



TAIYO YUDEN

High Reliability Products for

Industrial Equipment

太阳诱电株式会社

东京都中央区京桥2丁目7番19号 京桥东大楼

网站上介绍了高可靠性元件的解决方案。

请通过下列URL或二维码进行访问并查看。

https://www.yuden.co.jp/cs/solutions/high_reliability_industrial/index.html
hr02b2310v01c

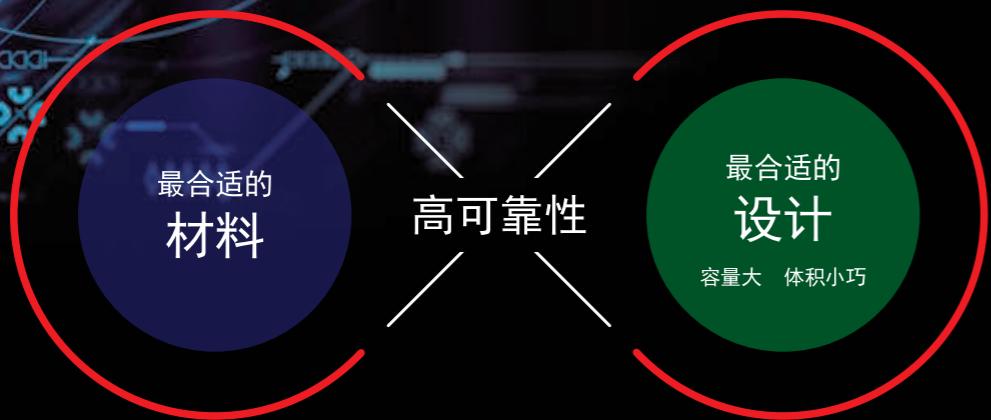


太阳诱电株式会社

What's the difference?

高可靠性元件

符合汽车电器市场、工业设备市场等各产业
类别要求标准的最优产品群。



电容器

多层陶瓷电容器 /
导电性高分子混合铝电解电容器



电感器·EMC抑制元件

金属功率电感器 / 铁氧体功率电感器 / 一般电感器
铁氧体磁珠电感器



通信基础设施·工业设备

通信基础设施

- 基站电信装置
- 光收发器
- 路由器 / 交换器(运营商级)
- UPS(不间断电源装置) 等

自动化技术

- PLC(可程式化逻辑控制器)
- 伺服马达 / 伺服驱动器
- 工业用机器人 等

测量仪器

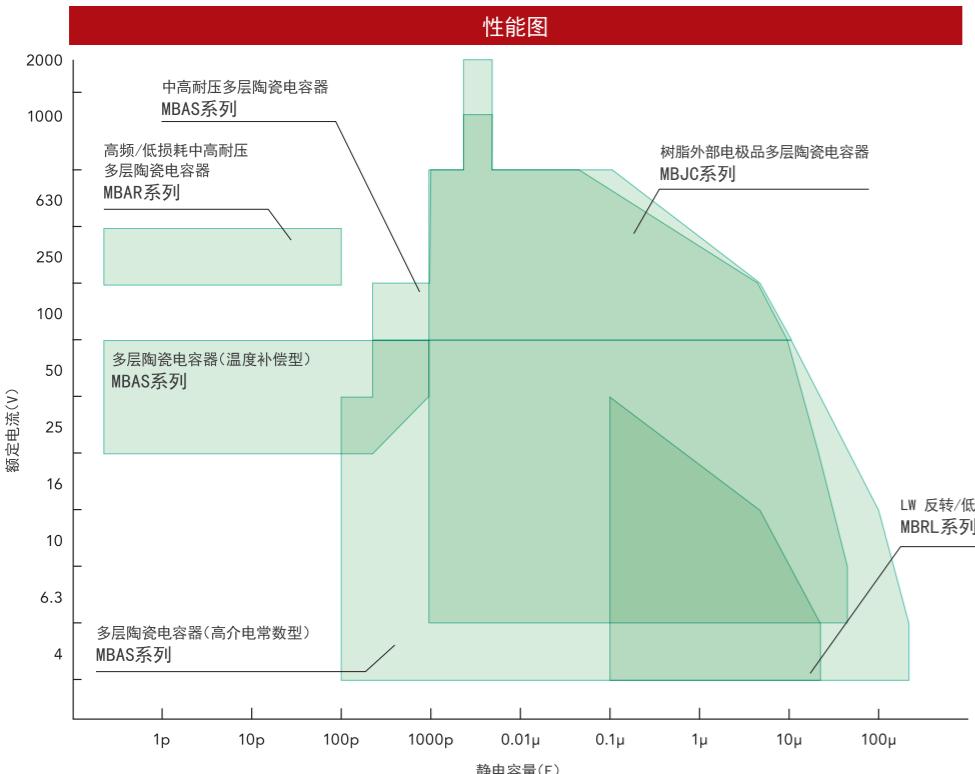
- 燃气表
- 水表
- 流量计
- 压力传感器
- 磁力传感器
- 温度传感器 等

电力设备

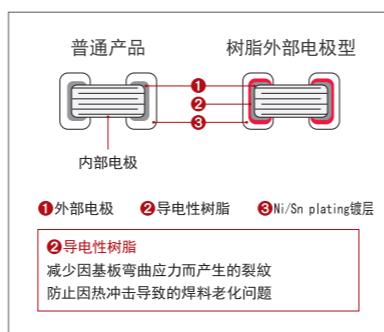
- 电力调整器(太阳能发电系统)
- 智能电表(电量测量仪)
- 漏电断路器
- EV充电桩 等

Type & Position

多层陶瓷电容器



普通产品与树脂外部电极型产品的区别



Products

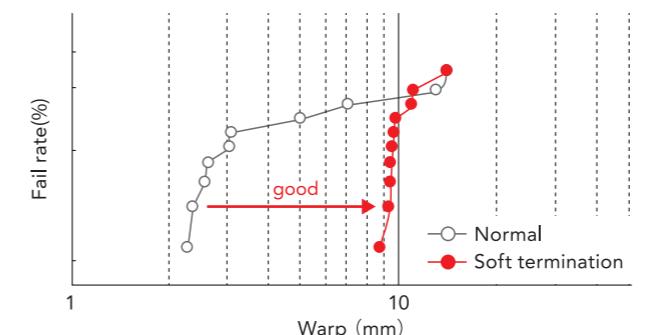
推荐产品

树脂外部电极品多层陶瓷电容器



- 通过在外部电极采用导电性树脂
- 减少因基板弯曲应力而产生的裂纹
- 防止因热冲击导致的焊料老化问题

减少因基板弯曲应力而产生的裂纹



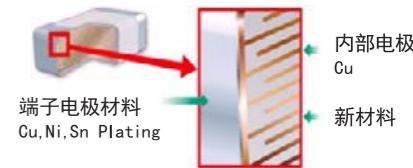
测量产生裂纹时的弯曲量



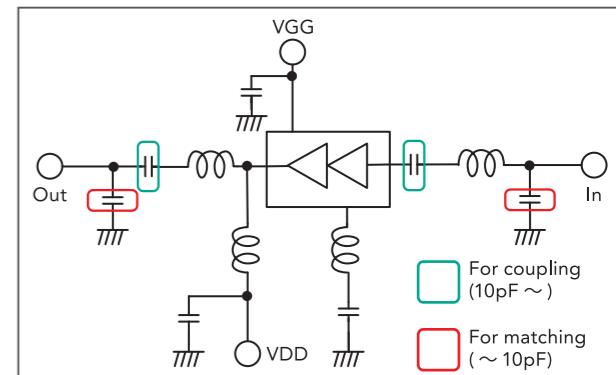
树脂层缓和应力等,
减少裂纹产生

高频/低损耗中高耐压 多层陶瓷电容器

RF Matching Coupling Hi-Q



Application(Power amplifier)

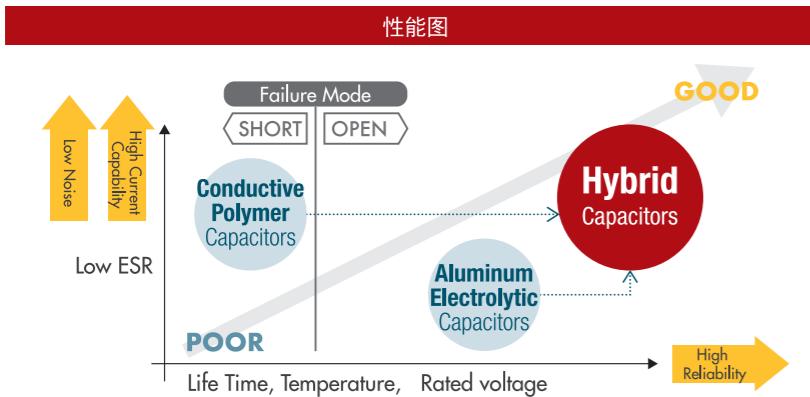


Type & Position

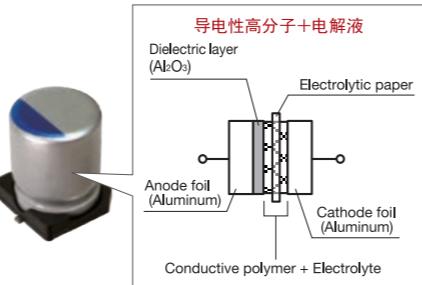
铝电解电容器

导电性高分子混合铝电解电容器

利用混合结构(导电性高分子+电解液),实现低ESR、长寿命、低漏电



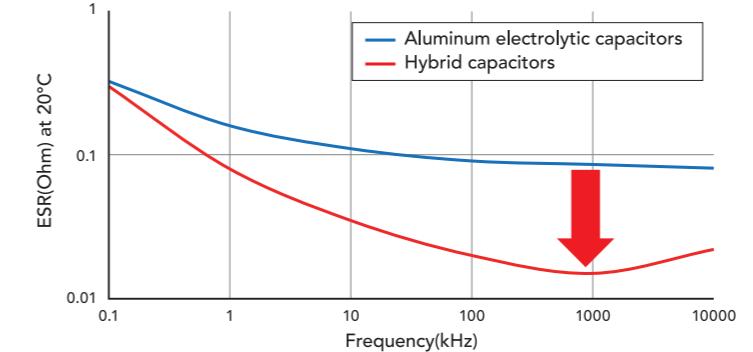
导电性高分子混合铝电解电容器 结构图



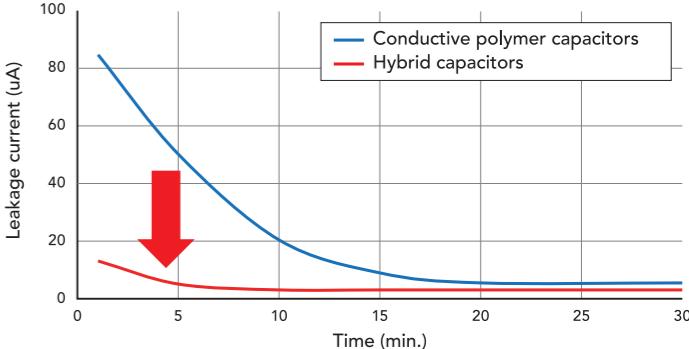
Products

推荐产品

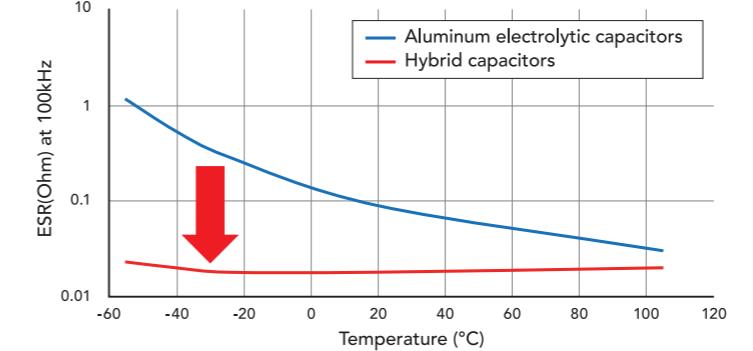
低ESR



低漏电



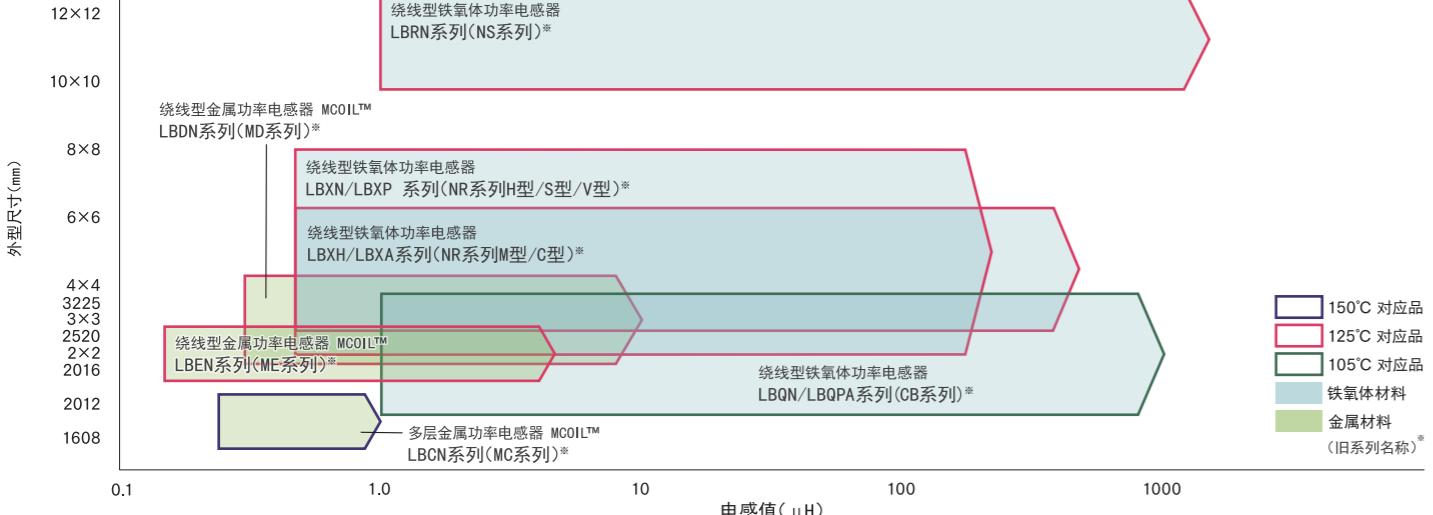
温度特性稳定



Type & Position

电感器

功率电感器



通用电感器



*MCcoil是TAIYO YUDEN CO., LTD. 的日本及在其他的国家的商标。

*系列前的代码是从产品编号里抽取出来的，用于表示产品的类型和特性等的区分。

Products

推荐产品

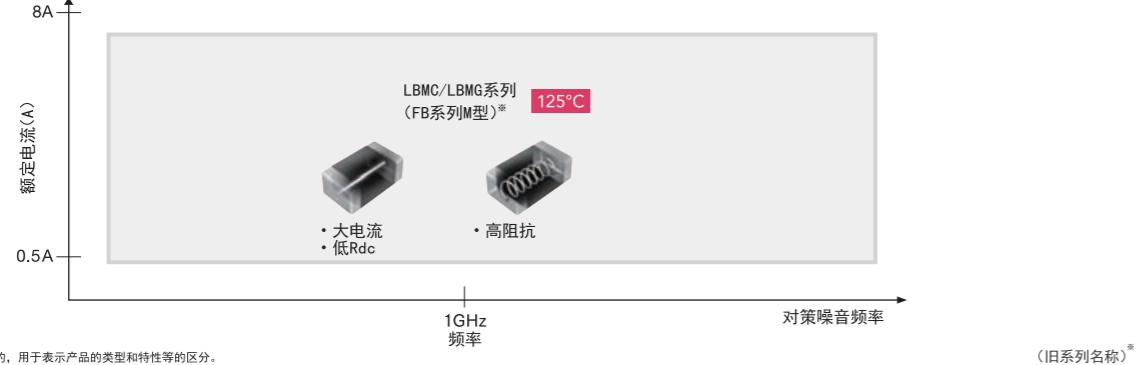
类型		金属功率电感器 MCcoil™		
系列	LBCN 系列	LBEN 系列	LBDN 系列	
外观				
结构图	极性标记 电极 内部导体 金属磁性材料	电极 绕线 金属树脂	金属鼓形磁芯 绕线 电极 含金属树脂	

类型		铁氧体功率电感器				通用电感器	
系列	LBXH 系列	LBXN/LBXP 系列	LBRN 系列	LBQN/LBQPA 系列	LBQM 系列	LBQB/LBQC/LBQE 系列	
外观							
结构图	铁氧体鼓形磁芯 绕线 电极 含金属树脂	铁氧体鼓形磁芯 绕线 电极 含铁氧体树脂	铁氧体筒状磁芯 铁氧体鼓形磁芯 电极 绕线	含铁氧体树脂 电极 绕线 铁氧体鼓形磁芯	含铁氧体树脂 电极 绕线 铁氧体鼓形磁芯	含铁氧体树脂 电极 绕线 铁氧体鼓形磁芯	

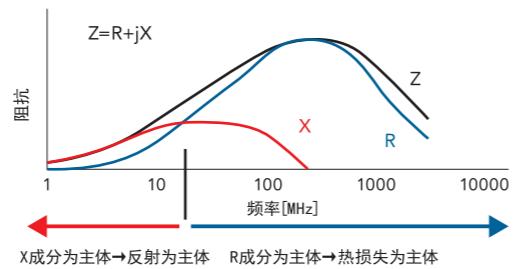
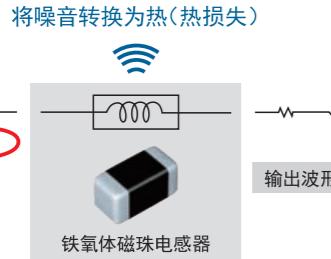
*系列前的代码是从产品编号里抽取出来的，用于表示产品的类型和特性等的区分。

铁氧体磁珠电感器

性能图



铁氧体磁珠电感器的作用

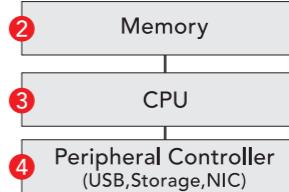


Application Guides



Server

① Power Supply



No	Block	Category	Form Factor	Series
①	Power Supply	MLCC	Chip	Medium-High Voltage Multilayer Ceramic Capacitors for Telecommunications Infrastructure and Industrial Equipment Multilayer Ceramic Capacitors (High dielectric type) for Telecommunications Infrastructure and Industrial Equipment Multilayer Ceramic Capacitors (Temperature compensating type) for Telecommunications Infrastructure and Industrial Equipment, MBAS Series
		Power Inductor	SMD	Wire-wound Metal Power Inductors MCQIL™ LBDN(MD-8)* series for Automotive Body & Chassis and Infotainment Wire-wound Ferrite Power Inductors LBQN/LBXP(NRH-8,NRS-8,NRV-8)* series for Telecommunications Infrastructure and Industrial Equipment
		Chip		Multilayer Metal Power Inductors MCQIL™ LBCN(MC-8)* series for Telecommunications Infrastructure and Industrial Equipment Wire-wound Ferrite Power Inductors LBQN/LBQPA(CB-8)* series for Telecommunications Infrastructure and Industrial Equipment
		Bead	Chip	Wire-wound Ferrite Bead Inductors for Power Lines LBMC/LBMG(FBM-8)* series for Telecommunications Infrastructure and Industrial Equipment
②	Memory	MLCC	Chip	Low ESR Hybrid Polymer Chip:RSHV1(HV)* series, Low ESR, 125°C, Hybrid Polymer Chip:RSHVK(HVK)* series
		MLCC	Chip	Multilayer Ceramic Capacitors (High dielectric type) for Telecommunications Infrastructure and Industrial Equipment Multilayer Ceramic Capacitors (Temperature compensating type) for Telecommunications Infrastructure and Industrial Equipment, MBAS Series
		Power Inductor	SMD	Medium-High Voltage Multilayer Ceramic Capacitors for Telecommunications Infrastructure and Industrial Equipment Multilayer Ceramic Capacitors (High dielectric type) for Telecommunications Infrastructure and Industrial Equipment Multilayer Ceramic Capacitors (Temperature compensating type) for Telecommunications Infrastructure and Industrial Equipment, MBAS Series
		Chip		Wire-wound Metal Power Inductors MCQIL™ LBDN(MD-8)* series for Automotive Body & Chassis and Infotainment Wire-wound Ferrite Power Inductors LBQN/LBXP(NRH-8,NRS-8,NRV-8)* series for Telecommunications Infrastructure and Industrial Equipment
③	CPU	MLCC	Chip	Wire-wound Metal Power Inductors MCQIL™ LBCN(MC-8)* series for Telecommunications Infrastructure and Industrial Equipment Wire-wound Ferrite Power Inductors LBQN/LBQPA(CB-8)* series for Telecommunications Infrastructure and Industrial Equipment
		Power Inductor	SMD	Wire-wound Metal Power Inductors MCQIL™ LBDN(MD-8)* series for Automotive Body & Chassis and Infotainment Wire-wound Ferrite Power Inductors LBQN/LBQPA(CB-8)* series for Telecommunications Infrastructure and Industrial Equipment
		Chip		Multilayer Metal Power Inductors MCQIL™ LBCN(MC-8)* series for Telecommunications Infrastructure and Industrial Equipment Wire-wound Ferrite Power Inductors LBQN/LBQPA(CB-8)* series for Telecommunications Infrastructure and Industrial Equipment
		Bead	Chip	Wire-wound Ferrite Bead Inductors for Power Lines LBMC/LBMG(FBM-8)* series for Telecommunications Infrastructure and Industrial Equipment
④	Peripheral Controller	MLCC	Chip	Medium-High Voltage Multilayer Ceramic Capacitors for Telecommunications Infrastructure and Industrial Equipment Multilayer Ceramic Capacitors (High dielectric type) for Telecommunications Infrastructure and Industrial Equipment Multilayer Ceramic Capacitors (Temperature compensating type) for Telecommunications Infrastructure and Industrial Equipment, MBAS Series
		Power Inductor	SMD	Wire-wound Metal Power Inductors MCQIL™ LBDN(MD-8)* series for Automotive Body & Chassis and Infotainment Wire-wound Ferrite Power Inductors LBQN/LBXP(NRH-8,NRS-8,NRV-8)* series for Telecommunications Infrastructure and Industrial Equipment
		Chip		Multilayer Metal Power Inductors MCQIL™ LBCN(MC-8)* series for Telecommunications Infrastructure and Industrial Equipment Wire-wound Ferrite Power Inductors LBQN/LBQPA(CB-8)* series for Telecommunications Infrastructure and Industrial Equipment
		Bead	Chip	Wire-wound Ferrite Bead Inductors for Power Lines LBMC/LBMG(FBM-8)* series for Telecommunications Infrastructure and Industrial Equipment

Application Guides

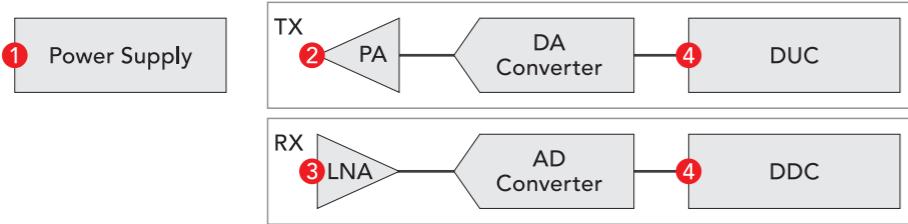
Base Station (RRU/BBU)



网站上介绍了各种应用实例。
请通过下列URL或二维码进行访问并查看。
<https://www.yuden.co.jp/cs/product/application/>



RRU



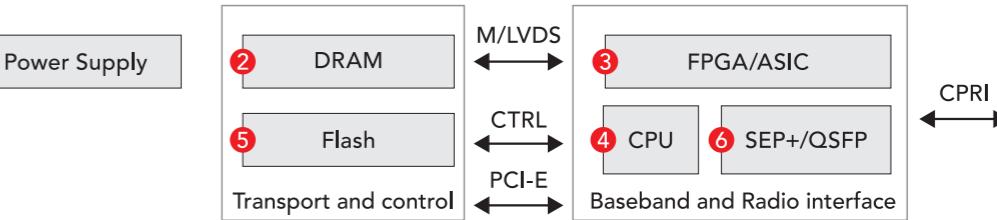
PA :Power Amplifier
LNA :Low Noise Amplifier
DUC :Digital Up Converter
DDC :Digital Down Converter

No	Block	Category	Form Factor	Series
①	Power Supply	MLCC	Chip	Medium-High Voltage Multilayer Ceramic Capacitors for Telecommunications Infrastructure and Industrial Equipment Multilayer Ceramic Capacitors (High dielectric type) for Telecommunications Infrastructure and Industrial Equipment Multilayer Ceramic Capacitors (Temperature compensating type) for Telecommunications Infrastructure and Industrial Equipment MBAS Series
		Power Inductor	SMD	Wire-wound Metal Power Inductors MCOIL™ LBDN(MD-8)® series for Automotive Body & Chassis and Infotainment Wire-wound Ferrite Power Inductors LBKN/LBXP(NRH-8,NRS-8,NRV-8)® series for Telecommunications Infrastructure and Industrial Equipment Wire-wound Ferrite Power Inductors LBXH(NRM-8)® series for Telecommunications Infrastructure and Industrial Equipment
		Power Inductor	Chip	Multilayer Metal Power Inductors MCOIL™ LBCN(MC-8)® series for Telecommunications Infrastructure and Industrial Equipment Wire-wound Ferrite Power Inductors LBQN/LBQPA(CB-8)® series for Telecommunications Infrastructure and Industrial Equipment
		Bead	Chip	Wire-wound Ferrite Bead Inductors for Power Lines LBMC/LBMG(FBM-8)® series for Telecommunications Infrastructure and Industrial Equipment
		Hybrid AL-CAP	Cylinder	Low ESR Hybrid Polymer Chip:RSHV1(HV)® series, Low ESR, 125°C, Hybrid Polymer Chip:RSHVK(HVK)® series
②	Power Amplifier	MLCC	Chip	Medium-High Voltage Multilayer Ceramic Capacitors for Telecommunications Infrastructure and Industrial Equipment: MBAS Series High frequency/Low loss Medium-High Voltage Multilayer Ceramic Capacitors for Telecommunications Infrastructure and Industrial Equipment: MBAR Series
③	Low noise Amplifier	MLCC	Chip	Medium-High Voltage Multilayer Ceramic Capacitors for Telecommunications Infrastructure and Industrial Equipment: MBAS Series High frequency/Low loss Medium-High Voltage Multilayer Ceramic Capacitors for Telecommunications Infrastructure and Industrial Equipment: MBAR Series
④	DUC / DDC	MLCC	Chip	Multilayer Ceramic Capacitors (High dielectric type) for Telecommunications Infrastructure and Industrial Equipment , MBAS Series
		Bead	Chip	Wire-wound Ferrite Bead Inductors for Power Lines LBMC/LBMG(FBM-8)® series for Telecommunications Infrastructure and Industrial Equipment

※LWDC是TAIYO YUDEN CO., LTD.的日本及在其他的国家的商标。※MCOIL是TAIYO YUDEN CO., LTD.的日本及在其他的国家的商标。

※系列前的代码是从产品编号里抽取出来的，用于表示产品的类型和特性等的区分。

BBU



No	Block	Category	Form Factor	Series
①	Power Supply	MLCC	Chip	Medium-High Voltage Multilayer Ceramic Capacitors for Telecommunications Infrastructure and Industrial Equipment Multilayer Ceramic Capacitors (High dielectric type) for Telecommunications Infrastructure and Industrial Equipment Multilayer Ceramic Capacitors (Temperature compensating type) for Telecommunications Infrastructure and Industrial Equipment , MBAS Series
		Power Inductor	SMD	Wire-wound Metal Power Inductors MCOIL™ LBDN(MD-8)® series for Automotive Body & Chassis and Infotainment Wire-wound Ferrite Power Inductors LBKN/LBXP(NRH-8,NRS-8,NRV-8)® series for Telecommunications Infrastructure and Industrial Equipment Wire-wound Ferrite Power Inductors LBXH(NRM-8)® series for Telecommunications Infrastructure and Industrial Equipment
		Power Inductor	Chip	Multilayer Metal Power Inductors MCOIL™ LBCN(MC-8)® series for Telecommunications Infrastructure and Industrial Equipment Wire-wound Ferrite Power Inductors LBQN/LBQPA(CB-8)® series for Telecommunications Infrastructure and Industrial Equipment
		Bead	Chip	Wire-wound Ferrite Bead Inductors for Power Lines LBMC/LBMG(FBM-8)® series for Telecommunications Infrastructure and Industrial Equipment
		Hybrid AL-CAP	Cylinder	Low ESR Hybrid Polymer Chip:RSHV1(HV)® series, Low ESR, 125°C, Hybrid Polymer Chip:RSHVK(HVK)® series
②	DRAM	MLCC	Chip	Multilayer Ceramic Capacitors (High dielectric type) for Telecommunications Infrastructure and Industrial Equipment Multilayer Ceramic Capacitors (Temperature compensating type) for Telecommunications Infrastructure and Industrial Equipment , MBAS Series
③	FPGA / ASIC	MLCC	Chip	Multilayer Ceramic Capacitors (High dielectric type) for Telecommunications Infrastructure and Industrial Equipment Multilayer Ceramic Capacitors (Temperature compensating type) for Telecommunications Infrastructure and Industrial Equipment , MBAS Series
④	CPU	MLCC	Chip	Multilayer Ceramic Capacitors (High dielectric type) for Telecommunications Infrastructure and Industrial Equipment Multilayer Ceramic Capacitors (Temperature compensating type) for Telecommunications Infrastructure and Industrial Equipment , MBAS Series
⑤	Flash	MLCC	Chip	Multilayer Ceramic Capacitors (High dielectric type) for Telecommunications Infrastructure and Industrial Equipment Multilayer Ceramic Capacitors (Temperature compensating type) for Telecommunications Infrastructure and Industrial Equipment , MBAS Series
		MLCC	Chip	Multilayer Ceramic Capacitors (High dielectric type) for Telecommunications Infrastructure and Industrial Equipment Multilayer Ceramic Capacitors (Temperature compensating type) for Telecommunications Infrastructure and Industrial Equipment , MBAS Series
⑥	SEP+/QSFP	Chip inductor	Chip	Wire-wound Ferrite Inductors LBQB/LBQC/LBQE(LB-8)® series for Telecommunications Infrastructure and Industrial Equipment Wire-wound Ferrite Inductors for Signal Lines LBQM (LBM-8)® series for Telecommunications Infrastructure and Industrial Equipment Wire-wound Ferrite Power Inductors LBQN/LBQPA(CB-8)® series for Telecommunications Infrastructure and Industrial Equipment

关于产品型号

太阳诱电株式会社已经对我们销售的产品型号进行了更改。

通过变更产品型号，可以让产品销售的目标市场/目标设备更加明确，同时能更加精准地推荐出符合使用目的产品。

此外,在变更的过程中,我们还制定了通用规律,让产品编号和推荐用途更简单易懂,更加容易检索。

mo

新型号表示方法

制定通用规则

产品设定

- ①** 产品群：表示多层陶瓷电容器、电感器等 产品群；
② 范畴：表示汽车专用、信息和基础设施设备、一般等市场等的推荐用途；
③ 类型：表示产品的种类，如每款产品的形状、功能等；
④ 特效·特性：表示每款产品的特点、特性等；
⑤～⑳：表示不同产品的规格，管理记号等

关于产品系列

用途	产品系列		品质等级 ^{*3}
	对象设备 ^{*1}	规格号 (型号标记) ^{*2}	
车载	汽车用电子设备(控制系 / 安全系)	A	1
	汽车用电子设备(车身系 / 情报系)	C	2
工业	通信基础设备・工业设备	B	2
医疗	医疗设备(国际(GHTF)第三类)	M	2
	医疗设备(国际(GHTF)第一类、第二类)	L	3
民用	一般电子设备	S	3
	移动设备专用 ^{*4}	E	4

敝公司所认知的该类设备对于电子元器件所需的一般要求，对于该产品系列进行的应用推荐。在讨论将各个产品系列在对象设备以外的设备上时，请务必事先向敝公司咨询。

品型号中左起第2位标注有上表中所记载的规格号。对于的详细内容,请参照有关各产品型号标示法的说明资料。

产品系列中，都设定了从上至下1至4的“品质等级”。另外，在未敝公司的事前书面承诺之前，请勿将敝公司的产品用于相该产品的品质等级被设定为上位品质等级的设备。

品系列仅可应用于一般民用电子设备中的移动设备(智能手
机、平板电脑、智能手表、掌上游戏机等)。由于其设计、规格和使用
与面向“一般电子设备”的产品系列(规格号:S)不同,有关本
系列的详细信息请参照交货规格说明书。另外,面向“一般电
子设备”的产品系列(规格号:S)也可以应用于移动设备。