

July 2016

Chip beads

For general signal line

HF-ACB series (for automobiles)

HFxxACB3216 Type

HFxxACB3216

[1206 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.

<u>∧</u> R	eminders
 The storage period is less than 12 months. Be sure to follow the less). 	e storage conditions (temperature:5 to 40°C, humidity:10 to 75% RH or
If the storage period elapses, the soldering of the terminal elect	trodes may deteriorate.
\bigcirc Do not use or store in locations where there are conditions such	n as gas corrosion (salt, acid, alkali, etc.).
 Before soldering, be sure to preheat components. The preheating temperature should be set so that the temperators does not exceed 150°C. 	ature difference between the solder temperature and chip temperature
 Soldering corrections after mounting should be within the range If overheated, a short circuit, performance deterioration, or lifes 	-
○ When embedding a printed circuit board where a chip is mount the overall distortion of the printed circuit board and partial distortion	ted to a set, be sure that residual stress is not given to the chip due to prtion such as at screw tightening portions.
 Self heating (temperature increase) occurs when the power is design. 	s turned ON, so the tolerance should be sufficient for the set thermal
 Carefully lay out the coil for the circuit board design of the non-r A malfunction may occur due to magnetic interference. 	magnetic shield type.
\bigcirc Use a wrist band to discharge static electricity in your body thro	ugh 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 th	e delivery specifications.
ment, home appliances, amusement equipment, computer eq ment, industrial robots) under a normal operation and use cond The products are not designed or warranted to meet the require ity require a more stringent level of safety or reliability, or whose person or property.	neral electronic equipment (AV equipment, telecommunications equip- uipment, personal equipment, office equipment, measurement equip- lition. Imments of the applications listed below, whose performance and/or qual- e failure, malfunction or trouble could cause serious damage to society, or if you have special requirements exceeding the range or conditions
 (1) Aerospace/aviation equipment (2) Transportation equipment (electric trains, ships, etc.) (3) Medical equipment (4) Power-generation control equipment (5) Atomic energy-related equipment (6) Seabed equipment (7) Transportation control equipment 	 (8) Public information-processing equipment (9) Military equipment (10) Electric heating apparatus, burning equipment (11) Disaster prevention/crime prevention equipment (12) Safety equipment (13) Other applications that are not considered general-purpose applications
When designing your equipment even for general-purpose applicate tection circuit/device or providing backup circuits in your equipment	tions, you are kindly requested to take into consideration securing pro- nt.

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Chip beads

For general signal line

Product compatible with RoHS directive Halogen-free Compatible with lead-free solders AEC-Q200

Overview of HFxxACB3216 type

FEATURES

O Noise reduction solution for general signal line.

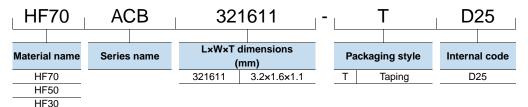
O Achieves various frequency characteristics by using 3 materials with different features.

O There is no directivity.

APPLICATION

Various ECUs, powertrains, body controls, and car multimedia (telematics).

PART NUMBER CONSTRUCTION



OPERATING TEMPERATURE RANGE, PACKAGE QUANTITY, PRODUCT WEIGHT

	Temperatu	ire ranges	Package quantity	Individual weight		
Туре		Operating temperature	Storage temperature*			
		(°C)	(°C)	(pieces/reel)	(mg)	
F	HFxxACB3216	-40 to +125	-40 to +125	2,000	22	

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

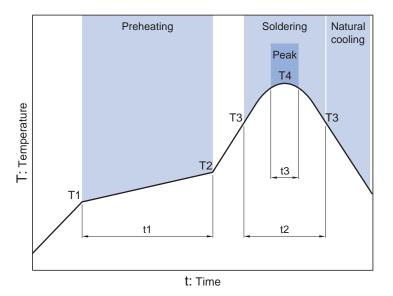
OROHS Directive Compliant Product: See the following for more details.https://product.tdk.com/info/en/environment/rohs/index.html

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.

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RECOMMENDED REFLOW PROFILE



Preheating		Soldering	Soldering			
Temp.		Time	Temp.	Time	Temp.	Time
T1	T2	t1	Т3	t2	T4	t3
150°C	180°C	60 to 120s	230°C	30 to 60s	250 to 260°C	10s

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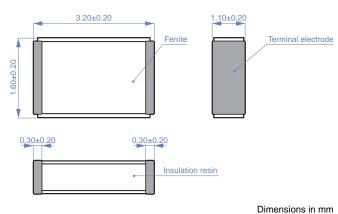
⊗TDK

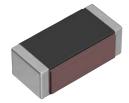
⊗TDK

EMC Components

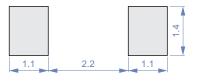
HFxxACB3216 type

SHAPE & DIMENSIONS





RECOMMENDED LAND PATTERN



Dimensions in mm

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HFxxACB3216 type

ELECTRICAL CHARACTERISTICS

CHARACTERISTICS SPECIFICATION TABLE

Impedance		DC resistance	Rated current	Part No.
[100MHz]				
(Ω)	Tolerance	(Ω)max.	(mA)max.	
26	±25%	0.2	500	HF70ACB321611-TD25
31	±25%	0.2	500	HF50ACB321611-TD25
19	±25%	0.2	500	HF30ACB321611-TD25

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ELECTRICAL CHARACTERISTICS

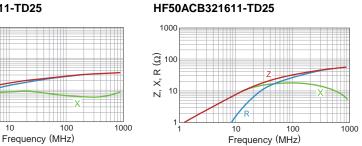
Z, X, R VS. FREQUENCY CHARACTERISTICS

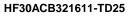
HF70ACB321611-TD25

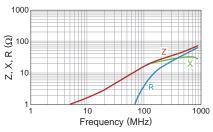
10

1000

00 (U) 2, X, R







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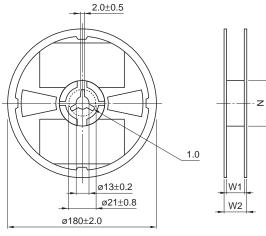
⊗TDK

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HFxxACB3216 type

PACKAGING STYLE

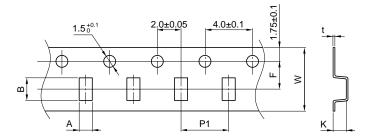
REEL DIMENSIONS



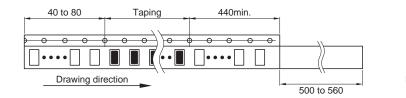
Type W1		W2	N	
HFxxACB3216	8.4+2.0/-0.0	14.4max.	ø60min.	

Dimensions in mm

TAPE DIMENSIONS



Dimensions in m							ensions in mm
Туре	A	В	F	P1	W	K	t
HFxxACB3216	1.75±0.1	3.45±0.1	3.5±0.05	4.0±0.1	8.0±0.3	1.4max.	0.3max.



Dimensions in mm

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