

# 规格承认书

## SPECIFICATION FOR APPROVAL

客户

CUSTOMER: \_\_\_\_\_

客户料号

CUST' S PART NO: LQM31FN100M00L

品名

DESCRIPTION: HDI3216N100T

号码

NO. : 20-102

日期

DATE: 2020-02-24

	“v”	客户签章 CUSTOMER' S SIGNATURE	备注 NOTE
承认 FULL APPROVED			
部分承认 CONDITIONAL APPROVED			
驳回 REJECTED			

拟制                      审核                      批准  
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技术部  
TECHNICAL DEPT

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## 1 适用范围 Scope

本产品规格承认书适用于 HDI 系列叠层片式铁氧体电感。

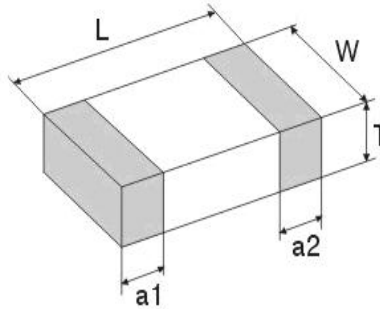
This product specification is applicable to HDI series laminated ferrite inductor.

## 2 品名构成 Product Identification

  HDI     3216     N     100     K     T   -   GP    
 ①           ②           ③           ④           ⑤           ⑥           ⑦

- ① 产品系列 Product Symbol
- ② 产品尺寸 Dimensions (见 3)
- ③ 基本材料代码 Material Code (K、B、N、H 等)
- ④ 电感量 Inductance Value (47N:0.047 $\mu$ H;R47:0.47 $\mu$ H;4R7:4.7 $\mu$ H;470:47 $\mu$ H;471:470 $\mu$ H)
- ⑤ 允许容差 Inductance Tolerance (J:±5%;K:±10%; M:±20%; N:±30%)
- ⑥ 包装方式 (B: 散装; T: 盘装) Packaging Style (B:; Bulk; T: Tape & Reel)
- ⑦ 无铅产品 Lead free products

## 3 形状、尺寸和材料 Appearance, Dimensions and Material



Type 型号	Dimensions (mm) [inch]			
	L长	W宽	T高	a1, a2
3216	3.20±0.20 [0.126±0.008]	1.6±0.20 [0.063±0.008]	0.85±0.20 [0.03±0.008]	0.50±0.30 [0.02±0.012]

	构成 Composition	材料 Material	供应商 Supplier
1	基本材料 Base Material	铁氧体(Ni-Cu-Zn 系列) Ferrite (Ni-Cu-Zn series)	日本 Japan
2	内导体 Internal Conductor	银 Ag	日本 Japan
3	端电极 Terminal Electrode	银 Ag	日本 Japan
4	端电极 Terminal Electrode	镍-锡 Ni-Sn	美国 USA

#### 4 测试条件 Testing Conditions

除非另有规定，否则在以下条件下测试 <Unless otherwise specified>

温度 Temperature : Ordinary Temperature ( 5 to 35°C)

湿度 Humidity : Ordinary Humidity (25 to 85% RH)

当对测量结果有疑问时 <In case of doubt>

温度 Temperature : 20±2°C

湿度 Humidity : 60 to 75% RH

大气压强 Atmospheric Pressure : 86 to 106 kPa

#### 5 标称值 Rating

操作温度范围 Operating Temperature Range : -40to +855°C

保存温度范围 Storage Temperature Range : -40 to +85°C

HDI 3216 Type

Part No.	Inductance ( $\mu\text{H}$ )	Q min	Test Freq. (MHz)	SRF (MHz) min	RDC ( $\Omega$ ) max	IR (mA) max
HDI3216N100MT	10	50	2	24	1.00	25

□:Please specify the inductance tolerance J( $\pm 5\%$ ) or k( $\pm 10\%$ ). M: for general purpose 请指定电感公差

## 6 电气特性 Electrical Performance

### 6.1 电感量; Q 值 Inductance; Q factor

按表 1 所列条件测量时，电感量应符合条款 5。

Inductance; Q factor shall meet item 5 when measured on the condition of Table 1.

Table 1

测量设备 Measuring Equipment	阻抗分析仪 HP4291 或其他 Impedance analyzer HP4291 or equivalent
测量频率 Measuring Frequency	见条款 5 (see item 5)
测量信号 Measuring signal level	50mV

### 6.2 直流电阻 DC Resistance

按表 2 所列条件测量时，直流电阻应符合条款 5。

D.C Resistance shall meet item 5 when measured on the condition of Table 2.

Table 2

测量设备 Measuring Equipment	LCR 测量表 HP4263A 或其他 LCR Meter HP4263A or equivalent
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### 6.3 自谐频率 Self Resonant Frequency (S.R.F)

按表 3 所列条件测量时，自谐频率应符合条款 5。

S.R.F. shall meet item 5 when measured on the condition of Table 3.

Table 3

测量设备 Measuring Equipment	阻抗分析仪 HP4291 或其他 Impedance analyzer HP4291 or equivalent
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### 6.4 额定电流 Rated current

当施加允许电流（见条款 5）时，电感量变化率在 $\pm 5\%$ 范围内。

Inductance change shall be within  $\pm 5\%$  when the allowable current (which is mentioned in item 5) is applied.

Table 4

测量设备 Measuring Equipment	阻抗分析仪 HP4291 或其他 直流电源 HP6632 和适配器 HP16200 Impedance analyzer HP4291 or equivalent DC power HP6632 and Adapter HP16200
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### 6.5 焊接变化率 Variance after Soldering

当经过焊接条件（260°C 浸锡 3±1 秒）后，电感量变化率≤±20%，Q 值变化率≤±30%。

Inductance change shall be within ±20% and Q factor change shall be within ±30% when the inductor is dipped into solder for 3 ± 1 seconds which is 260°C.

Table 5

测量设备 Measuring Equipment	阻抗分析仪 HP4291 或其他；焊接炉 Impedance analyzer HP4291 or equivalent Solder furnace
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