

FIDA-SMD Type (Rev. 4.0)**Features**

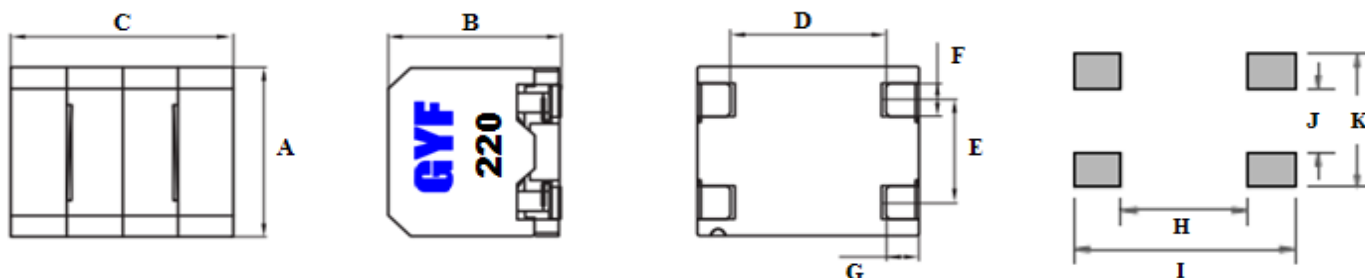
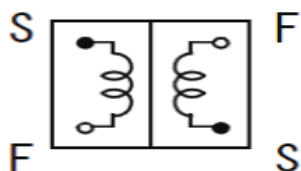
- * Space reduction is realized by cohered structure
- * The optimal design realizes high quality sound and low distortion
- * Small size and SMD type, magnetic shielded
- * High current, low resistance

Product Identification

FIDA 1010 - 220 M

1 2 3 4

1. Product Code
2. Size Code (W*H): 10.5 * 10.5mm
3. Inductance: 22uH
4. Tolerance: M= $\pm 20\%$

Dimension & Recommended PAD Layout: [mm]**Schematics:**

(Bottom View)

Construction:

FIDA, a full series of inductor module for LPF used in the digital amplifier featuring with higher efficiency and lower heat generation.

* Could customize according to customers' requirements.

Applications

* Car audios, home theater sets and large LCDs

Operating & Storage Condition :

- * Operating Temp : -40 to +125 °C
- * Storage Temp : -40 to +85 °C
- * Storage Life Time : 12 months @25 °C , RH 65%

Test Equipment :

- * HP4291A-Z, HP4284A, HP42841A- L, IDC, Q, RDC
- * HP8753D Network Analyzer- SRF

Standard Atmospheric Conditions :

- * Ambient Temp : 20 \pm 15 °C
- * Relative Humidity : 65 \pm 20%

Size Code	A(± 0.3)	B(max.)	C(± 0.3)	D(± 0.3)	E(± 0.3)	F(ref.)	G(± 0.3)	H(ref.)	I(ref.)	J(ref.)	K(ref.)
FIDA0910	9.0	10.0	10.0	6.2	5.5	1.2	1.9	5.5	11.0	3.5	7.6
FIDA1010	10.5	10.5	12.8	9.0	6.4	1.2	1.9	8.0	14.0	4.2	8.6

FIDA series (Rev. 4.0)**Electrical Characteristics**

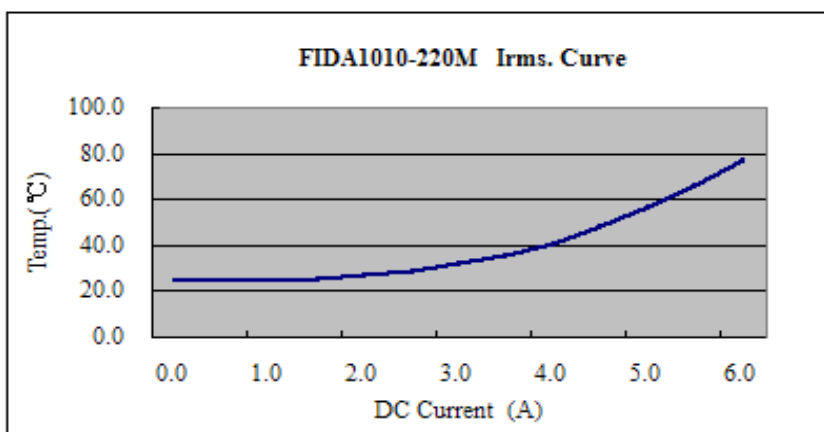
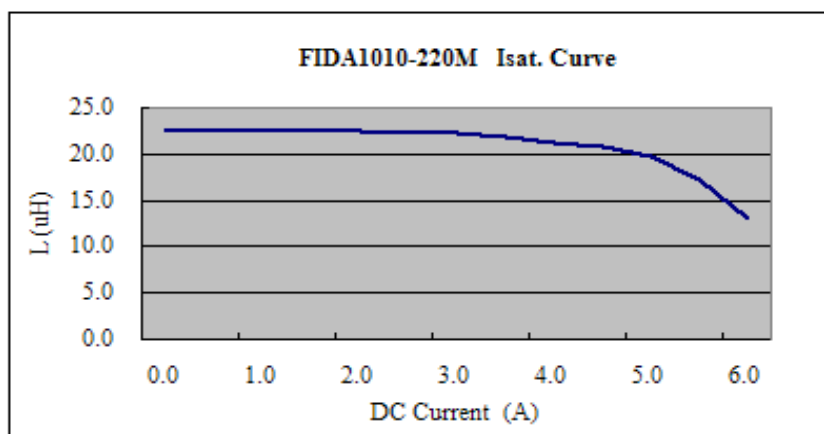
P/N	Inductance (uH)	DCR (mΩ) max.	Isat (A) max.	Irms (A) max.
FIDA0910-100M	10.0	20.0	6.0	4.5
FIDA0910-120M	12.0	22.0	5.5	4.0
FIDA0910-150M	15.0	30.0	5.0	3.0
FIDA0910-220M	22.0	32.0	4.0	2.5
FIDA1010-100M	10.0	16.0	7.6	7.2
FIDA1010-120M	12.0	18.0	6.2	5.5
FIDA1010-150M	15.0	22.0	5.5	5.0
FIDA1010-180M	18.0	24.0	5.0	4.8
FIDA1010-220M	22.0	28.0	4.3	4.5
FIDA1010-270M	27.0	27.4	3.8	4.1

* Test Condition: @1KHz/ 1.0V, 25 °C Ambient

* Isat.: This indicates the value of DC current when the inductance becomes 25% lower than its nominal value.

* Irms.: The DC current at which the temperature rise is $\Delta T \leq 40\text{ }^{\circ}\text{C}$ ($T_a=20\text{ }^{\circ}\text{C}$).

* Tolerance: K= $\pm 10\%$, M= $\pm 20\%$, N= $\pm 30\%$

Characteristics of DC Superposition:

FIDA-Dip Type (Rev. 4.0)



Flat Wire

Features

- * The optimal design realizes high quality sound and low distortion
- * Low radiation noise by magnetically shielded construction
- * High current, low resistance

FIDA, a full series of inductor module for LPF used in the digital amplifier featuring with higher efficiency and lower heat generation.

* Could customize according to customers' requirements.

Applications

- * Car audios, home theater sets and large LCDs

Operating & Storage Condition :

- * Operating Temp : -40 to +125 ℃
- * Storage Temp : -40 to +85 ℃
- * Storage Life Time : 12 months @25 ℃ , RH 65%

Product Identification

FIDA 1315 - 220 M
1 2 3 4

- 1. Product Code: FIDA
- 2. Size Code (W*H): 13 * 15mm
- 3. Inductance: 22uH
- 4. Tolerance: M= ±20%

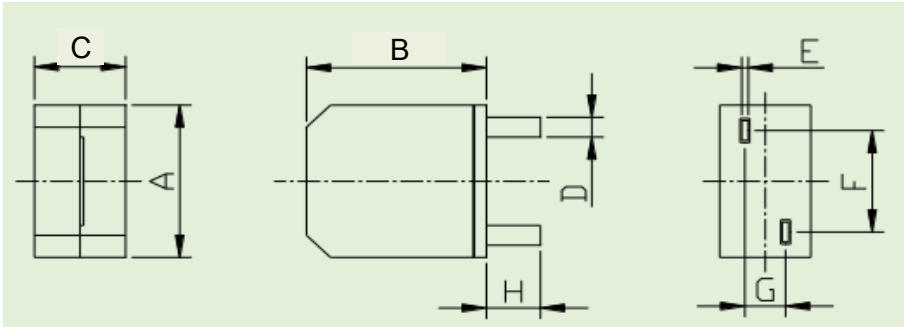
Test Equipment :

- * HP4291A-Z, HP4284A,HP42841A- L,IDC,Q,RDC
- * HP8753D Network Analyzer- SRF

Standard Atmospheric Conditions :

- * Ambient Temp : 20±15 ℃
- * Relative Humidity : 65±20%

Dimension: [mm]



Size Code	A(±0.5)	B(max.)	C(±0.5)	D(±0.1)	E(±0.1)	F(±0.5)	G(±0.5)	H(±1.0)
FIDA1010	10.5	10.5	6.4	1.2	0.2	6.4	3.6	4.0
FIDA1315	13.0	15.0	8.4	1.8	*	8.4	3.3	5.0
FIDA1416	14.0	16.0	9.6	1.8	*	9.2	5.2	5.0

* Vary with different inductance. Please refer to **Electrical Characteristics**.

FIDA series (Rev. 4.0)**Electrical Characteristics**

P/N	Inductance (uH)	DCR (mΩ) max.	Isat (A) max.	Irms (A) max.	Dimension (mm)	
					D	E
FIDA1010-100M	10.0	18.0	7.5	5.5	1.2	0.2
FIDA1010-120M	12.0	20.0	6.0	5.0	1.2	0.2
FIDA1010-150M	15.0	23.0	5.3	4.8	1.2	0.2
FIDA1315-100M	10.0	5.6	7.0	8.5	1.8	0.50
FIDA1315-120M	12.0	6.5	6.6	8.0	1.8	0.50
FIDA1315-150M	15.0	7.2	5.5	7.5	1.8	0.50
FIDA1315-220M	22.0	9.0	5.2	7.0	1.8	0.40
FIDA1315-270M	27.0	15.0	4.0	6.0	1.8	0.33
FIDA1315-330M	33.0	16.0	3.8	5.5	1.8	0.33
FIDA1416-100M	10.0	6.5	9.0	8.0	1.8	0.50
FIDA1416-120M	12.0	6.5	8.5	8.0	1.8	0.50
FIDA1416-150M	15.0	7.0	7.5	7.5	1.8	0.50
FIDA1416-220M	22.0	12.0	6.5	7.0	1.8	0.43
FIDA1416-330M	33.0	15.0	6.0	6.0	1.8	0.35
FIDA1416-470M	47.0	20.0	5.0	5.0	1.8	0.30

* Test Condition: @1KHz/ 1.0V, 25 °C Ambient

* Isat.: This indicates the value of DC current when the inductance becomes 25% lower than its nominal value.

* Irms.: The DC current at which the temperature rise is $\Delta T \leq 40^\circ\text{C}$ ($T_a=20^\circ\text{C}$).* Tolerance: K= $\pm 10\%$, M= $\pm 20\%$, N= $\pm 30\%$ **Characteristics of DC Superposition:**