

July 2016

# Chip beads

For general signal line

**HF-ACB** series

# HFxxACB2012 Type

HFxxACB2012

[0805 inch]\*

\* Dimensions code JIS[EIA]

## **Reminders for using these products**

Before using these products, be sure to request the delivery specifications.

### **Safety reminders**

Please pay sufficient attention to the warnings for safe designing when using this products.

🕂 Ren	ninders
<ul> <li>The storage period is less than 12 months. Be sure to follow the st less).</li> </ul>	corage conditions (temperature:5 to 40°C, humidity:10 to 75% RH or
If the storage period elapses, the soldering of the terminal electron	des may deteriorate.
$\bigcirc$ Do not use or store in locations where there are conditions such a	s gas corrosion (salt, acid, alkali, etc.).
<ul> <li>Before soldering, be sure to preheat components.</li> <li>The preheating temperature should be set so that the temperature does not exceed 150°C.</li> </ul>	re difference between the solder temperature and chip temperature
<ul> <li>Soldering corrections after mounting should be within the range of If overheated, a short circuit, performance deterioration, or lifespare</li> </ul>	-
When embedding a printed circuit board where a chip is mounted the overall distortion of the printed circuit board and partial distortion	
<ul> <li>Self heating (temperature increase) occurs when the power is tu design.</li> </ul>	Irned ON, so the tolerance should be sufficient for the set thermal
<ul> <li>Carefully lay out the coil for the circuit board design of the non-ma A malfunction may occur due to magnetic interference.</li> </ul>	gnetic shield type.
$\bigcirc$ Use a wrist band to discharge static electricity in your body throug	h the grounding wire.
$\bigcirc$ Do not expose the products to magnets or magnetic fields.	
$\bigcirc$ Do not use for a purpose outside of the contents regulated in the c	lelivery specifications.
ment, industrial robots) under a normal operation and use condition The products are not designed or warranted to meet the requirement ity require a more stringent level of safety or reliability, or whose far person or property.	ment, personal equipment, office equipment, measurement equip-
<ol> <li>(1) Aerospace/aviation equipment</li> <li>(2) Transportation equipment (cars, electric trains, ships, etc.)</li> <li>(3) Medical equipment</li> <li>(4) Power-generation control equipment</li> <li>(5) Atomic energy-related equipment</li> <li>(6) Seabed equipment</li> <li>(7) Transportation control equipment</li> </ol>	<ul> <li>(8) Public information-processing equipment</li> <li>(9) Military equipment</li> <li>(10) Electric heating apparatus, burning equipment</li> <li>(11) Disaster prevention/crime prevention equipment</li> <li>(12) Safety equipment</li> <li>(13) Other applications that are not considered general-purpose applications</li> </ul>
When designing your equipment even for general-purpose applicatio tection circuit/device or providing backup circuits in your equipment.	ns, you are kindly requested to take into consideration securing pro-

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### **Chip beads**

For general signal line

# **Overview of HFxxACB2012 type**

#### FEATURES

O Noise reduction solution for general signal line.

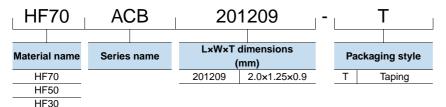
O Achieves various frequency characteristics by using 3 materials with different features.

O There is no directivity.

#### APPLICATION

Signal line noise removal for DSCs, DVCs, PCs, TVs, printers, game machines, smart grids, wireless base stations, industrial equipment.

#### PART NUMBER CONSTRUCTION



#### OPERATING TEMPERATURE RANGE, PACKAGE QUANTITY, PRODUCT WEIGHT

	Temperatu	ure ranges	Package quantity	Individual weight
Туре	Operating temperature (°C)	Storage temperature* (°C)	temperature*	
			. ,	(mg)
HFxxACB2012	-40 to +125	-40 to +125	2,000	10

\* The storage temperature range is for after the circuit board is mounted.

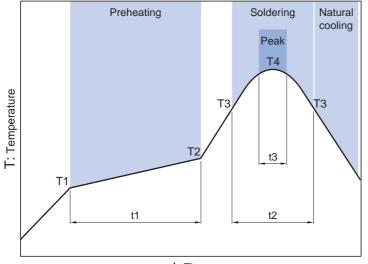
RoHS Directive Compliant Product: See the following for more details.https://product.tdk.com/info/en/environment/rohs/index.html

O Halogen-free: indicates that CI content is less than 900ppm, Br content is less than 900ppm, and that the total CI and Br content is less than 1500ppm.

Please be sure to request delivery specifications that provide further details on the features and specifications of the products for proper and safe use. Please note that the contents may change without any prior notice due to reasons such as upgrading.

**公TDK** 

#### RECOMMENDED REFLOW PROFILE

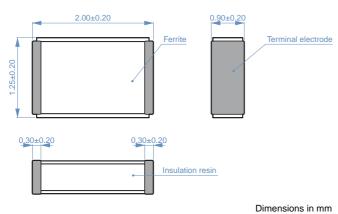


t: Time

Preheating		Soldering	Soldering			
Temp.		Time	Temp.	Time	Temp.	Time
T1	T2	t1	Т3	t2	Τ4	t3
150°C	180°C	60 to 120s	230°C	30 to 60s	250 to 260°C	10s

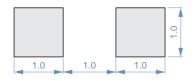
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#### SHAPE & DIMENSIONS





#### RECOMMENDED LAND PATTERN



Dimensions in mm

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#### ELECTRICAL CHARACTERISTICS

#### CHARACTERISTICS SPECIFICATION TABLE

Impedance		DC resistance	Rated current	Part No.
[100MHz]				
<b>(</b> Ω <b>)</b>	Tolerance	<b>(</b> Ω <b>)max.</b>	(mA)max.	
10	±25%	0.1	600	HF70ACB201209-T
11	±25%	0.1	600	HF50ACB201209-T
7	±25%	0.1	600	HF30ACB201209-T

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#### ELECTRICAL CHARACTERISTICS

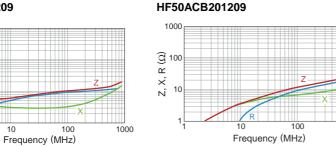
#### $\Box$ Z, X, R VS. FREQUENCY CHARACTERISTICS

HF70ACB201209

1000

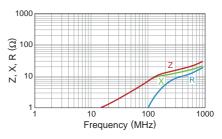
C, X, R (Ω) 100 2, X, 10

1





1000



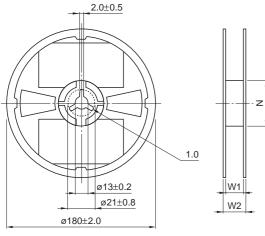
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# HFxxACB2012 type

#### PACKAGING STYLE

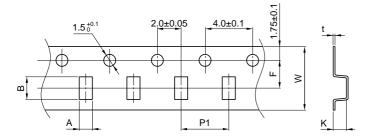
#### **REEL DIMENSIONS**



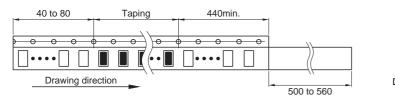
Туре	W1	W2	N	
HFxxACB2012	8.4+2.0/-0.0	14.4max.	ø60min.	

Dimensions in mm

#### **TAPE DIMENSIONS**



Dimensions in m							nsions in mm
Туре	A	В	F	P1	W	K	t
HFxxACB2012	1.4±0.1	2.25±0.1	3.5±0.05	4.0±0.1	8.0±0.3	1.25max.	0.3max.



Dimensions in mm

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