

制品规格书
SPECIFICATION FOR APPROVAL

产品编码 P/N	PDCMAA2216-161MLN	测试设备 TEST INSTRUMENT	Chroma: 3302 16502 Keysight: E4991
产品系列 Series	插件共模滤波器	测试频率 TEST FREQUENCY	100MHz/0.1V

客户名称
Customer

:

客户编码
Customer P/N

:

产品系列
Series

:

插件共模滤波器
DIP Common Mode Chokes产品编码
Supply P/N

:

PDCMAA2216-161MLN

发版号
Version

:

A3.0

承认日期
Endorsement Date

:

2026-5-8

备注
Note

:

谱罗德电子科技（深圳）有限公司 PuLuoDe Electronic Technology (Shenzhen) Co. LTD	
制作 APPROVED	Ben
审查 CHECKED	Yuki
确认 PREPARED	Peter

* 烦请贵司在正式订单下达前确认回签本承诺书，否则敝司默认贵司认可本承诺书内的参数与条款，并以此参数生产交货

Please confirm and sign this acknowledgement letter before placing the formal order, otherwise PROD will acquiesce that your company recognizes the parameters and terms in this acknowledgement letter, and will produce and deliver according to these parameters.

客户承认

Customer Approval

客户签章



修订记录

REVISION RECORD



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谱罗德
PROD

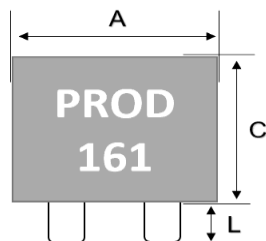
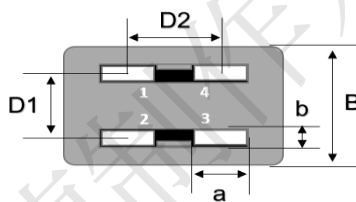
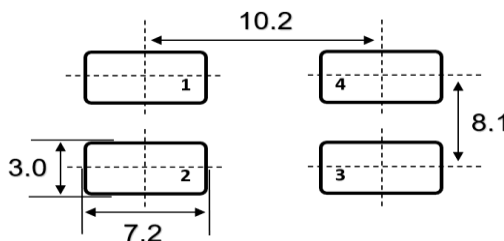
谱罗德电子科技（深圳）有限公司
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封装尺寸 (mm)
Dimension正视图
Front view底视图
Bottom view推荐的焊盘尺寸
Recommended Land Pattern

系列	封装尺寸 Dimension								MPQ
Series	A	B	C	L	D1	D2	a	b	吸塑盒/Tray
2216	22.0±0.4	16.0±0.3	16.5±0.3	3.0 Min	8.1 Ref	10.2 Ref	5.5 Ref	1.5 Ref	30

编码解释

Code interpretation

PDCMAA	2216	-	XXX	M	L	N
类别码	尺寸系列		阻抗	精度	立式	标准品
Category code	Dimension		Impedance	Tolerance	Vertical type	Standards

电气参数

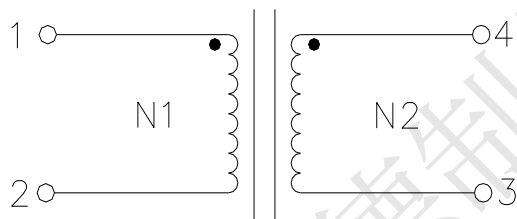
Electrical Characteristics

产品编码 P/N	@ 25 °C Ambient Temperture					
	阻抗 Impedance	精度 Tolerance	DCR	额定电流 rated current	耐压 Withstand Voltage	感值 Inductance
	N1/N2	N1/N2	mΩ	A	N1 vs N2 or N vs Core	
	Ω	±	Max	ΔT≈40℃	AC/60Hz 1mA 3s	μH(Typ)
PDCMAA2216-161MLN	160	+∞/-25%	0.15	85	1.5KV	1.4

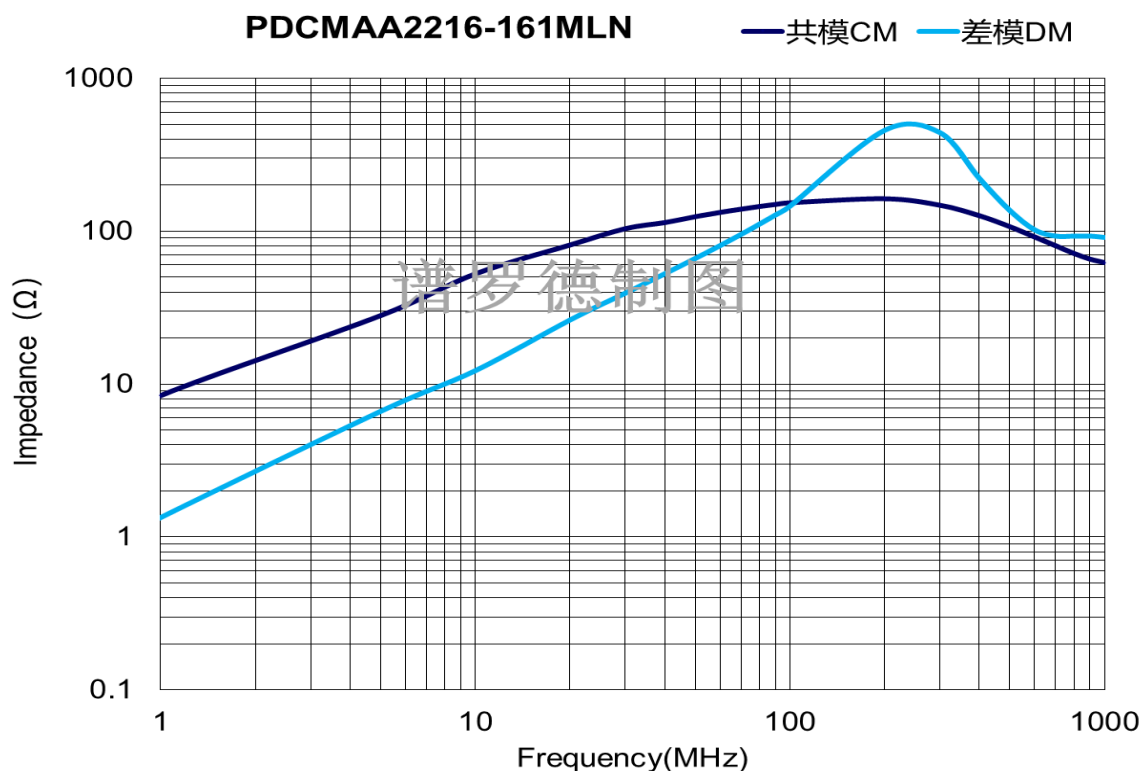
- 规格参数基于环境温度25℃取得
All test Data is referenced to 25℃ ambient
- 标识符“Typ” “Ref” 则代表该参数值为参考用，无明确的正负公差
“Typ” or “Ref” = It is merely a reference value and does not have positive or negative tolerance.
- 电感工作环境温度：-40℃ ~ 125℃
Operating temperature range -40 °C to +125 °C
- 务必考虑最终的产品设计，元器件布局，线路板走线，以及使用环境过程中，电感最终温度不得超过105℃
The operating temperature of inductance do not exceed 105℃
- 参考产品开发设计实测尺寸，感值，DCR等数据，请参考规格书第6页
The Dimension, Inductance, DCR test data is on page 6
- 使用电感时，请查阅第8页注意事项
The announcements is on page 8



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电路图
Schematic图示
image

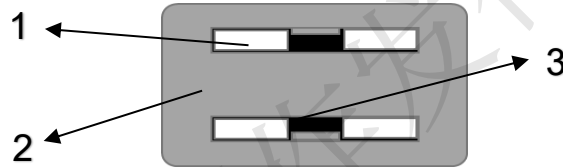
◎ 电感内置两组线圈
Inductor Contents two Sets of Coil

阻抗曲线
Impedance Curve

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材料清单

Material List

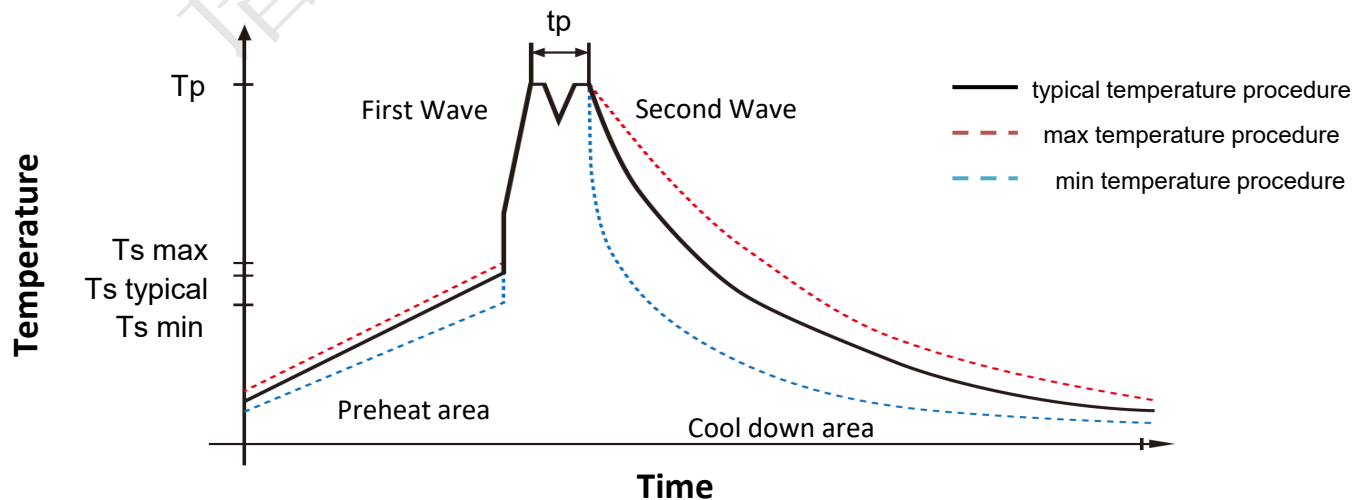


NO.	结构 Structure Name	材料规格 Material Name	材料制造商 Material Manufacturer
1	铜材/Copper	C1100	YUEZHONG
2	磁芯/Core	铁氧体磁芯/Ferrite Core	SINCORES
3	胶水/Glue	环保胶水/eco-friendly glue	Liduo

*组件的材料不限制于清单内的制造商/The material of the part is not limited to the listed manufacturer

焊接温度（推荐）

Recommended Classification Wave Soldering Profile



Profile Feature	Item	Pb-Free Assembly	Sn-Pb Assembly
Preheat Temperature Min	Ts min	100 °C	
Preheat Temperature Typical	Ts typical	120 °C	
Preheat Temperature Max	Ts max	130 °C	
Preheat Time ts from Ts min to Ts max	ts	70 seconds	
Ramp-up Rate	ΔT	150 °C max.	
Peak Temperature	Tp	250 °C - 260 °C	235 °C - 260 °C
Time of actual peak temperature	tp	max. 10 secondsmax. 5 seconds each wave	
Ramp-down Rate, Min		~ 2 K/ second	
Ramp-down Rate, Typical		~ 3.5 K/ second	
Ramp-down Rate, Max		~ 5 K/ second	
Time 25 °C to 25 °C		4 minutes	

* 参考标准: EN61760-1:2006 refer standard to: EN61760-1:2006



测试数据

TEST REPORT



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测试数据

Test Date

NO.	尺寸测试数据 Dimension Test Date								电性 electrical	
	A	B	C	L	D1	D2	a	b	DCR	Z
	mm	mm	mm	mm	mm	mm	mm	mm	mΩ	Ω
	22.0±0.4	16.0±0.3	16.5±0.3	3.0 Min	8.1 Ref	10.2 Ref	5.5 Ref	1.5 Ref	0.15	120 Min
1	22.08	16.02	16.6	3.43	8.11	10.23	5.44	1.55	0.087	153.90
2									0.086	158.40
3									0.086	162.10
4									0.086	158.30
5										
6										
7										
8										
9										
10										
平均值	22.08	16.02	16.6	3.43	8.11	10.23	5.44	1.55	0.08625	158.175

◎ 所有测试数据基于环境温度25℃取得
All test Data is referenced to 25℃ ambient



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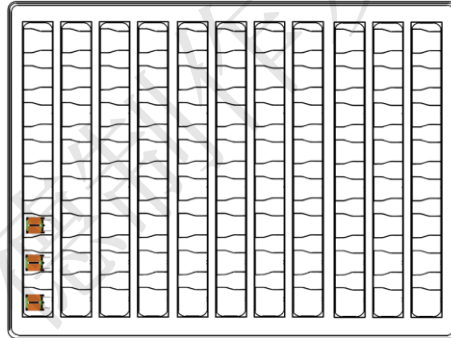
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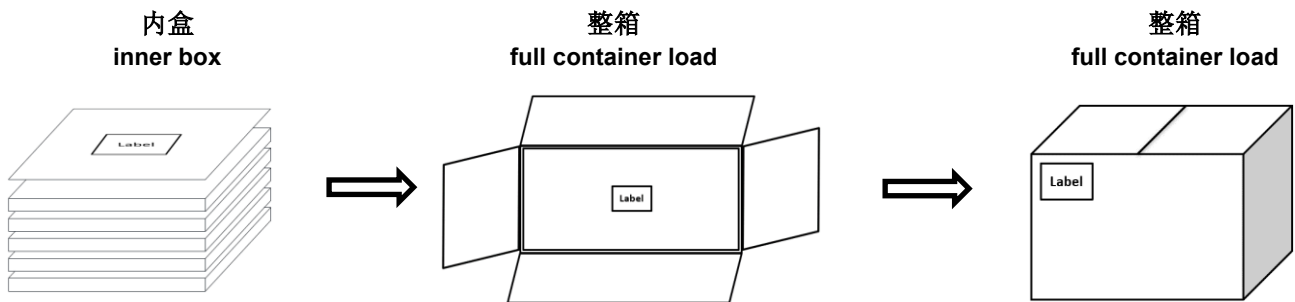
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内盒包装 MPQ packaging



产品使用吸塑盒包装，每托盘装30pcs
MPQ=30pcs, Packing in plastic trays

外箱 full container load



每箱内装10小盒，每箱数量300pcs
10 little boxes fill a whole case, 300pcs/full container load

尺寸与重量 Size and Weight

	单颗产品 single	内盒 inner box	整箱 full container load
尺寸 Size	N.A		
净重 net weight	31.8g		
毛重 gross weight	N.A		





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.

