BERYL®

承认书

APPROVAL SHEET

铝电解电容器(Aluminium Electrolytic Capacitors)

No:20160721L

客户

CUSTOMER

深圳市金鹏辉科技有限公司

商标

BRAND: BERYL

系列

SERIES: ME

日期

DATE：2016-7-21

形 状: 导针型

TYPE: RADIAL

描述

DESCRIPTION：

10μF/400V Φ8*20L

供应商 VENDOR			客户 CUSTOMER		
Approver 批 准	Auditor 审 核	Designer 制 作	Approver 批 准	Auditor 审 核	Tester 测试者
殷春禧	黄汝梅	廖梅君			

承认后，请签回一份，在下正式订单前如未签回承认书，视同默认本公司的相关标准及技术指标。
After approved, please sign back 1 Approval Sheet before order. If not, we will treat it as tacitly acknowledged and accepted our relative standard and technical index.

肇庆绿宝石电子科技股份有限公司 工程部 4412020019588

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ME Series

- 105℃high-temperature resistance,Standard Product
- RoHS Compliant

◆ 规格表 Specifications

项目Items	特性参数Characteristics
使用温度范围 Category Temperture Range	-40 ~ +105℃ (400V)
额定工作电压范围 Rated Voltage Range	400V
静电容量允许偏差 Capacitance Tolerance	±20% (M) (at 20℃,120Hz)

漏电流 Leakage Current

400V

Time / CV	After 1minute 1分钟读数（20℃）	After 5 minutes 5分钟读数（20℃）
CV≦1000	I=0.1CV+40	I=0.03CV+15
CV>1000	I=0.04CV+100	I=0.02CV+25

Note: I=Max.leakage current (uA), C=Nominal capacitance(uF), V=Rated voltage(V) (at 20℃)

损耗角正切值tanδ Dissipation Factor

Rated voltage(V)	400
tanδ(Max)	0.24

标称容量超过1000uF,则每增加1000uF,损耗角正切值增加0.02

When nominal capacitance exceeds 1000μF,add 0.02 to the value above for each 1000μF increase. (at 20℃,120Hz)

低温特性 Low Temperature Characteristics (Max.Impedance Ratio)

电容器在120Hz下的阻抗比值，不应超过下表所列出的值

Rated voltage(V)	400
Z(-25℃)/Z(+20℃)	6
Z(-40℃)/Z(+20℃)	6

耐久性 Endurence

105℃施加额定工作电压和最大允许纹波电流1000小时，（额定工作电压≥160V或铝壳≥Φ13的产品，为2000H)恢复到20℃后，产品性能应满足以下要求

The following specifications shall be satisfied when the capacitors are restored at 20℃ after subjected to DC voltage with the rated ripple current is applied for 1000hours(2000 hours to meet the following two conditions ≧160V,or≧13Φ at 105℃.)

Capacitance change	≦±20% of the initial value
D.F.(tanδ)	≦200% of the specified value
Leakage current	≦The specified value

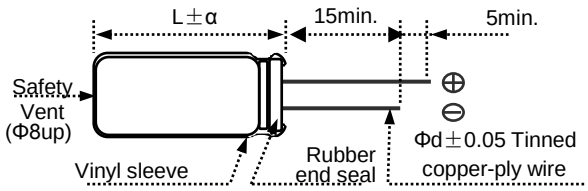
高温储存特性 Shelf Life

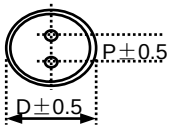
105℃存放1000小时，恢复到20℃后，产品性能应满足以下要求

The following specifications shall be satisfied when the capacitors are restored at 20℃ after exposing them for 1000 hours at 105℃ without voltage applied.

Capacitance change	≦±20% of the initial value
D.F.(tanδ)	≦200% of the specified value
Leakage current	≦500% of the specified value

◆ 外形图Dimensions (mm)





ΦD	8
P	3.5
Φd	0.5

α	(L<20)1.5
	(L≧20)2.0

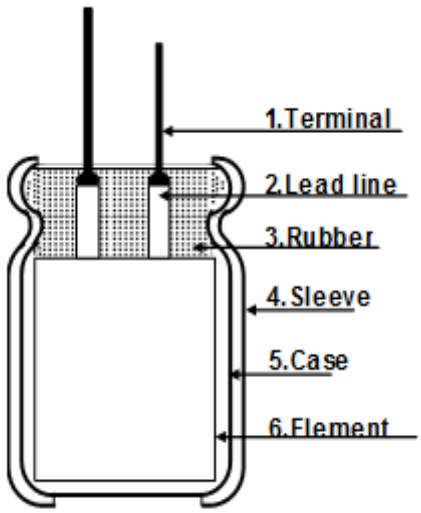
表中Max和Min均为样品实测数据.Max、Min value in the list is measured value.

BERYL		金鹏辉		主要技术参数									
部品号码	部品名	额定条件下工作寿命		CX容量 (uF)at120Hz 25℃			DF损失(%)at120Hz 25℃			最大允许纹波电流(mArms)温度105℃ 频率120Hz	LC漏电(uA)1分钟测试		
				8~12			<24				<260		
ME400M100LO8*20	10uF/400V Φ8*20L	2000H		Max	Min	$\overline{X}$	Max	Min	$\overline{X}$		Max	Min	$\overline{X}$
	黑色			9.917	9.170	9.544	3.46	2.50	2.98	105.0	23.0	10.0	16.5

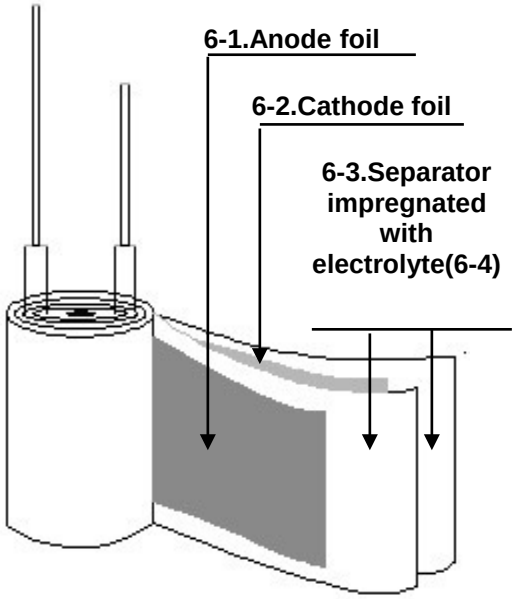
PLANNED BY	CHECKED BY	APPROVED BY		SHEET
廖梅君	黄汝梅	殷春禧	BERYL	共6页，第3页

铝电解电容器结构图
Structure Drawing of Aluminum Electrolytic Capacitors

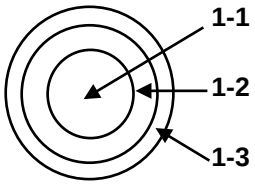
电容器
Capacitor



素子展开图
Stretch Out View of Element



CP 线横向剖面图
Cross Section of Terminal



铁芯
1-1.Fe

镀铜层
1-2. Copper plate (≥10um)

镀锡层
1-3.Tin Plate(≥8um)

Item	组成材料 Component	材质 Materials	供应商 Vendor
1	CP线 Terminal	镀铜镀锡铁线 Tinned copper-ply wire	Japan-Funded Enterprises
2	引出线 Lead line	纯度为99.95%或99.97%的金属铝片 Aluminum, 99.95% or 99.97%	Nan Ming(Ri Hui)
3	胶盖 Rubber	IIR 橡胶 IIR rubber	Lian An
4	胶管 Sleeve	PET PET	Yun Lin
5	铝壳 Case	纯度为99.8%的金属铝 Aluminum, 99.8%	An Qi Li
6-1	阳极箔 Anode Foil	纯度99.99%或99.98%的化成铝箔 Formed aluminum, 99.99% or 99.98%	China-Japan Joint Venture
6-2	阴极箔 Cathode Foil	纯度99.7%或99.4%的腐蚀铝箔 Etched aluminum, 99.7% or 99.4%	FOILTEC
6-3	电解纸 Separator	纤维纸 fiber paper	KAN、MHSSP
6-4	电解液 Electrolyte	乙二醇、铵盐等 Ethylene glycol, ammonium salt,etc.	BERYL

TITLE/DESCRIPTION		SHEET
ALUMINUM ELECTROLYTIC CAPACITOR 铝电解电容器	BERYL	共6页， 第4页

NOTICE ON MANUFACTURING PROCESS 对于构成部品的材料，处理的注意事项

●Don't change written contents and append it. ●记载内容不变更与添加

1.此部品不使用含有RoHS的指定物质.

2.对于RoHS物质使用的有无在承认书上要明确规定.

3.为部品易区分处理．对塑料材料要标识材料记
所谓标识记号详细请参照RoHS[塑料制部品的材料标识规定」
但，标识困难时除外.

「困难例」

. 无记入标识记号的场所.
. 因要记入标识可能会造成机能损坏.
. 因生产方法标识困难。

4.成型用树脂．油墨，涂料，覆盖电线要从绿色环保伙伴认定厂商购买.

1.This part should not contain any substances which are specified in RoHS

2.Clarify by delivery specifications about the existence of use of the substance which are specified in RoHS

3.In order to make sorting of plastic waste easy, material symbols is marked on the plastic part
For details on marking symbols, refer to RoHSMarking of plastic parts and packaging material.

Marking may be cmitted in the following cases:

. Not enough space to apply the marking
. Marking would interfere with performance or funcional requirements
. Marking technically not feasible due to the specific production method

4.Purchase ink, paint,wire rods. And molding resins only from the business partners that approves as RoHS

5.Marking

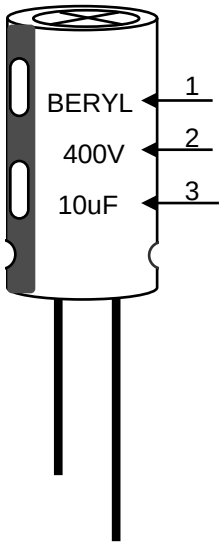
The following items shall be marked indelibly and legibly on specimen or each unit pack.

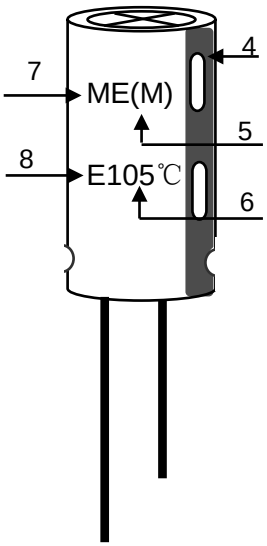
1.Manufacturer's name(abbreviated manufacturer's name permitted) or trademark.
2.Work voitage
3.Capacitance
4.Polarity of the terminals
5.Capacitance Tolerance
6.Work temperature
7.Series
8.Sleeve

5.标示

每个部品的表面或最小包装单位依下记事项不易消失的方法来标示.

1.制造者名(料号）或商标
2.额定电压
3.静电容量
4.极性
5.静电容量允许误差
6.最高使用温度
7.系列
8.胶管材质：PET





注：1.本承认书中所有数据如有异议，以中文为准。
2.在使用电解电容器时，请参考承认书内的使用标准，由于客户使用超出承认书相关参数和范围，如额定电压、额定纹波电流、温度等，不在我司质量保证范围内。
3.由于电路设计不当或缺陷造成的电解电容器损坏，不在我司质量保证范围内。