

TDK XIAMEN CO., LTD. 1~19# Lian Sheng Rd., North Industrial District, Jimei, Xiamen, Fujian. (361021)

Phone: 086-0592-6150333-576

Branch Off	ice
Sales div.	Tel:
SPEC. No.	XL-0911-1651 (00)
DATE :	2017/7/12
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SPECIFICATION APPROVAL			
		SPEC. No.	XL-0911-1651 (00)
MESSRS : TCA/DISTRIBUTION		DATE :	2017/7/12
CUSTOMER'S PRODUCT NAME :			
H5AT2	8X13X16		
TDK PRODUCT NAME :			
H5AT2	8X13X16		
THIS SPECIFICATION IS :			
☐ FULLY APPROVED			
□ DENIED			
☐ APPROVED UNDER THE FOLLOWING CO	ONDITIONS		

	Magnetics Business Grou	ıp	SALES DIV.	
PREPARED BY	CHECKED BY	APPROVED BY	REVIEWED BY	AUTHORIZED BY
2017 .07. 12 林火阳	I_1 2017.07.13 吴聪强	37/13		

SIGNATURE : \_\_\_\_ DATE : \_\_\_\_

NAME (PRINTED) :

TITLE :

PRODUCT CLASSIFICATION CODE :

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	Basic contents
	1 ). Scope of Application
	This specification shall be applied for the Ferrite cores to be delivered to Messrs. TCA/DISTRIBUTION
	2 ). Name of product
	The name of the product to be defined in this specification shall be defined as H5AT28X13X16
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### 3 ). Related Specifications

## 4 ). Description

Items	Attached drawings and tables	Page
Outer appearance		
structure and size		2
Electrical		
characteristics		2
Marking		2
Manufacturing site		2
Others		3

Revision Records

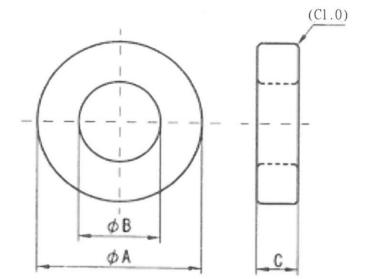
Magnetics Business Group

Edition	Date	Revised by	Revision
00	2017/7/12	Huoyang Lin	First Issue
			,
		Spec	ification No.

TDK CORPORATION

XL-0911-1651 (00)

### 1. Dimensions (Unit:mm)



S P E C	Dimension(mm)			
	φΑ	28.0	±	0.40
	φВ	16.0	±	0.40
	С	13.0	±	0.30

#### 2. Electrical characteristics

Item	Specification	Test conditions		
Inductance	$530\mu\mathrm{H}\pm25\%$	●EQUIP.: LCR METER(Agilent 4284A) OR EQUIVALENT		
		●MEASUREMENT METHOD : Single test		
		●FREQ. : 50 kHz		
		●LEVEL : 10mV (ALC ON)		
		●COIL : φ0.35 N=10 Ts		

- Marking "H5A TDK Date X" is marked on the side of core.
- e. g.

  H5A TDK 3323 X

- 4. The core shall be supplied as piece.
- 5. Manufacturing site

China: TDK Xiamen Co., Ltd

Specification No.

XL-0911-1651 (00)

Inspection Test Schedule

Magnetics Business Group of TDK CORPORATION performs outgoing inspection tests on the inspection items in Table-1. The inspection shall be performed according to ISO-2859-1 Inspection level I (n=10, c=0 for dimension and n=5, c=0 for core loss)

Table-1. AQL and Inspection items

	AQL	Inspection Items	
Α	0.4 %	Inductance and Crack	
В	1.0 %	Dimensions	
C	1.5 %	Chipping	- contact

Permissible limit of chips are prescribed as follows:

- (1) Depth of a permissible chip and pull-out shall be 1.0 mm max.
  Chips and pull-outs on the corner should be judged by only the area.
- (2) Area of a permissible chip and pull-out shall be 4.0 mm<sup>2</sup> max. For the chips and pull-outs more than two on a core piece, the total area of chips shall be used for judgement.
- (3) Others.
  Not described above are based on IEC 60424 specification.

Specification No.

## CAUTION !

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# CAUTIONS

Please seriously consider the following points in order to minimize heat generation:

 Select the material & shape of ferrite cores by utilizing the published nominal and min./max. values of magnetic properties especially;

AL-value
Saturation Flux Density(maximum)
Core Loss
Temperature Coefficients
Frequency Characteristics
Curie Temperature

- Provide proper insulation of windings by selecting non-corrosive and non-interacting materials and take care to avoid overfill of coilformer and scrapes or abrasions of wire insulation during winding.
- Insulation is further enhanced by use of a case, bobbin, tape, cement or other appropriate insulating medium with a thermal expansion coefficient very similar to that of ferrite.
- Avoid excessive force or poor fit of test fixtures and tools to prevent cracking or chipping the ferrite core.
- Provide clearance between the case, bobbin, coil and core to prevent cracking of the core and insulation breakdown.
- Distribute the coil windings evenly, preferably with Bi-Filar Windings, to prevent hot spots in the windings which could cause combustion.
- Keep safety in mind to prevent transient currents and to position the transformer assembly so that any heat generated in normal usage will not damage other circuit components even if another circuit should fail.
- To prevent personal injury when handling ferrite cores during assembly follow these precautions;
  - Ferrites, a ceramic material, are fragile and can chip and crack when mishandled.
  - Avoid placing ferrite cores near strong magnetic fields.
  - Prevent mechanical shocking of cores when using fixtures or tools.
  - Prevent thermal shocking of cores when may cause cracks.
  - Polished cores have sharp mating edges. Avoid touching these surfaces.
  - Because of the considerable weight of ferrite cores, be extra careful when stacking or handling cartons of cores.
  - Avoid reprocessing ferrite cores.
  - Ferrite cores are not edible. Make sure to keep ferrite cores away from young children so that they do not attempt to eat the cores.