

Chip Beads For Signal Line

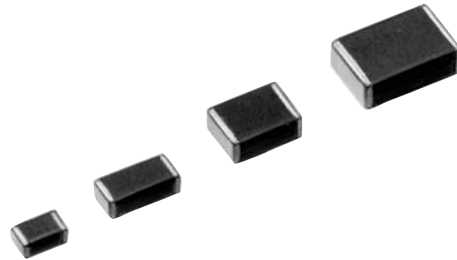
Conformity to RoHS Directive

ACB Series

HFxxACB2012, HFxxACB3216, HFxxACB3225, HFxxACB4532

FEATURES

- This extensive series completely covers impedance values ranging from 7 to 125Ω[100MHz] and can be applied to a wide range of circuits.
- The 2012, 3216, 3225 and 4532 types all use HF70, 50 and 30 materials. The most suitable component can be selected for the circuit pattern and the suppression band.
- These components are applicable for both flow and reflow solderings, and have outstanding physical characteristics such as excellent terminal strength, body strength, resistance to soldering heat, solderability and mounting reliability.
- Available reflow soldering.
- It is a product conforming to RoHS directive.



PRODUCT IDENTIFICATION

HF70	ACB	201209	-	T
(1)	(2)	(3)		(4)

- (1) Material name
 (2) Series name
 (3) Dimension code
 (4) Packaging style
 T: ø180mm reel taping
 TL: ø330mm reel taping

SPECIFICATIONS

Operating temperature range	-40 to +125°C
Storage temperature range	-40 to +125°C(After mount)

PACKAGING STYLE AND QUANTITIES

Packaging style	Type	Quantity
Taping	201209	2000 pieces/reel
	321611	2000 pieces/reel
	322513	2000 pieces/reel
	453215	1000 pieces/reel

HANDLING AND PRECAUTIONS

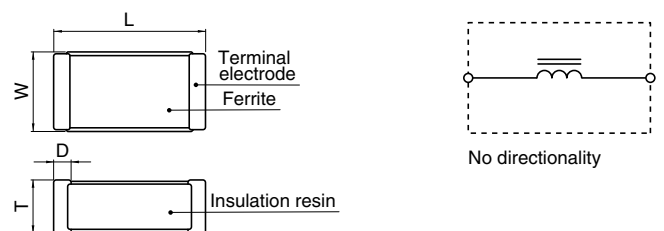
- Before soldering, be sure to preheat components. The preheating temperature should be set so that the temperature difference between the solder temperature and product temperature does not exceed 150°C.
- After mounting components onto the printed circuit board, do not apply stress through board bending or mishandling.
- Do not expose the inductors to stray magnetic fields.
- Avoid static electricity discharge during handling.
- When hand soldering, apply the soldering iron to the printed circuit board only. Temperature of the iron tip should not exceed 350°C. Soldering time should not exceed 3 seconds.

- Conformity to RoHS Directive: This means that, in conformity with EU Directive 2002/95/EC, lead, cadmium, mercury, hexavalent chromium, and specific bromine-based flame retardants, PBB and PBDE, have not been used, except for exempted applications.

- Please contact our Sales office when your application is considered the following:
 The device's failure or malfunction may directly endanger human life (e.g. application for automobile/aircraft/medical/nuclear power devices, etc.)

- All specifications are subject to change without notice.

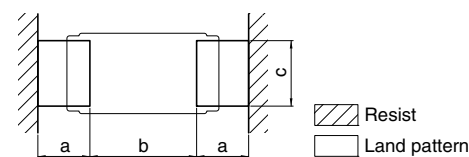
SHAPES AND DIMENSIONS/CIRCUIT DIAGRAM



Dimensions in mm

Type	L	W	T	D
201209	2.0±0.2	1.25±0.2	0.9±0.2	0.3±0.2
321611	3.2±0.2	1.6±0.2	1.1±0.2	0.3±0.2
322513	3.2±0.2	2.5±0.2	1.3±0.2	0.3±0.2
453215	4.5±0.25	3.2±0.25	1.5±0.25	0.3±0.2

RECOMMENDED PC BOARD PATTERN REFLOW SOLDERING



Dimensions in mm

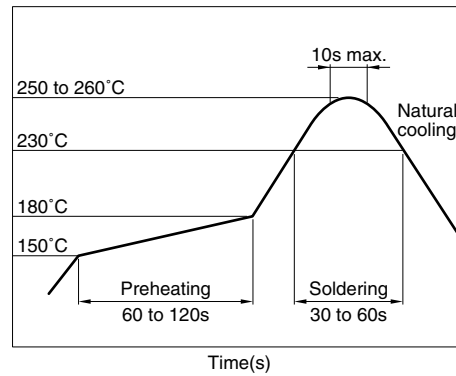
Type	a	b	c
201209	1.0	1.0	1.0
321611	1.1	2.2	1.4
322513	1.1	2.2	2.3
453215	1.5	3.0	3.0

ELECTRICAL CHARACTERISTICS

Type	Part No.	Impedance (Ω)[100MHz]	DC resistance (Ω)max.	Rated current (mA)max.
201209	HF70ACB201209	10 $\pm$ 25%	0.1	600
	HF50ACB201209	11 $\pm$ 25%	0.1	600
	HF30ACB201209	7 $\pm$ 25%	0.1	600
321611	HF70ACB321611	26 $\pm$ 25%	0.2	500
	HF50ACB321611	31 $\pm$ 25%	0.2	500
	HF30ACB321611	19 $\pm$ 25%	0.2	500
322513	HF70ACB322513	52 $\pm$ 25%	0.3	400
	HF50ACB322513	60 $\pm$ 25%	0.3	400
	HF30ACB322513	31 $\pm$ 25%	0.3	400
453215	HF70ACB453215	120 $\pm$ 25%	0.4	300
	HF50ACB453215	125 $\pm$ 25%	0.4	300
	HF30ACB453215	70 $\pm$ 25%	0.4	300

RECOMMENDED SOLDERING CONDITION

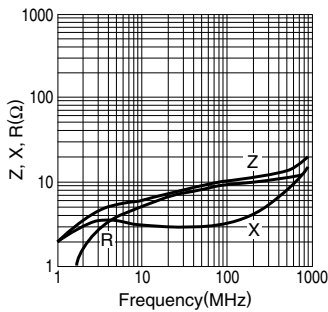
REFLOW SOLDERING



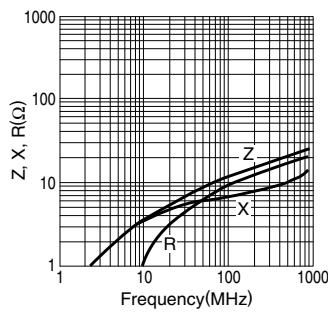
TYPICAL ELECTRICAL CHARACTERISTICS

Z, X, R vs. FREQUENCY CHARACTERISTICS

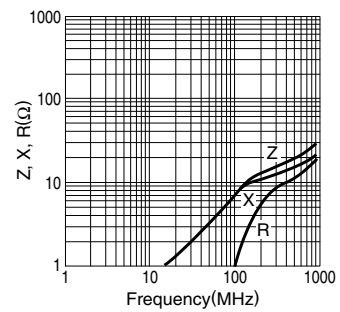
HF70ACB201209



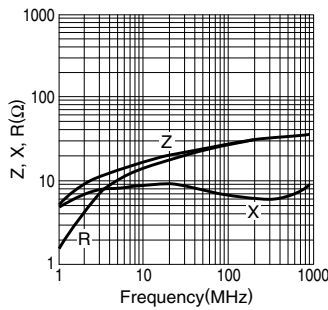
HF50ACB201209



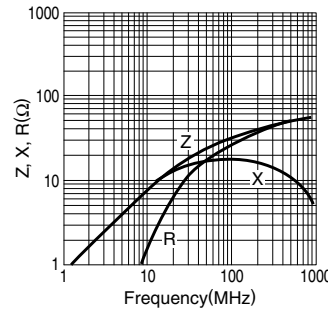
HF30ACB201209



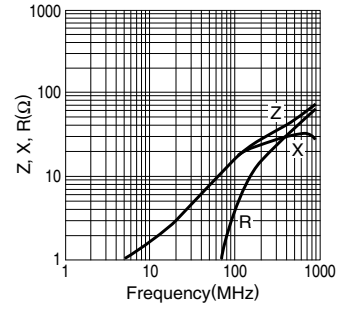
HF70ACB321611



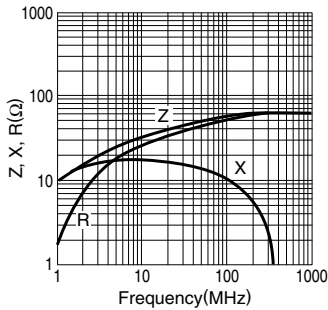
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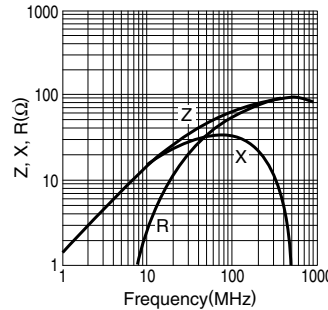
HF30ACB321611



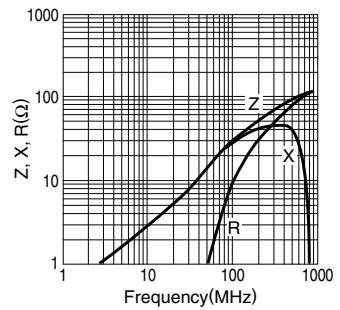
HF70ACB322513



HF50ACB322513



HF30ACB322513



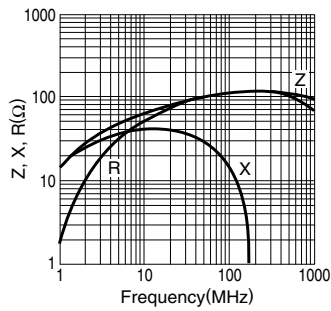
• TEST EQUIPMENT: RF IMPEDANCE ANALYZER YHP4191A

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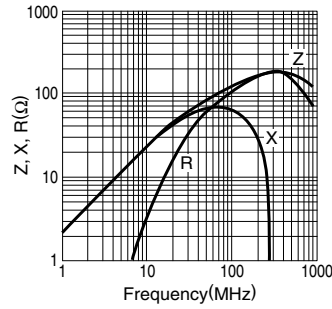
TYPICAL ELECTRICAL CHARACTERISTICS

Z, X, R vs. FREQUENCY CHARACTERISTICS

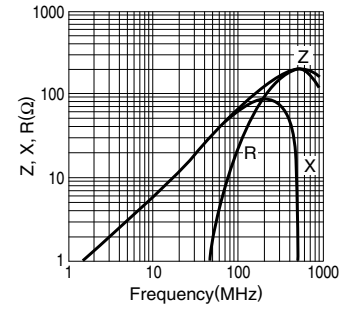
HF70ACB453215



HF50ACB453215



HF30ACB453215

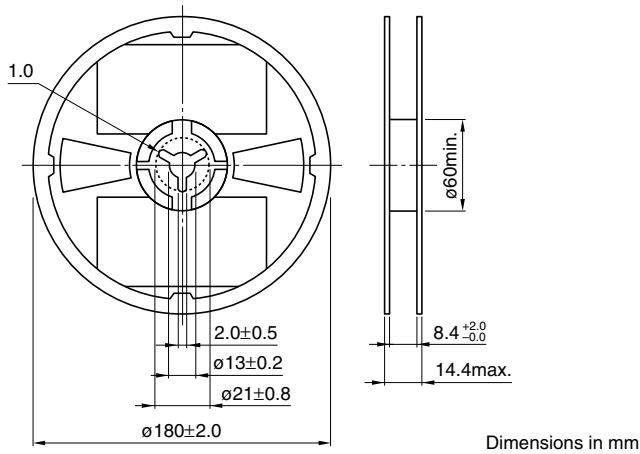


• TEST EQUIPMENT: RF IMPEDANCE ANALYZER YHP4191A

PACKAGING STYLES

201209 TO 322513 TYPES

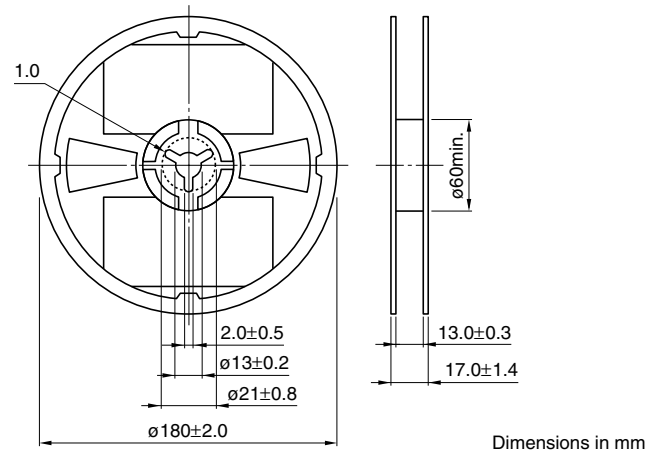
REEL DIMENSIONS



Dimensions in mm

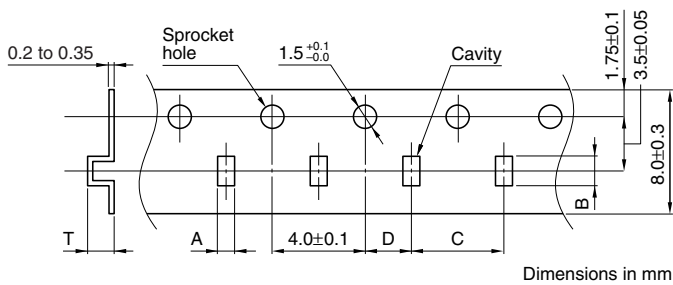
453215 TYPE

REEL DIMENSIONS



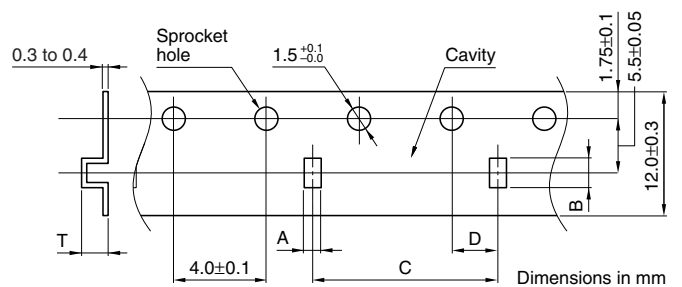
Dimensions in mm

TAPE DIMENSIONS



Dimensions in mm

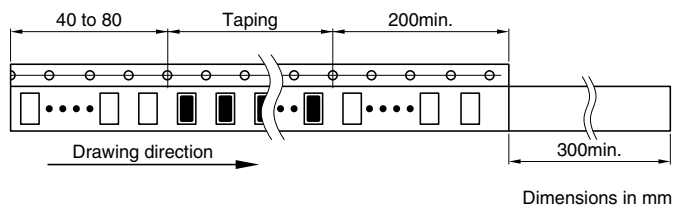
TAPE DIMENSIONS



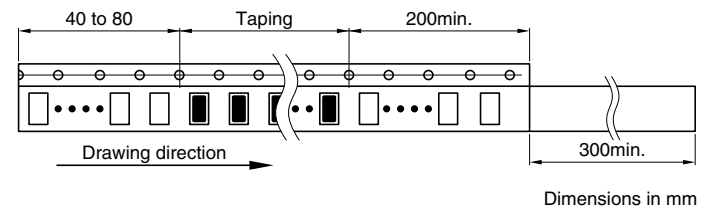
Dimensions in mm

Type	A	B	C	D	T
201209	1.4±0.1	2.25±0.1	4.0±0.1	2.0±0.05	1.25max.
321611	1.75±0.1	3.45±0.1	4.0±0.1	2.0±0.05	1.4max.
322513	2.6±0.1	3.45±0.1	4.0±0.1	2.0±0.05	1.6max.

Type	A	B	C	D	T
453215	3.37±0.1	4.75±0.1	8.0±0.1	2.0±0.05	1.8max.



Dimensions in mm



Dimensions in mm

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