

SPECIFICATION SHEET

SPECIFICATION SHEET NO.	Q1108- ALMB1009100MTA	
DATE	Nov. 08, 2023	
REVISION	A0	Updated With Most Recent Data - Official First Release
DESCRIPTION AND MAIN PARAMETRICS	<p>SMD Power Fixed Inductors, ALMB series, 4 pins Size Code 1009, Dimension: L10.5*W9.5*H10.5mm Inductance: 10μH, Tolerance ±20%, Rated current (IDC1): 5.0A Max; D.C. Resistance: 22 Ω Max. Operating Temp. Range -40°C ~+125°C. Package in Tray, RoHS/RoHS III Compliant</p>	
CUSTOMER		
CUSTOMER PART NO.		
CROSS REF. PART NO.		
ORIGINAL MFG/PART NO.	Aillen/ALMB1009-100MT	
PART CODE	ALMB1009100MTA	

VENDOR APPROVE

Issued/Checked/Approved



DATE: Nov. 08, 2023

CUSTOMER APPROVE

DATE:

11/8/2023

SMD POWER INDUCTORS ALMB SERIES CASE 1009

MAIN FEATURE

- Super Low Resistance, Ultra High Current Rating.
- High Performance (Isat) Realized by metal dust core
- Cross Competitors Parts
- RoHS III Complaint



APPLICATION

- For General High Current Power Supplies

RFQ
Request For Quotation

PART CODE GUIDE

ALMB	1009	100	M	T	A
1	2	3	4	5	6

1. ALMB: SMD Power Fixed Inductors, ALMB series, 4 pins
2. 1009: Size Code 1009, Dimension: L10.5*W9.5*H10.5mm
3. 100: Nominal Inductance Code, 100: 10μH
4. M: Inductance Tolerance: K: ±10%; M: ±20%
5. T: Package Code: T: Tray
6. A: Internal Control Code or special Parameters code letter A~Z or digits (1-9)

ELECTRICAL CHARACTERISTICS

See Page 4 For Different Part Code

HOW TO ORDER

Please indicate part code and send us your RFQ by E-mail, sales@nextgencomponent.com

SMD POWER INDUCTORS ALMB SERIES CASE 1009

DIMENSION – (Unit: mm)

Image For Reference

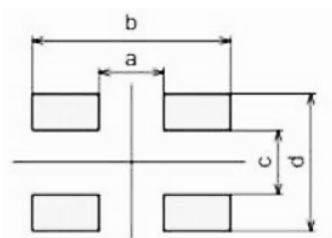
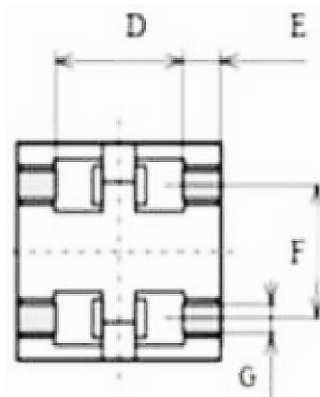
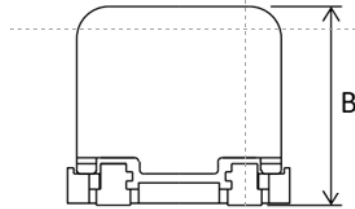
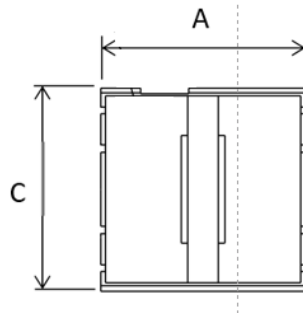


ALMB Series

Size Code 1009

Dimension:

L10.5*W9.5*H10.5mm

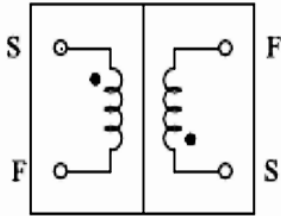


Symbol	Dimension
A	10.5 Max.
B	10.5 Max.
C	9.5 Max.
D	6.5 ± 0.3
E	2.0 ± 0.5
F	5.5 ± 0.5
G	1.2 ± 0.1
a	5.6 Typ.
b	10.6 Typ.
c	3.6 Typ.
d	7.4 Typ.

**Recommend
Pad Layout**

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CIRCUIT DIAGRAM



MATERIAL LIST FOR REFERENCE

No.	Material Name	Material Description
1	Core	FERRITE
2	Wire	AIW
3	Solder	107H
4	Epoxy	G-500HF
5	Margin Tape	WF

ELECTRICAL CHARACTERISTIC

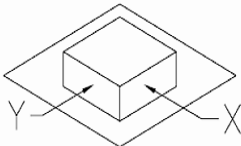
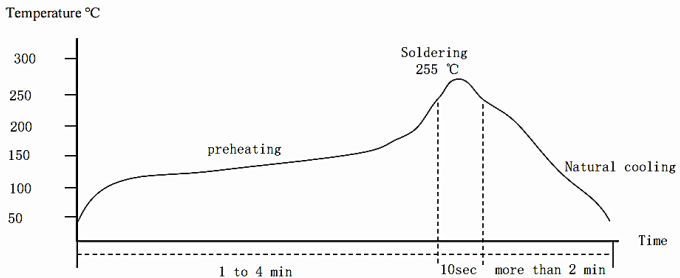
Part Code	Inductance @10KHz/1V		DCR (mΩ)	IDC 1 (A) Max.	IDC 2 (A) Max.
	L (uH)	Tol (%)			
ALMB10093R3MTA	3.3	±20	20 Typ.	10	8.5
ALMB1009100MTA	10	±20	22 Typ	5	3.9
ALMB1009150MTA	15	±20	44 Typ.	4.1	2.8
ALMB1009220MTA	22	±20	52 Typ.	3.2	2.5

Notes

1. IDC1: Base on Temp. rise & $\Delta L/L0A \leq 35\%$ Max
2. IDC2: Temp. rise 40°C Typ.
3. Operating Temperature: -40°C up to +125°C
4. Temperature: -20°C up to +40°C, 75% RH Max.

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RELIABILITY TEST-

No.	Item	Test Terminal
1	Operating Temperature	- 40 to +125 °C (Contain Heating coil)
2	Appearance Inspection	No external defects by visual inspection
3	Terminal Strength	<p>After soldering , between copper plaet and terminals of coils , push in two directions of X , Y with standing 10N(1.02kg) for10+/-2 sec.</p> <p>Terminal should not peel off. (Refer to figure at right)</p> 
4	Heat endurance of reflow soldering	Refer to figure
5	Insulating resistance	Over 100 MΩ at 100V D.C . between wire and core
6	Dielectric Strength	Apply at 0.5KV 3mA for 1 minute between wire and core
7	Temperature characteristics	Inductance coefficient (0~2,000) × 10 / °C(- 40~ + 125 °C)
8	Humidity characteristics	Inductance deviation within ± 10% , after 96 hours in 90~95% relative humidity at 40 ± 2 °C and 1 hours drying under normal condition
9	IR Reflow profile	<p>Temperature and humidity . After that , no mechanical and electrical defect should be found .</p> 

SMD POWER INDUCTORS ALMB SERIES CASE 1009

PACKAGE

Packed in Tray and box

STORAGE PERIOD

Products which inspected in QC dept. over 6 months ago should be examined and used, Solder ability should be checked if this period is exceeded.

STORAGE CONDITIONS

1. Products should be storage in the warehouse on the following conditions Temperature: $\leq 40^{\circ}\text{C}$; Humidity : $\leq 70\%$ relative humidity, No rapid change on temperature and humidity
2. Don't keep products in corrosive gases such as sulfur, chlorine gas or acid, or it may cause oxidization of electrode, resulting in poor solder ability.
3. Products should be storage on the palette for the prevention of the influence from humidity, dust and so on.
4. Products should be storage in the warehouse without heat shock, vibration, direct sunlight and so on.
5. Products should be storage under the airtight packaged condition.

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ROHS COMPLIANCE

- The levels of RoHS restricted materials in this product are below the maximum concentration values (also referred to as the threshold limits) permitted for such substances, or are used in an exempted application, in accordance with EU RoHS Directive (EU) 2015/863 EC (RoHS3). RoHS Test Report for this product can be obtained can be obtained at Download Center.

REACH COMPLIANCE

- REACH substances of high concern (SVHCs) information is available for this product. Since the European Chemical Agency (ECHA) has published notice of their intent to frequently revise the SVHC listing for the foreseeable future, REACH Test Report for this product can be obtained can be obtained at Download Center.

IMPORTANT NOTES AND DISCLAIMER

1. All Product parametric performance is indicated in the Electrical Characteristics for the listed herein test conditions, unless otherwise noted. Product performance may not be indicated by the Electrical Characteristics if operated under different conditions.
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