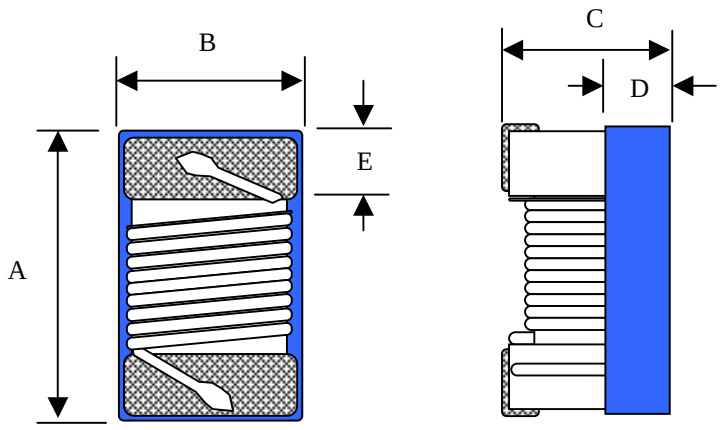
AXIS POWER 經軸電子

● BCCWH-252018FT-S SERIES WIRE WOUND SMD INDUCTOR

SHAPES



ELECTRICAL CHARACTERISTICS	
INDUCTANCE	0.47uH~47uH
Q (Min.)	23~35 MHz
SRF (Min.)	17~460 MHz
DCR (Max.)	0.20Ω~7.8Ω
IDC (Max.)	350 mA~2400 mA
Irms. (Max.)	100 mA~1100 mA

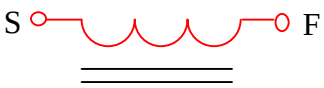
DIMENSIONS IN (mm)	
A	2.9 Max.
B	2.54 Max.
C	2.03 Max.
D	1.3 (REF)
E	0.50 ± 0.1

TEST FREQUENCY

(REFERENCE PAGE.2)

EQUIVALENT CIRCUIT

Equivalent circuit



ORDERING CODE：

BCCWH – 252018 FT – S □□□

(1) (2) (3) (4) (5) (6)

(1) Product Code
(2) Dimension
(3) Material: Ferrite
(4) S: Special electrical characteristics
(5) Inductance
(6) Tolerance

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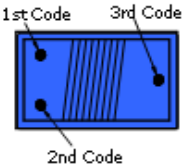
● Electrical Characteristics

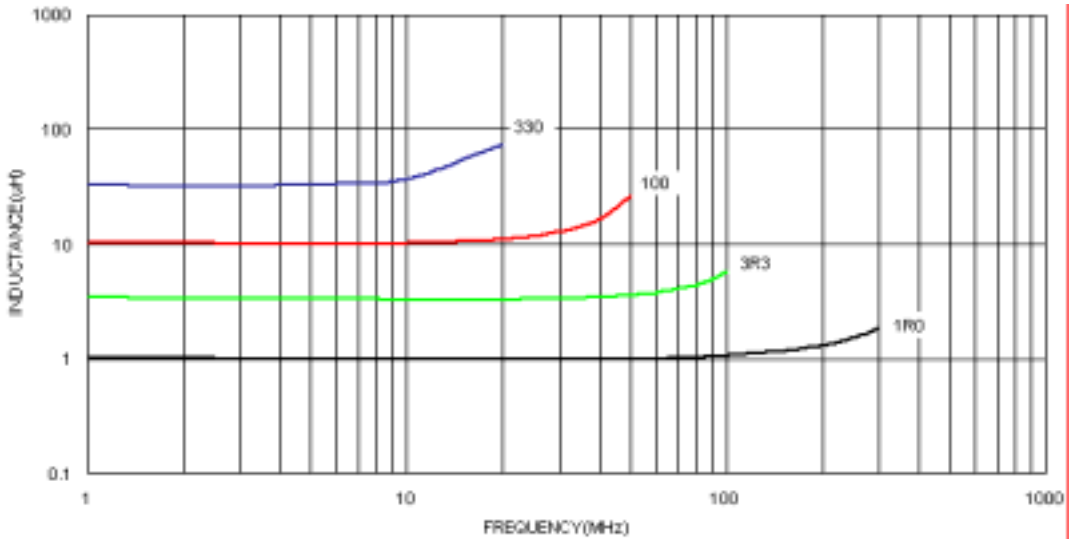
CCS Part Number	Inductance (uH)/MHz	Inductance Tolerance	Q/MHz Typ.	SRF(Min.) (MHz)	RDC (Ω)Max.	IDC Max. (mA)	Irms Typ. (mA)	Color Coding		
								1st	2nd	3rd
BCCWH-252018FT-SR47□	0.47/25	J K	35/25	460	0.20	2400	1100	Yellow	Violet	Brown
BCCWH-252018FT-SR82□	0.82/25	J K	35/25	360	0.35	1800	1000	Gray	Red	Brown
BCCWH-252018FT-S1R0□	1.0/7.9	J K	32/7.9	340	0.34	2100	900	Brown	Black	Red
BCCWH-252018FT-S1R2□	1.2/7.9	J K	25/7.9	290	0.25	1900	860	Brown	Red	Red
BCCWH-252018FT-S1R5□	1.5/7.9	J K	32/7.9	280	0.42	1800	740	Brown	Green	Red
BCCWH-252018FT-S1R8□	1.8/7.9	J K	27/7.9	180	0.45	1700	720	Brown	Gray	Red
BCCWH-252018FT-S2R2□	2.2/7.9	J K	27/7.9	140	0.50	1500	700	Red	Red	Red
BCCWH-252018FT-S3R3□	3.3/7.9	J K	27/7.9	125	0.60	1300	540	Orgnge	Orgnge	Red
BCCWH-252018FT-S3R9□	3.9/7.9	J K	27/7.9	100	0.80	1200	480	Orgnge	White	Red
BCCWH-252018FT-S4R7□	4.7/7.9	J K	27/7.9	90	0.90	1100	400	Yellow	Violet	Red
BCCWH-252018FT-S6R8□	6.8/7.9	J K	27/7.9	60	1.05	950	420	Blue	Gray	Red
BCCWH-252018FT-S8R2□	8.2/7.9	J K	25/7.9	55	1.20	850	380	Gray	Red	Red
BCCWH-252018FT-S100□	10/2.5	J K	23/2.5	55	1.55	800	240	Brown	Black	Orange
BCCWH-252018FT-S150□	15/2.5	J K	23/2.5	36	2.38	650	200	Brown	Green	Orange
BCCWH-252018FT-S220□	22/2.5	J K	23/2.5	29	2.92	550	180	Red	Red	Orange
BCCWH-252018FT-S330□	33/2.5	J K	23/2.5	21	4.10	450	140	Orgnge	Orgnge	Orange
BCCWH-252018FT-S470□	47/2.5	J K	23/2.5	17	7.80	350	100	Yellow	Violet	Orange

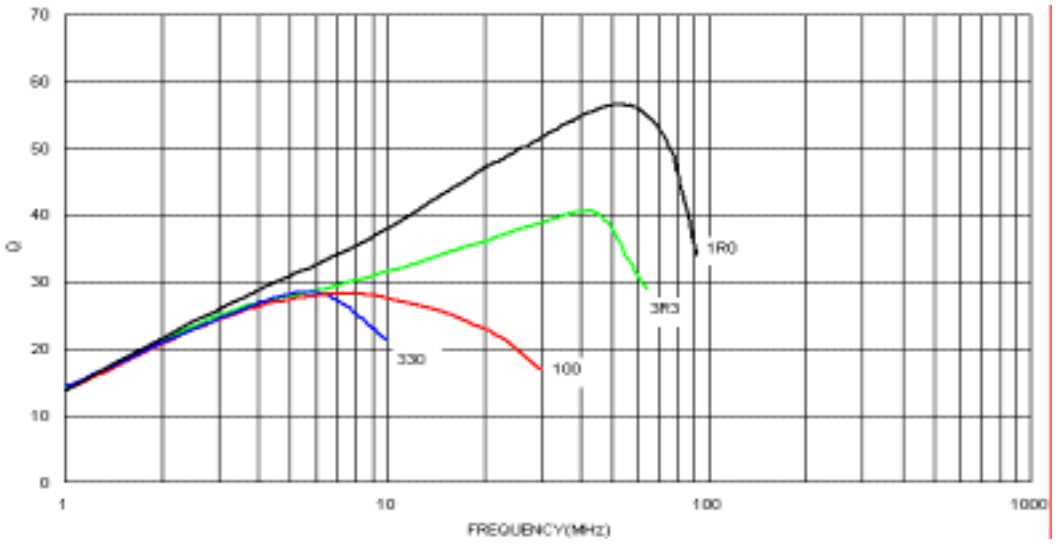
1. When ordering, please specify tolerance and packaging codes. Ex: BCCWH-252018FT-S100J
   Tolerance : J = ±5% , K = ±10%
   Packaging : Clear tape and reel { standard }.
2. L , Q : Agilent/HP E4991A+ Agilent/HP16197A
3. SRF : Agilent/HP E4991A+ Agilent/HP 16197A
4. Rdc : DIGITAL MILLIOHM METER Chroma 16502, or equivalent.
5. Idc for Inductance drop 10% from its value without current.
6. Operating temperature range from -25℃ to 85℃.



COLOR CODING

● BCCWH-252018FT-S SERIES WIRE WOUND SMD INDUCTOR





5. Material list

Item	Material
Core	Ferrite core
Wire	Copper wire
Epoxy	UV Eopxy

● BCCWH-252018FT-S SERIES WIRE WOUND SMD INDUCTOR

● Reliability Test

Item	Specifications	Test conditions
Solderability	The metalized area must have 90% minimum solder coverage.	Dip pads in flux and dip in solder pot(96.5 Sn/3.5 Ag solder) at 232°C ±5°C.
Resistance to soldering heat	There must be no case deformation or change in dimensions. Inductance must not change more than the stated tolerance.	Inductors shall be reflowed onto a PC board using 96.5 Sn/3.5 Ag solder paste. Solder process shall be at a maximum temperature of 260°C. For 96.5 Sn/3.5 Ag solder paste:>217°C for 90 seconds
Vibration	There must be no case deformation or change in dimensions. Inductance must not change more than the stated tolerance.	Solder specimen inductor on the test printed circuit board. Apply vibrations in each of the x,y and z directions for 2 house for a total of 6 hours. Frequency : 10~50 Hz Amplitude : 1.5mm
High temperature resistance	There must be no case deformation or change in dimensions. Inductance must not change more than the stated tolerance.	Inductors shall be subjected to temperature 85±2℃ for 500±12 hours. Measure the test items after leaving the inductors at room temperature and humidity for 2 hours.
Static Humidity	Inductors must not have a shorted or openwinding.	Inductors shall be subjected to temperature 85±2℃ and 90 to 95%RH. for ten 24-hours. Measure the test items after leaving the inductors at room temperature and humidity for 2 hours.
Component adhesion (push test)	Inductors shall be subjected to 1.8Kg	Inductors shall be reflow soldered (232°C ±5°C for 10 seconds) to a tinned copper substrate. A force gauge shall be applied to the side of the component. The device must withstand the stated force without a failure of the termination.

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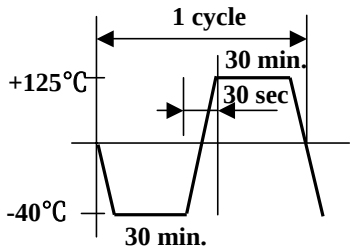
Low temperature storage	There must be no case deformation or change in dimensions.	Inductors shall be subjected to temperature -40±2℃ for 48±12 hours. Measure the test items after leaving the inductors at room temperature and humidity for 1 to 2 hours.
Resistance to solvent	There must be no case deformation, change in dimensions, or obliteration of marking.	Inductors must withstand 6 minutes of alcohol or water.
Thermal shock	There must be no case deformation or change in dimensions. Inductance must not change more than the stated tolerance.	Inductors shall be subjected to 10 cycles to the the following temperature cycle:  Measure the test items after leaving the inductors at room temperature and humidity for 2 hours.

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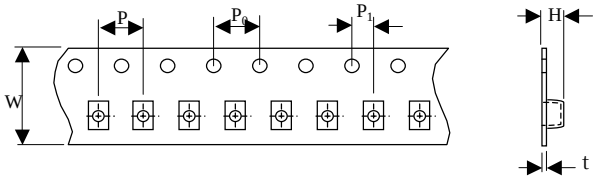
Packaging

The packaging must be done not to receive any damage during transporting and storing.

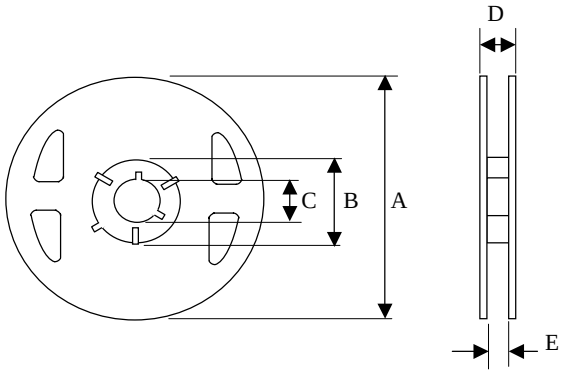
1 Tape dimensions



(Dimensions in mm)

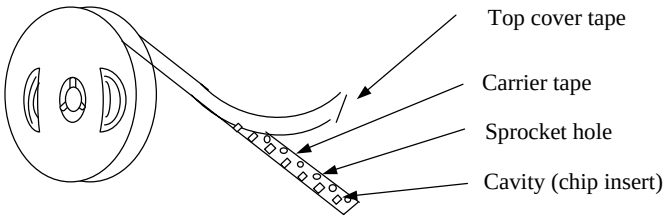
Symbol	W	P	P_0	P_1	H	T
Dimension	8	4	4	2	NA	1

2 Reel dimensions



Symbol	T
A	180
B	60
C	13
D	14.4
E	8.4

3 Tapping figure



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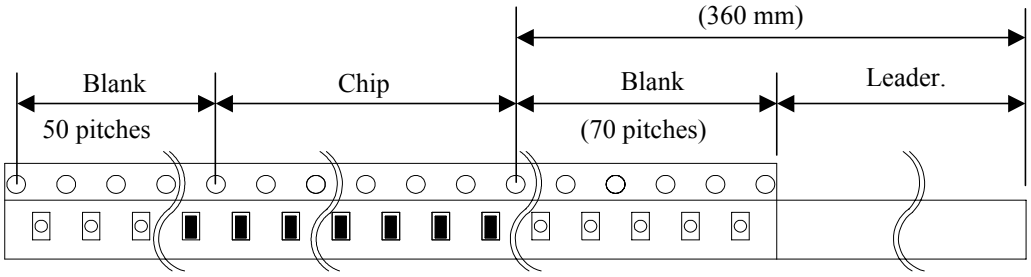
4 Packaging Form

There shall not continuation more than two vacancies of the product.



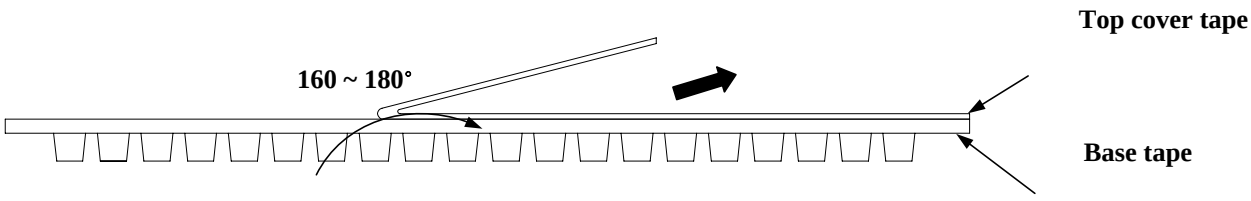
5 Cover Tape Peel Strength

The force for tearing off cover tape is 0.1~0.6(N) in the arrow direction at the following conditions:

Temperature : 5 ~ 35℃

Humidity : 45 ~ 85%

Atmospheric pressure : 860 ~ 1060 hpa



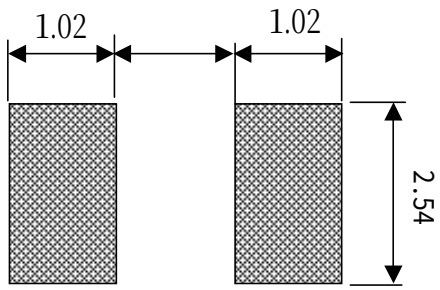
6 Packing Quantity

φ180 mm reel type : 2,000 pcs./reel

● BCCWH-252018FT-S SERIES WIRE WOUND SMD INDUCTOR

● Recommended Soldering Conditions (Please use this product by reflow soldering)

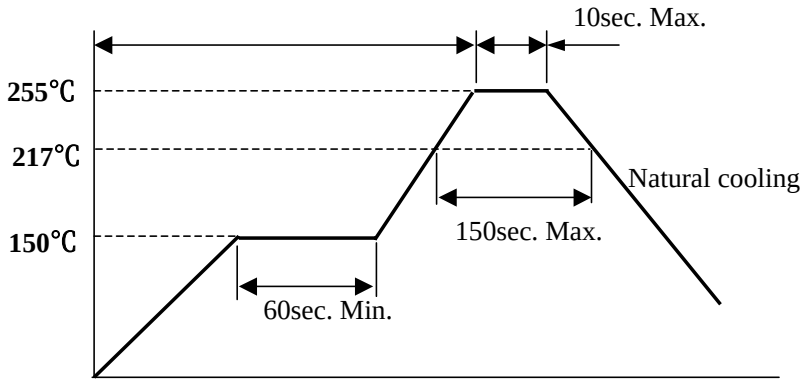
1 Recommended Footprint



Unit: mm

2 Recommended Reflow Pattern

Reflow at 260℃/3 Cycles



3 Iron Soldering

Use a solder iron of less than 30W when soldering ,do not allow the soldering iron tip directly touch the Ceramic body outside of terminal electrode.

4 seconds max. at 260℃.

● Attention in Case of Using

In case of using product ,please avoid following matters:

Splashing water or salt water

Dew condenses

Toxic gas (Hydrogen sulfide, Sulfurous acid ,Chlorine, Ammonia)

Vibrations or shocks which exceed the specified condition

Please be careful for the stress to this product by board flexure or something after the mounting.

● Others

10-1 Operating temperature range : Ferrite Series :-25~＋85℃

Ceramic Series :-40~+125 ℃

10-2 Storage condition : Temperature 20°~25 ℃ , Relative Humidity 40%~60%