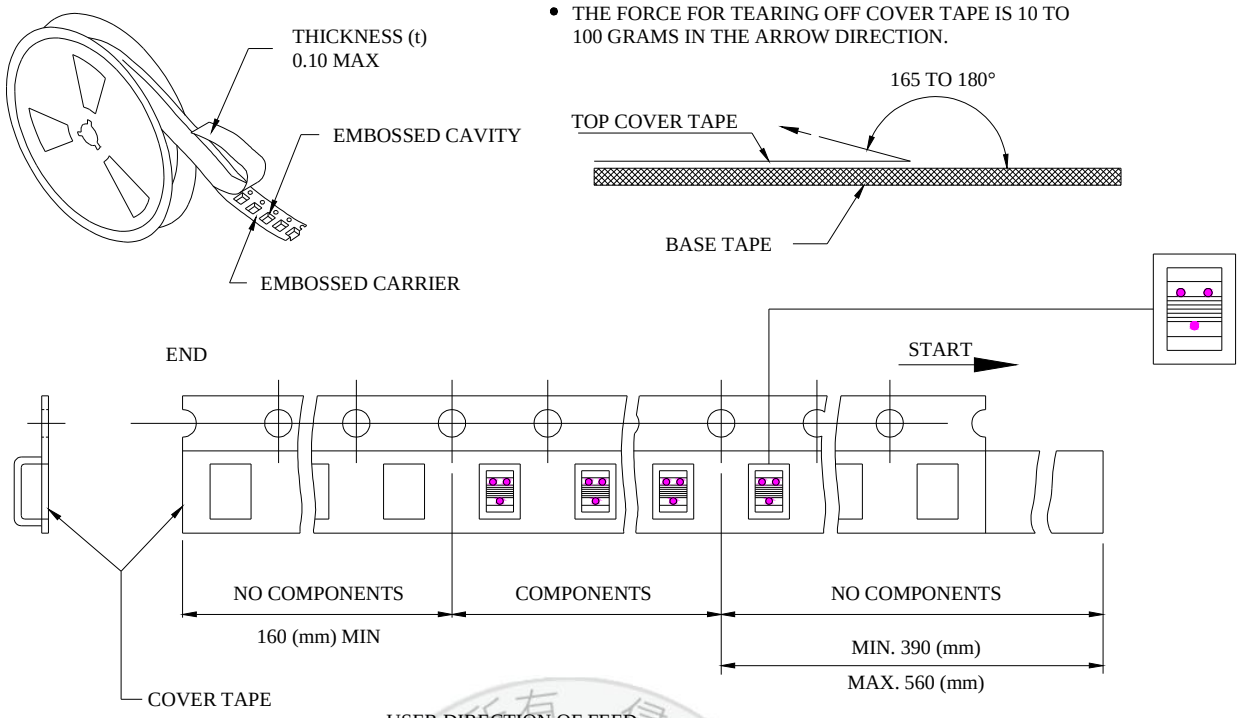
Reliability Experiment For Physical

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

Typical RoHS Reflow Profile

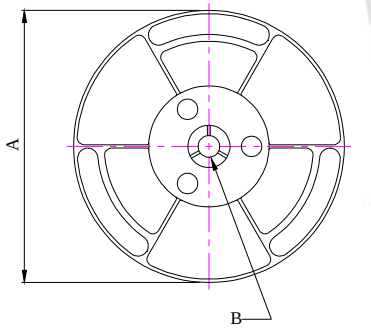


Packaging Specification

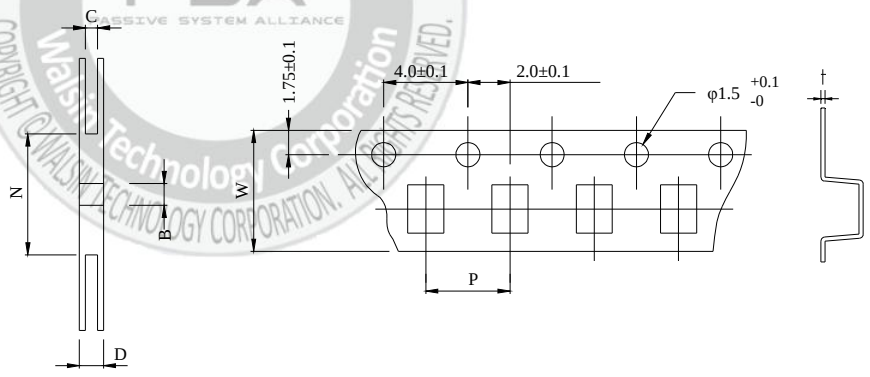


■ CARRIER TAPE REELS (mm)

MATERIAL: PLASTIC



■ DIMENSIONS OF CARRIER TAPE (mm)



	A	B	C	D	N	P	W	t
DIM.	178	13.0	12.5	16.4	50	8.0	12.0	0.25
TOL.	MAX.	+0.5–0.2	+1.5–0	+1.5–0	MIN.	±0.1	±0.2	±0.05

Quantity per reel：0.6K pcs