

TIDA-SMD TYPE (Rev. 5.0)



Features

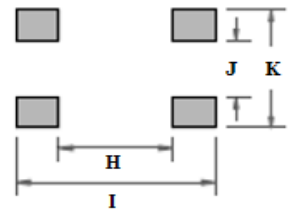
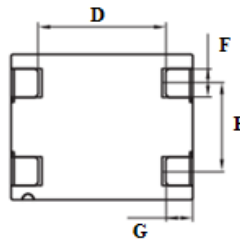
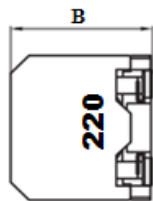
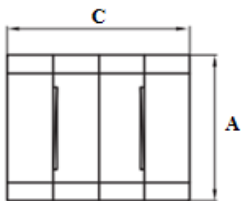
- * Space reduction is realized by cohered structure
- * The optimal design realizes high quality sound and low distortion
- * Small size and SMD type, magnetic shielded
- * High current, low resistance

Product Identification

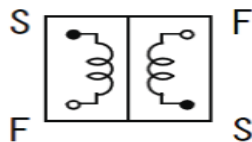
TIDA 1010 - 220 M
 1 2 3 4

1. Product Code
2. Size Code
3. Inductance: 22uH
4. Tolerance: M= ±20%

Dimension & Recommended PAD Layout: [mm]



Schematic:



Construction:



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

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+/-5 °C
- * Relative Humidity : 65+/-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.)
0910	9.0	10.0	10.0	6.2	5.5	1.2	1.9	5.5	11.0	3.5	7.6
1010	10.5	10.5	12.8	9	6.4	1.2	1.9	8	14	4.2	8.6

TIDA-SMD TYPE (Rev. 5.0)**Electrical Characteristics**

P/N	Inductance (μH)	DCR ($\text{m}\Omega$) max.	Isat (A) max.	Irms (A) max.
TIDA0910-100M	10.0	20.0	6.0	4.5
TIDA0910-120M	12.0	22.0	5.5	4.0
TIDA0910-150M	15.0	30.0	5.0	3.0
TIDA0910-220M	22.0	32.0	4.0	2.5
TIDA1010-100M	10.0	16.0	7.6	7.2
TIDA1010-120M	12.0	18.0	6.2	5.5
TIDA1010-150M	15.0	22.0	5.5	5.0
TIDA1010-180M	18.0	24.0	5.0	4.8
TIDA1010-220M	22.0	28.0	4.3	4.5
TIDA1010-270M	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 $\Delta T \leq 40^\circ\text{C}$ ($T_a = 20^\circ\text{C}$).

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

Characteristics of DC Superposition: