制品规格书
SPECIFICATION FOR APPROVAL

产品编码 P/N	PSCLAQ0905 Series	测试设备 TEST INSTRUMENT	Keysight:E4991B Chroma:16502 3302
产品系列 Series	共模线性滤波器	测试频率 TEST FREQUENCY	参考规格书内定义

客户名称 Customer	:	
客户编码 Customer P/N	:	
产品系列 Series	:	共模线性滤波器 Common Mode Linear Filter
产品编码 Supplly P/N	:	PSCLAQ0905 Series
发版号 Version	:	A3.0
承认日期 Endorsement Date	:	2026-7-5
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

客户承认 Customer Approval

客户签章

A3.0

修订记录
REVISION RECORD

产品编码 P/N	PSCLAQ0905 Series	测试设备 TEST INSTRUMENT	Keysight:E4991B Chroma:16502 3302
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Version	REVISON ITEM	BEFORE REVISON	AFTER REVISON	DATE
A3.0				2026-7-5

谱罗德制作发布

封装尺寸
Dimension

产品编码 P/N	PSPOCI3225C Series	测试设备 TEST INSTRUMENT	Keysight:E4991B Chroma:16502 3302
产品系列 Series	POC电感	测试频率 TEST FREQUENCY	参考规格书内定义

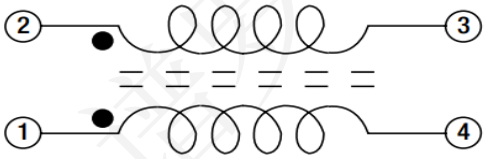
产品特点
Features

¤ 产品薄，尺寸小，额定电流最大可达1.6A
Low profile，Small size and the rated current up to 1.6A

¤ 适用于10KHz~500MHz频率的滤波
EMI suppression range：10KHz~500Mhz

¤ SMD结构便于SMT生产自动化贴片
SMD structure is convenient for SMT production automation patch

电路图
Schematic



◎ 电感内置两组线圈
Inductor Contents 2 Sets of Coil

编码解释
Code interpretation

PSCLAQ	0905	-	XXX	Y
类别码	尺寸系列		电感值	精度
Category code	Dimension		Inductance	Tolerance

© 规格参数基于环境温度25℃取得
All test Data is referenced to 25℃ ambient

© 电感工作环境温度： -40℃ ~ 105℃
Operating temperature range -40 °C to +105 °C

© 加载额定电流会使电感温度上升大约 40℃ (电感初始温度+上升温度=电感最终温度)
Typical Heat Rating DC Current would cause an approximately △T of 40℃

© 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℃

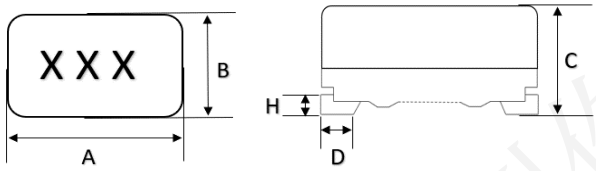
© 使用电感时，请查阅最后一页注意事项
The announcements is on last page

© **规格书中给出的参数精度为“+∞”，则意味着该规格不规定该参数的上限；参数精度为“Ref” “Typ”时，则该值仅做参考，无明确的正负公差**
∞=unlimited，**Ref or Typ**=It is merely a reference value and does not have positive or negative tolerance.

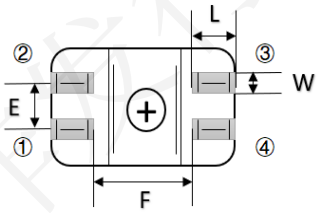
电气特性
ELECTRICAL CHARACTERISTICS

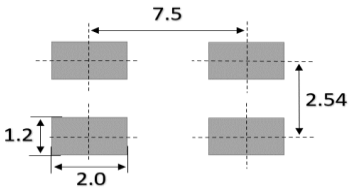
产品编码 P/N	PSCLAQ0905 Series	测试设备 TEST INSTRUMENT	Keysight:E4991B Chroma:16502 3302
产品系列 Series	共模线性滤波器	测试频率 TEST FREQUENCY	参考规格书内定义

封装尺寸 Dimension (mm)



推荐的焊盘尺寸 Recommaned Land Pattern





系列 Series	封装尺寸 Dimension								
	A	B	C	D	H	E	F	L	W
0905	9.2±0.3	6.0±0.3	5.0±0.3	1.4 Max	0.8±0.2	2.54 Ref	5.7 Ref	1.8 Ref	1.0 Ref

编码解释
Code interpretation

PSCLAQ	0905	-	102	Y
类别码	尺寸系列		阻抗值	精度
Category code	Dimension		Impedance	Tolerance

电气参数
Electrical Characteristics

产品编码 P/N	@ 25 ℃ Ambient Temperture							
	感值值 (L)	精度 Tolerance	测试频率 Test Frequency	DCR	额定电流 Rated Current	滤波范围 Frequency Range	额定电压 Rated Voltage	峰值阻抗 Peak Impedance
	N1=N2			Ω	mA			Ω@MHZ
	μH	±	KHZ	Max	△T≈40℃	MHZ(Ref.)	Vdc	Ref
PSCLAQ0905-100N	10	30%	1KHZ/ 0.1V	0.08	1600	10~500	80	1.2KΩ@90MHz
PSCLAQ0905-250N	25	30%		0.16	1000	5~300	80	1.8KΩ@60MHz
PSCLAQ0905-400N	40	30%		0.25	900	5~300	80	2.9KΩ@40MHz
PSCLAQ0905-500N	50	30%		0.32	800	5~100	80	3.3KΩ@20MHz
PSCLAQ0905-251Y	250	50%	100KHZ /5mV	0.13	1200	0.5~100	80	1.5KΩ@20MHz
PSCLAQ0905-471Y	470	50%		0.14	1100	0.5~100	80	2.5KΩ@20MHz
PSCLAQ0905-501Y	500	50%		0.15	1000	0.5~100	80	2.6KΩ@17MHz
PSCLAQ0905-102Y	1000	50%		0.31	800	0.05~100	80	2.7KΩ@10MHz
PSCLAQ0905-202Y	2000	50%		0.42	600	0.05~50	80	4.2KΩ@1MHz
PSCLAQ0905-472Y	4700	50%		0.9	400	0.05~30	80	17KΩ@1MHz
PSCLAQ0905-652Y	6500	50%		1.05	300	0.01~30	80	17.5KΩ@1MHz

电气特性
ELECTRICAL CHARACTERISTICS

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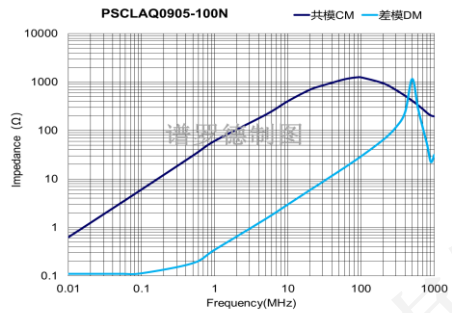
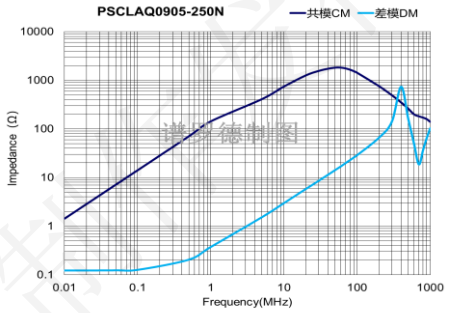
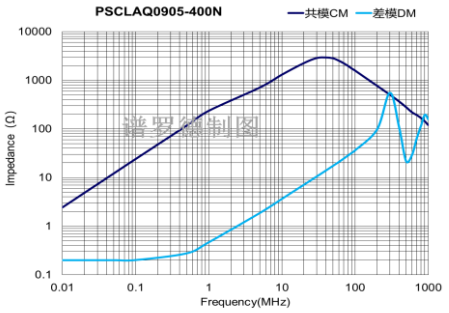
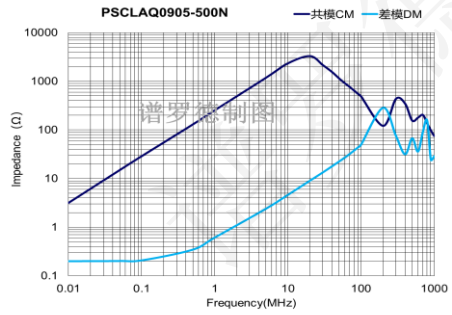
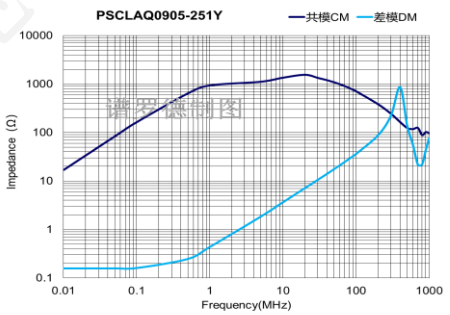
特性曲线
Performance Curves

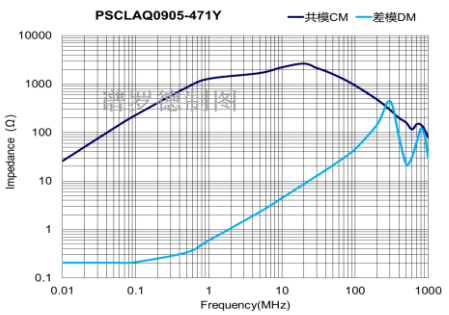


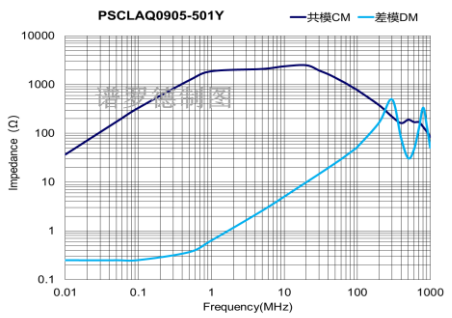


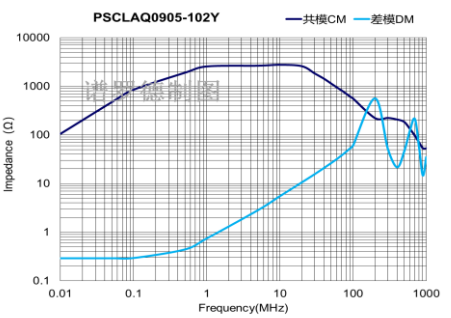


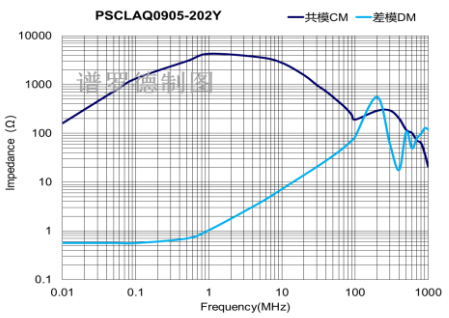


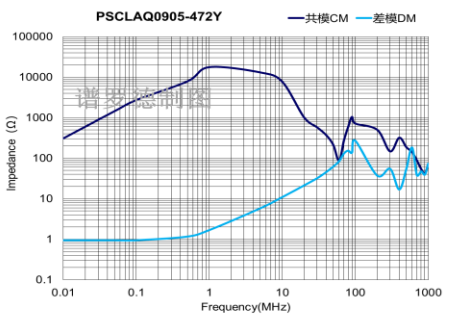


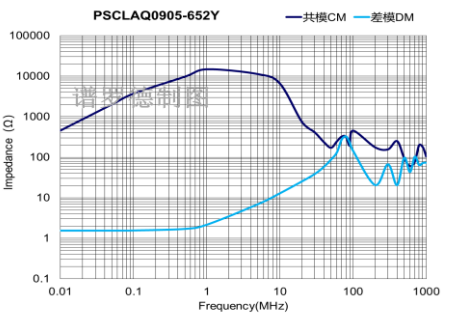












组件与焊接
Parts and Soldering Profile

产品编码 P/N	PSPOCI3225C Series	测试设备 TEST INSTRUMENT	Keysight:E4991B Chroma:16502 3302
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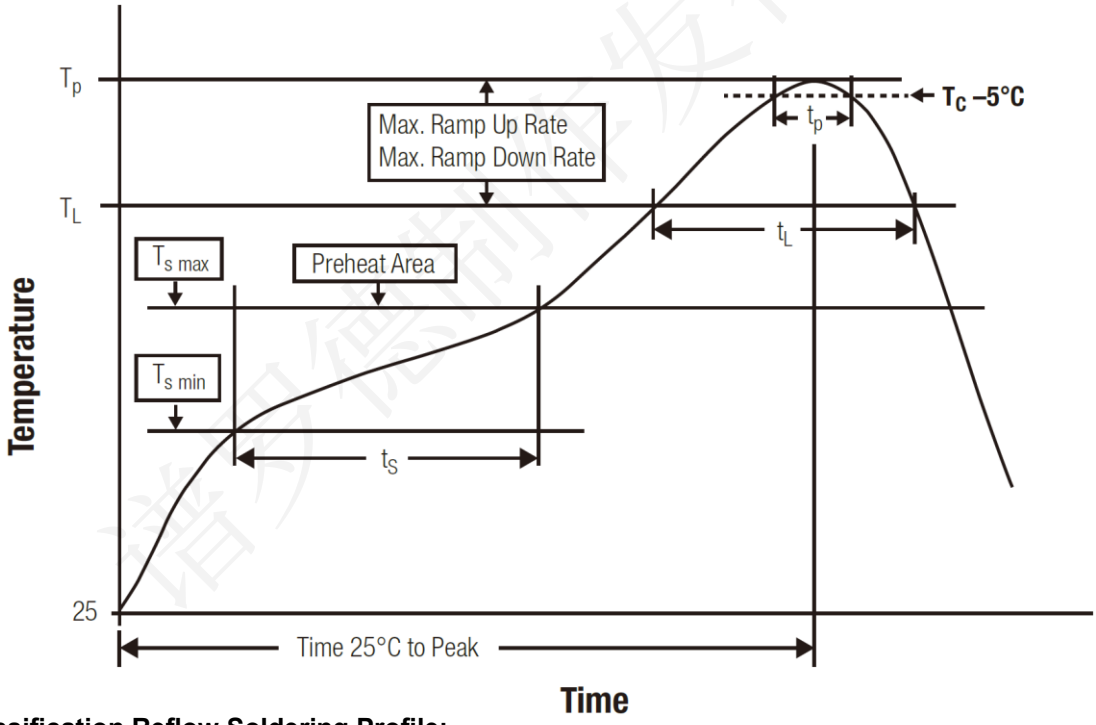
焊接温度（推荐）
Recommended Classification Wave Soldering Profile



Classification Reflow Soldering Profile:

Profile Feature	Item	Value
Preheat Temperature Min	**Ts min**	150 °C
Preheat Temperature Max	**Ts max**	200 °C
Preheat Time ts from Ts min to Ts max	**ts**	60 - 120 seconds
Ramp-up Rate (TL to TP)		3 °C/ second max.
Liquidous Temperature	**TL**	217 °C
Time tL maintained above TL	**tL**	60 - 150 seconds
Peak package body temperature	**Tp**	Tp <=Tc, see Table below
Time within 5°C of actual peaktemperature	**t p**	20 - 30 seconds
Ramp-down Rate (TP to TL)		6 °C/ second max.
Time 25°C to peak temperature		8 minutes max.

Package Classification Reflow Temperature (Tc):

Properties	Volume mm³ <350	Volume mm³ 350-2000	Volume mm³ >2000
PB-Free Assembly | Package Thickness < 1.6 mm	260°C	260°C	260°C
PB-Free Assembly | Package Thickness 1.6 mm - 2.5 mm	260°C	250°C	245°C
PB-Free Assembly | Package Thickness > 2.5 mm	250°C	245°C	245°C

* 参考标准：IPC/ JEDEC J-STD-020E　refer standard to: IPC/ JEDEC J-STD-020E

信赖性实验
RELIABILITY TEST

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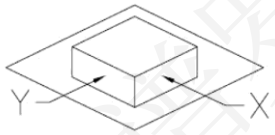
可靠性实验

RELIABILITY TESTING

项目/Item	方法/Method
Operating Temperature	- 40 to +105 °C (Contain Heating coil)
Appearance Inspection	No external defects by visual inspection
Terminal Strength 	After soldering , between copper plaet and terminals of coils , push in two directions of X , Y with standing 10N(1.02kg) for10+/-2 sec. Terminal should not peel off. (Refer to figure at right)
Heat endurance of reflow soldering	Preheating：150±10°C for 60 seconds Soldering：245±5°C dwell for 5+/- 0.5 second
Insulating resistance	Over 10 MΩ at 50V D.C . between wire and core
Dielectric Strength	Apply at 0.5KV 1mA for 3S between wire and core
Temperature characteristics	Inductance coefficient (0~2,000) × 10 / °C(- 40~ + 105 °C)
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

A test is made under the above mentioned condition , and it is kept for 2 hours in the normal

包装方式
PACKING FOR SMD

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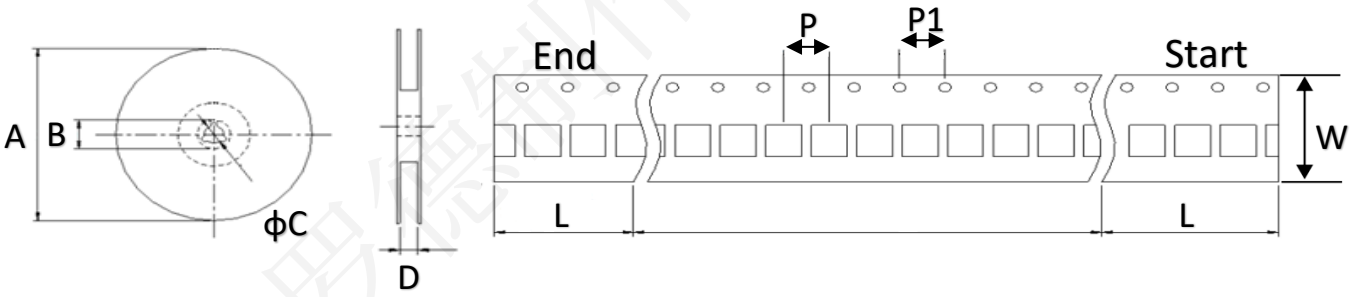
載帶卷盤尺寸：(mm)

Packing Dimension

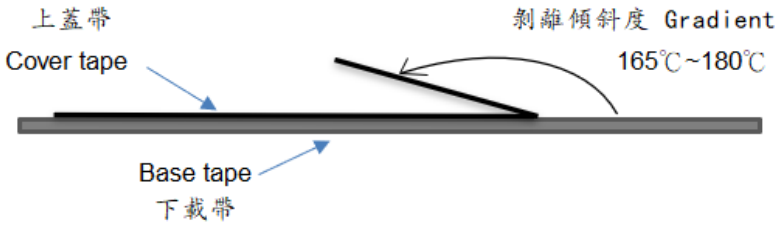
MPQ	A	B	C	D	P	P1	W	L
1000pcs/卷盤	330 Typ	21 Ref	13 Ref	18 Ref	12 Ref	4 Ref	12 Ref	前后预留约30空格



载带剥离力：
Typical Pulling Force

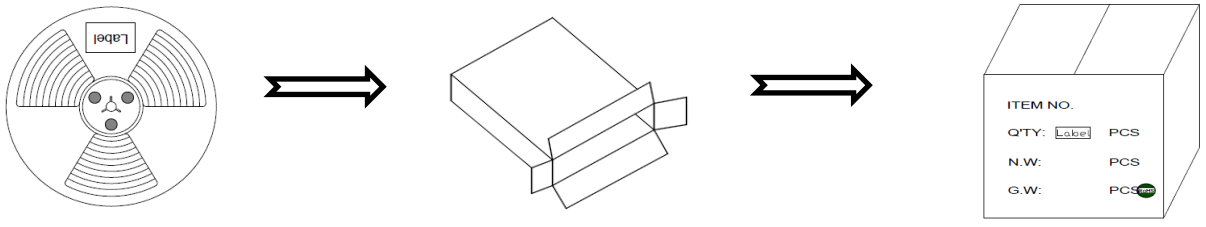
对上盖带施加力：20g~120g内即可与下载带剥离

Tape Peeling off force：20g~120g



装箱数量：
Package Quantity

最小包装	内盒	外箱
MPQ	Middle box	Outer box
1000pcs/Reel	20000pcs/ Middle box	60000pcs/ Outer box



© 实际出货过程，依据客户需求状况的不同，包装数量会有变化，最终的包装数量请参照实际出货包装

In the actual delivery process, the package quantity will change according to the different customer demands. Please refer to the actual shipment quantity for the final package quantity

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.