



產品編碼 P/N	PDMFAT22148D-series	測試設備 TEST INSTRUMENT	Keysight:E4991B Chroma:16502 3302
產品系列 Series	宽频共模电感	測試頻率 TEST FREQUENCY	1KHZ / 0.3V

客戶名稱

Customer

客戶編碼

Customer P/N

產品系列

Series

宽频共模电感

Common Mode Line Chokes

產品編碼

Supply P/N

PDMFAT22148D-series

發版號

Version

A3.0

承認日期

Endorsement Date

2025-7-10

備註

Note

譜羅德電子科技（深圳）有限公司 PuLuoDe Electronic Technology (Shenzhen) Co. LTD	
製作 APPROVED	Ben
審查 CHECKED	Yuki
確認 PREPARED	Peter

客戶承認

Customer Approval

客戶簽章



A3.0

修訂記錄

REVISION RECORD



產品編碼 P/N	PDMFAT22148D-series	測試設備 TEST INSTRUMENT	Keysight:E4991B Chroma:16502 3302	
產品系列 Series	宽频共模电感	測試頻率 TEST FREQUENCY	1KHZ / 0.3V	

Version	REVISION ITEM	BEFORE REVISION	AFTER REVISION	DATE
A2.0	First Version			2022-9-15
A3.0	Second Edition	最小包装：盒装	最小包装：托盘	2025-7-10

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譜羅德電子科技（深圳）有限公司

PuLuoDe Electronic Technology (Shenzhen) Co., LTD

深圳市寶安區石岩三聯工業區B棟311

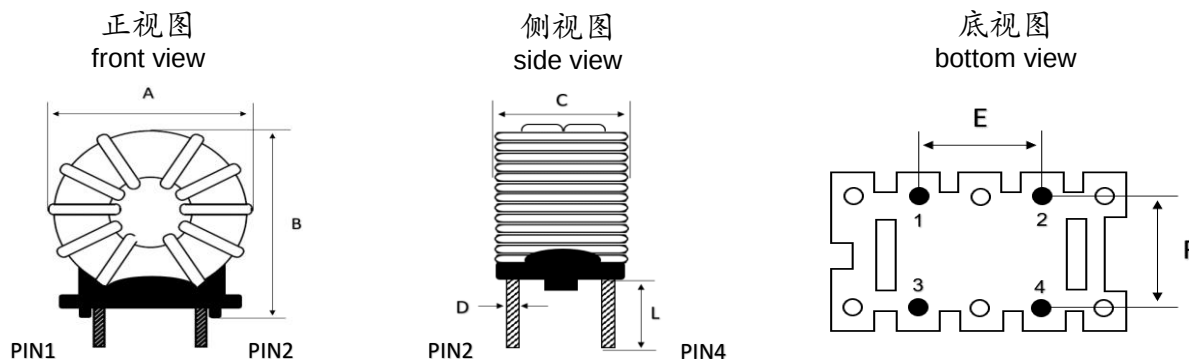
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產品系列 Series	宽频共模电感	測試頻率 TEST FREQUENCY	1KHZ / 0.3V

封裝尺寸 Dimension (mm)



系列	封裝尺寸 Dimension							MPQ
Series	A	B	C	D	E	F	L	pcs/托盘
22148-4P	28.0 Max	34.0 Max	21.0 Max	1.0±0.1	10.0±0.5	12.0±0.5	4.0 Min	50

編碼解釋

Code interpretation

PDMFAT	22148D	-	102	M	L	B	-	4P
類別碼	尺寸系列		感值	精度	立式	帶底座		端子數量
Category code	Dimension		Inductance	Tolerance	Vertical type	Base		PIN Number

電氣參數

Electrical Characteristics

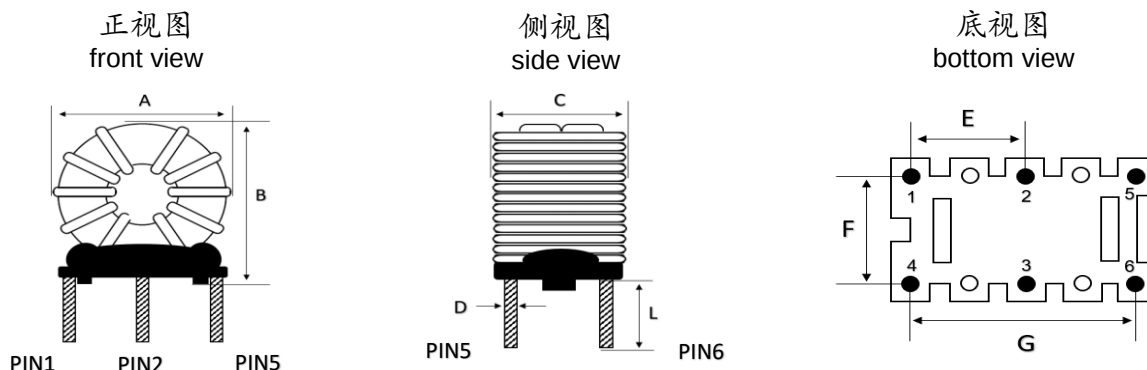
產品編碼 P/N	@ 25 °C Ambient Temperature					
	感值 Inductance	精度 Tolerance	DCR	額定電流 rated current	耐壓 HI-POT	
	N1/N2	N1/N2	mΩ	A	N1/N2	N1-C/N2-C
	mH	Min (mH)	Max	ΔT≈40℃	AC 1.5KV	AC1.5KV
PDMFAT22148D-102MLB-4P	1	0.9	13	15	AC/60Hz 1mA 3Sec	AC/60Hz 1mA 3Sec
PDMFAT22148D-202MLB-4P	2	1.8	24	12		
PDMFAT22148D-502MLB-4P	5	4.5	40	9		
PDMFAT22148D-103MLB-4P	10	9	80	6		
PDMFAT22148D-203MLB-4P	20	18	130	4		

- ◎ 規格參數基於環境溫度25℃取得
All test Data is referenced to 25℃ ambient
- ◎ 電感工作環境溫度：-40℃ ~ 105℃
Operating temperature range -40 °C to +105 °C
- ◎ 加載額定電流會使電感溫度上升大約 40℃ (電感初始溫度+上升溫度=電感最終溫度)
Typical rated currentt would cause an approximately ΔT of 40℃
- ◎ 務必考慮最終的產品設計，元器件佈局，線路板走線，以及使用環境過程中，電感最終溫度不得超過105℃
The operating temperature of inductance do not exceed 105℃
- ◎ 使用電感時，請查閱第9頁注意事項
The announcements is on page 9



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產品系列 Series	宽频共模电感	測試頻率 TEST FREQUENCY	1KHZ / 0.3V

封裝尺寸 Dimension (mm)



系列	封裝尺寸 Dimension								MPQ
	A	B	C	D	L	E	F	G	pcs/托盤
22148-6P	28.0 Max	34.0 Max	21.0 Max	1.0±0.1	4.0 Min	10.0±0.5	12.0±0.5	20.0±0.5	50

編碼解釋

Code interpretation

PDMFAT	22148D	-	102	M	L	B	-	6P
類別碼	尺寸系列		感值	精度	立式	帶底座		端子數量
Category code	Dimension		Inductance	Tolerance	Vertical type	Base		PIN Number

電氣參數

Electrical Characteristics

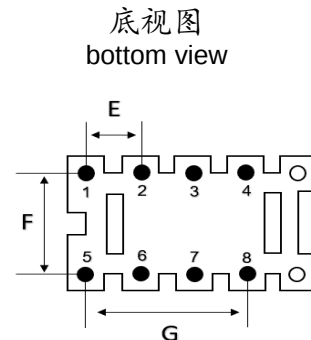
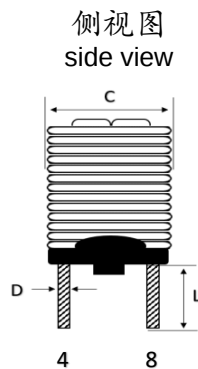
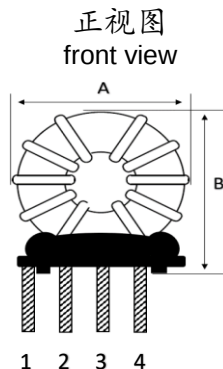
產品編碼 P/N	@ 25 °C Ambient Temperature					
	感值 Inductance	精度 Tolerance	DCR	額定電流 rated current	耐壓 HI-P0T	
	N1/N2	N1/N2	mΩ	A	N1/N2	N1-C/N2-C
	mH	Min (mH)	Max	ΔT≈40℃	AC 1.5KV	AC1.5KV
PDMFAT22148D-102MLB-6P	1	0.9	16	12	AC/60Hz 1mA 3Sec	AC/60Hz 1mA 3Sec
PDMFAT22148D-202MLB-6P	2	1.8	27	9		
PDMFAT22148D-502MLB-6P	5	4.5	52	7		
PDMFAT22148D-103MLB-6P	10	9	80	5.5		
PDMFAT22148D-203MLB-6P	20	18	150	4		

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封裝尺寸 Dimension (mm)



系列	封裝尺寸 Dimension								MPQ
	A	B	C	D	L	E	F	G	pcs/托盤
22148-8P	29.0 Max	35.0 Max	22.0 Max	1.0±0.1	4.0 Min	5.0±0.5	12.0±0.5	5.0±0.5	50

編碼解釋

Code interpretation

PDMFAT	22148D	-	102	M	L	B	-	8P
類別碼	尺寸系列		感值	精度	立式	帶底座		端子數量
Category code	Dimension		Inductance	Tolerance	Vertical type	Base		PIN Number

電氣參數

Electrical Characteristics

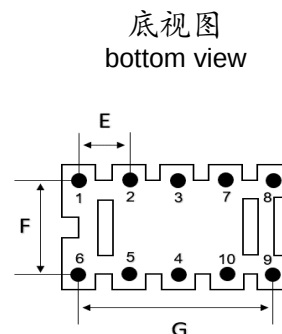
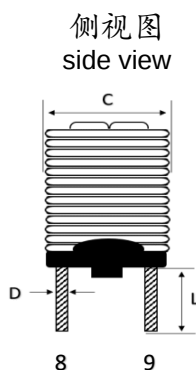
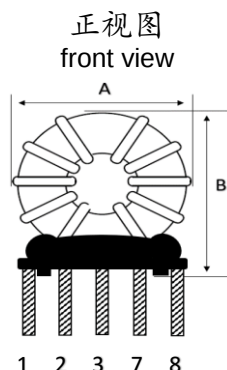
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	感值 Inductance	精度 Tolerance	DCR	額定電流 rated current	耐壓 HI-P0T	
	N1/N2	N1/N2	mΩ	A	N1/N2	N1-C/N2-C
	mH	Min (mH)	Max	ΔT≈40℃	AC 1.5KV	AC1.5KV
PDMFAT22148D-102MLB-8P	1	0.9	20	10	AC/60Hz 1mA 3Sec	AC/60Hz 1mA 3Sec
PDMFAT22148D-202MLB-8P	2	1.8	32	7.5		
PDMFAT22148D-502MLB-8P	5	4.5	60	6		
PDMFAT22148D-103MLB-8P	10	9	130	4		
PDMFAT22148D-203MLB-8P	20	18	200	3.5		

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產品系列 Series	宽频共模电感	測試頻率 TEST FREQUENCY	1KHZ / 0.3V

封裝尺寸 Dimension (mm)



系列	封裝尺寸 Dimension								MPQ
Series	A	B	C	D	L	E	F	G	pcs/托盤
22148-10P	29.0 Max	35.0 Max	22.0 Max	1.0±0.1	4.0 Min	5.0±0.5	12.0±0.5	20.0±0.5	50

編碼解釋

Code interpretation

PDMFAT	22148D	-	102	M	L	B	-	10P
類別碼	尺寸系列		感值	精度	立式	帶底座		端子數量
Category code	Dimension		Inductance	Tolerance	Vertical type	Base		PIN Number

電氣參數

Electrical Characteristics

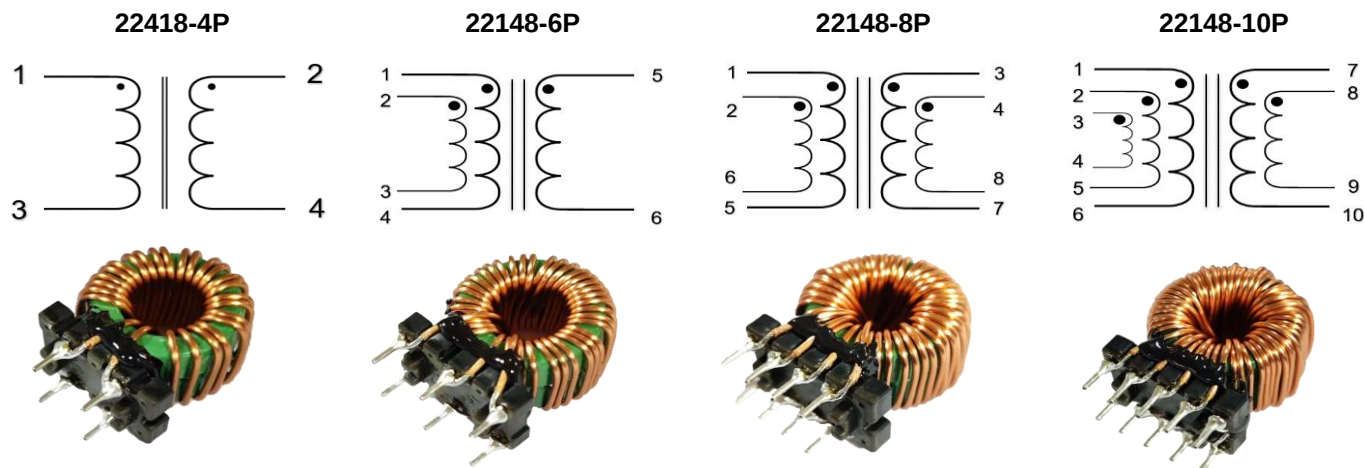
產品編碼 P/N	@ 25 °C Ambient Temperature					
	感值 Inductance	精度 Tolerance	DCR	額定電流 rated current	耐壓 HI-POT	
	N1/N2	N1/N2	mΩ	A	N1/N2	N1-C/N2-C
	mH	Min (mH)	Max	ΔT≈40°C	AC 1.5KV	AC1.5KV
PDMFAT22148D-102MLB-10P	1	0.9	23	10	AC/60Hz 1mA 3Sec	AC/60Hz 1mA 3Sec
PDMFAT22148D-202MLB-10P	2	1.8	32	8		
PDMFAT22148D-502MLB-10P	5	4.5	75	5.5		
PDMFAT22148D-103MLB-10P	10	9	130	4		

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產品系列 Series	宽频共模电感	測試頻率 TEST FREQUENCY	1KHZ / 0.3V

電路結構 Schematic



电路组数/Inductor Contents of Coil

22148-4P	22148-6P	22148-8P	22148-10P
2	3	4	5

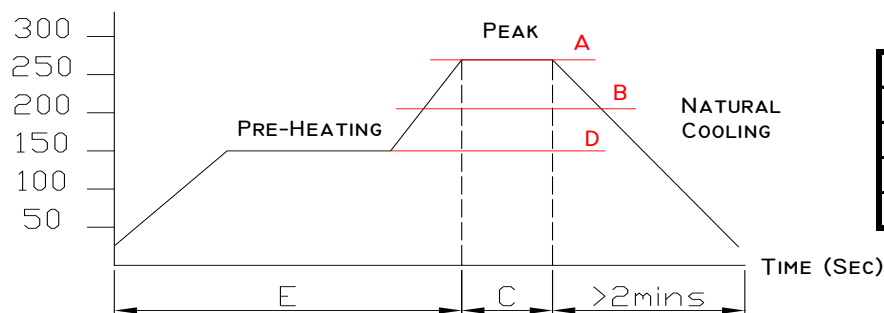
內部構造 Internal Structure

NO.	材料 ITEM	材質規格 Material	製造商 Manufacturer	UL NO.
1	磁芯/Core	22148x2	YF (或等同廠商規格)	N.A
2	漆包線/Wire	2UEW+F 155℃	ELEKTRISOLA (或等同廠商規格)	E258243
3	底座/Base	T738JB	PLASTICS (或等同廠商規格)	E59481
4	锡条/Sn	LEAD FREE SOLDER	CIYT (或等同廠商規格)	N.A
5	凡立水/Varnish	E962	ZHCX (或等同廠商規格)	E335405

焊接溫度（推荐）

Recommended Soldering Temperature Graph

TEMPERATURE (°C)



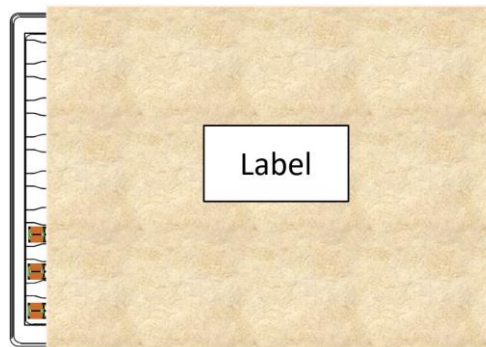
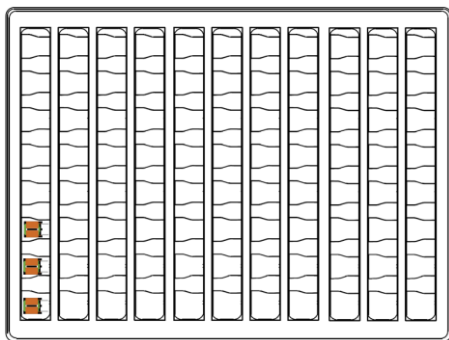
A	260℃
B	230℃
C	10 Sec
D	150℃
E	60~240 Sec



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內盒包裝

MPQ packaging

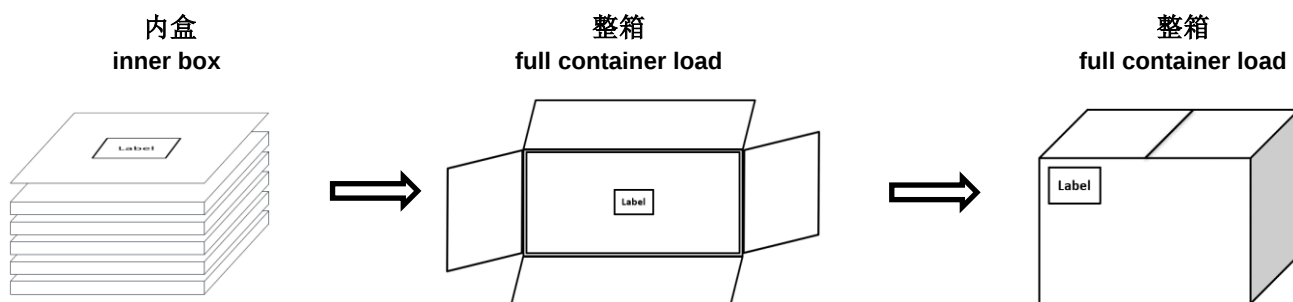


产品使用吸塑盒包装，每托盘装50pcs, 每托盘顶部放一块纸板

MPQ=50pcs, Packaging in plastic trays, Place a piece of cardboard on top of every trays

外箱

full container load



每箱內裝10小盒，每箱數量500pcs

10 little boxes fill a whole case, 500pcs/full container load





注意事项

使用本产品时，请注意以下事项

- ◎ 产品保存期限为12个月，保存条件：温度5~40℃，湿度10~75%RH以内，超过保存期限可能会使元器件电极发生氧化，存储标准可参照：IEC_61760-2-2021
This components storage life is 12 months, Storage Temperature: TEMP. 5~40℃; RH10%~75%. Please use this components within the warranty period. refer standard to: IEC_61760-2-2021
- ◎ 请勿在极端环境下使用和保存（高盐，强酸，强碱，强辐射等）。
Do not use this component in special environments, such as high salt content, strong acid, strong alkali, strong corrosion and other special environments.
- ◎ 元器件焊接前，请进行预热，预热与焊接温度之间温差建议控制在150℃以内；焊接标准参考：EN61760-1:2006
Please preheat the product before welding; it is recommended to control the preheating temperature and welding temperature within 150℃. refer standard to: EN61760-1:2006
- ◎ 元器件焊接后需重新拆卸焊接修正时，请遵循规格书规定的条件范围；过高的加热温度以及反复的拆卸可能会导致元器件失效。
When repairing this component, the temperature used for disassembly should not exceed the datasheet limit and do not disassemble it frequently to prevent damage to the component.
- ◎ 请勿用清洗剂、丙酮等腐蚀性液体接触该元器件，这可能会侵蚀元器件本体以至于失效。
Do not use acetone or other corrosive liquids to contact this component or it will cause it to fail.
- ◎ 元器件焊接到线路板后，请注意不可因线路板整体变形或局部变形而施加给电感剩余应力，这可能会导致元器件脱落、破损失效。
When this component is soldered to the circuit board, you need to pay attention to the stress applied to it by the PCB, which may cause it to fall off or damaged fail.
- ◎ 元器件通电后温度会随电流的增大而上升，设计时请务必考虑留有余量。
Self heating (Rated Current or Irms) occurs when the power is turned ON, so the tolerance should be sufficient for the set thermal design.
- ◎ 过高的静电会损坏该元器件，请注意静电防护。
Too high static electricity will cause permanent damage to the product, please pay attention to electrostatic protection.
- ◎ 本元器件作为磁性产品，设计时请务必考虑周边元器件与本产品可能产生的耦合效应影响。
This magnetic component needs to be considered for coupling effects in the application.
- ◎ 谱罗德并不能完全掌握或熟悉客户的特定应用以及要求，贵司有责任和义务验证此元器件以及元器件规格书中的描述是否满足于贵司的设计要求；需要指出是：即使按照现有的技术标准操作，该元器件依然有几率在典型寿命结束前发生故障，谱罗德强烈建议贵司对于该元器件在一些典型的严苛应用中，例如安规产品，工业产品、医疗产品、车载产品、航空/航天等产品应用，对于该元器件可能存在的失效情况做适当的冗余设计，以此避免该元器件在失效时造成严重后果；特别提醒：对于特定的应用对象谱罗德强烈要求贵司同谱罗德取得书面的许可，否则谱罗德不予承担元器件失效带来的任何责任，特定对象包括且不限于：车用，航空航天，安规产品，军用以及贵司对元器件有严苛要求的产品。

PROD cannot fully understand and be familiar with customers' specific applications and requirements. Your company has the responsibility and obligation to verify whether the components and the description in the component specification meet your design requirements. Special reminder: Even if operated in accordance with existing technical standards, this component still has a chance of failure before the end of its typical life. PROD strongly recommends that your company make appropriate redundant designs for possible failure situations of this component in some typical harsh applications, such as safety products, industrial products, medical products, automotive products, aviation/aerospace products, etc., so as to avoid serious consequences when the component fails.

PROD Requirements: For specific application item, PROD strongly requires your (or company) to obtain written permission from PROD, otherwise PROD will not bear any responsibility for component failure. Specific item list include but are not limited to: automotive, aerospace, safety products, military and products that your company has strict requirements on components.

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譜羅德電子科技（深圳）有限公司

PuLuoDe Electronic Technology (Shenzhen) Co., LTD

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