



产品规格确认书 Specification for approval

产品规格确认书

Specification for approval

顾客 Customer: _____

顾客产品名称 Custom Product Name: _____

顾客零件号 : Custom Part No: _____

产品名称 Product Name: Common Mode Choke

产品型号 Product model: SY20EF-010-100-001

发布日期 Publish Date: _____

版本 Version: V1.0

特别说明: 此确认书请顾客在 2 周内确认, 如未在规定时间内答复, 则视为同意。

三友审批签字 Signature by Sanyou			顾客签字或盖章 stamp of signature by customer
编制 Make	审核 Check	批准 Approved	

Especially claim: This specification should be checked in 2 weeks, if had not answered in the scheduled time ,then regards as the agreement.



产品规格确认书 Specification for approval

变更版记录 Revisions

版本 Version No.	变更内容 Change description	变更原因 Reason	日期 Date	修改 Drafted by	审核 Checked by
1.0	初版	/	2022.1.5	黄玉华	何明荣

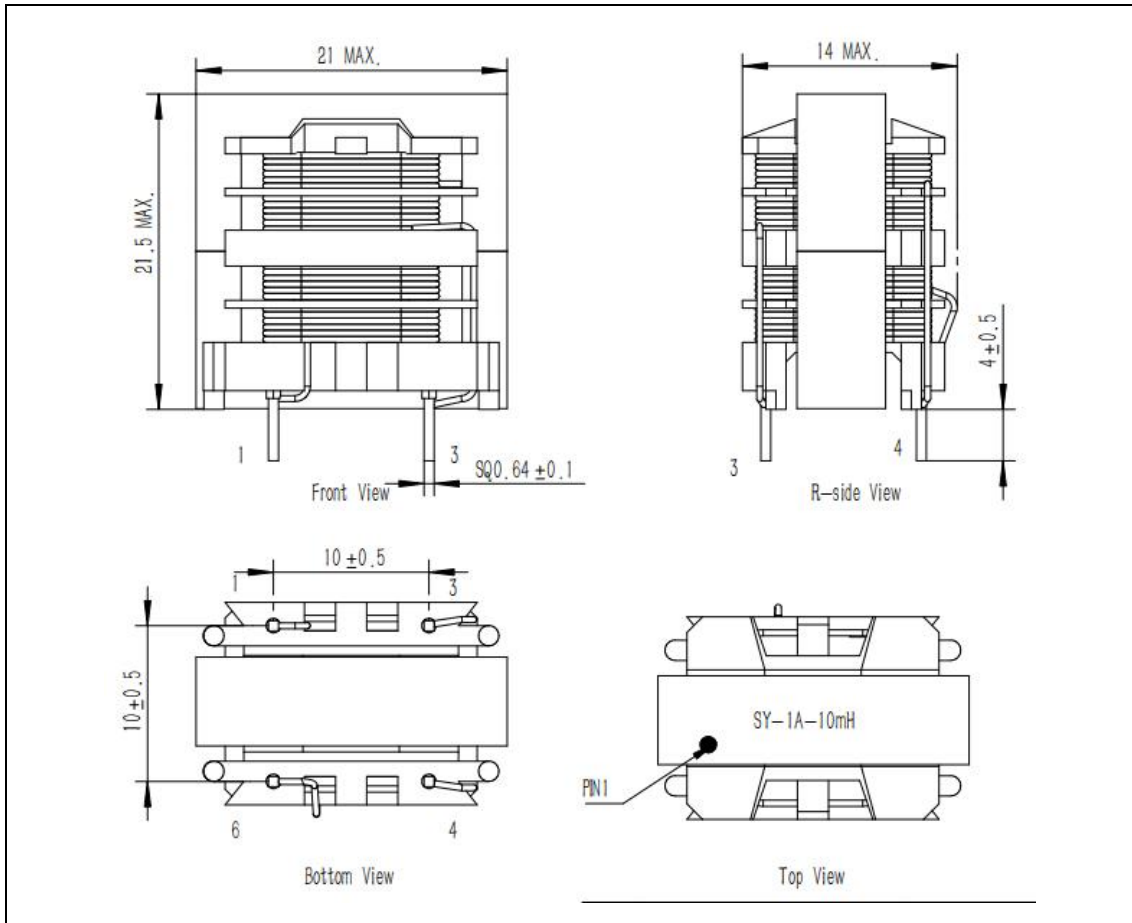
目录 Catalog

1.	外形尺寸(Outline Dimensions)
2.	推荐 PCB 安装尺寸 (Suggested PCB Layout)
3.	原理图 (Schematic Diagram)
4.	绕线参数 (Winding Parameter)
5.	电气特性(Electrical Characteristics)
6.	材料表 (Material List)
7.	产品工艺要求(Technological Requirements)
8.	推荐焊接条件 (Recommend Soldering Conditions)



产品规格确认书 Specification for approval

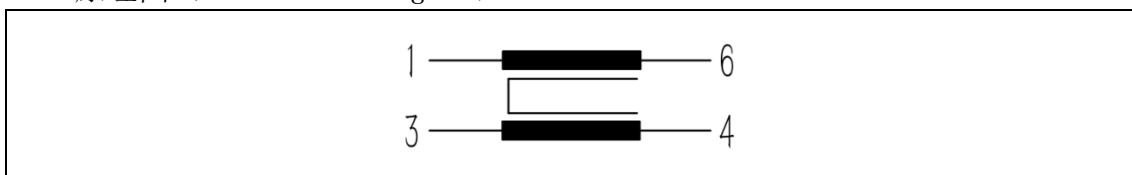
1. 外形尺寸(Outline Dimensions) (单位: mm) (UNIT:mm)



2. 推荐 PCB 安装尺寸 (Suggested PCB Layout) (单位: mm) (UNIT:mm)



3. 原理图 (Schematic diagram)





产品规格确认书 Specification for approval

4. 绕线参数 (Winding Parameter)

起线-尾线 Start-Finished pin	线径规格 Wire Diameter	圈数 Turns	绕线方式 Winding Condition	胶带圈数 Turns of tape
1-6	2UEWF 0.35	55 (REF.)	close	\
3-4	2UEWF 0.35	55 (REF.)	close	\

备注：绕线圈数参考，以电感量为准。

The turns of coil listed in winding parameter is only for reference, the actual number is decided by the inductance

5. 电气特性 (Electrical characteristics)

项目 Item	测试引脚 Pin NO.	规格 SPEC.	测试条件 Conditions
电感 Inductance	1-6	10mH -30%/+30%	10KHz 0.3V 25°C (LCR 测试仪器内阻 100 Ω)
	3-4	10mH min -30%/+30%	
电感偏差 Inductance Deviation	1-6 - 3-4	300uH max.	10KHz 0.3V 25°C (LCR 测试仪器内阻 100 Ω)
漏感 Leakage Inductance	1-6	180uH max.	100KHz 0.3V 25°C (LCR 测试仪器内阻 100 Ω) PIN3-4 short
直流电阻 DC Resistance	1-2	0.42 Ω max.	25°C
	4-3	0.42 Ω max.	
高压测试 Hi-Pot Test	(1-6)-(3-4)	1.5KV	5S 1mA
	PIN-CORE	0.75KV	5S 1mA
绝缘电阻 Insulation Resistance	(1-6)-(3-4)	100MΩ min	500VDC
工作温度范围 Operation Temperature		-25°C~125°C	包含线圈发热导致的温度升高 (including coil's temperature rising)



产品规格确认书 Specification for approval

6. 材料表 (Material list)

编号 NO.	类别 Description	材料 Material	供应商 MANUFACTURER	UL NO.	温度等级 TEMP.
1	Core	EF20 GH5	Guanda or equivalent	/	130°C
2	Bobbin	PET	NANTONG ORIENT PLASTICS CO LTDt	E332375	130°C
3	Wire	2UEW-F	Guangdong Jinyan Electrotechnics or equivalent	E238500	155°C
4	Epoxy	EP600-3M HF	Santong or equivalent	/	130°C
5	Solder	Sncu	Qiandao or equivalent	/	/
6	Varnish	116C	Better New Materials Co Ltd	E230067	130°C

7. 产品工艺要求 (Technological requirements):

- 1) 绕线平整，两个绕组圈数相同。The turns of two coils must be same, and the winding shall be flat without overlap.
- 2) 磁芯和骨架点胶固定。Fasten core and bobbin with glue.
- 3) 如客户无要求，产品标签为SY-1A-10mH 否则按照客户要求 If no rerequirements, marked the inductor with:SY-1A-10mH, else meets customer' s specification.

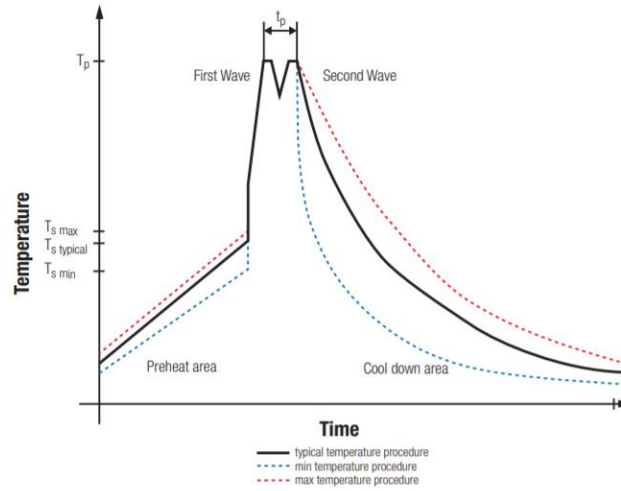
8. 推荐焊接条件 (Recommend Soldering Conditions)

- 1) 焊接方式：波峰焊 (Wave Soldering)
- 2) 典型焊接曲线 (Classification Wave Soldering Profile)



产品规格确认书 Specification for approval

Classification Wave Soldering Profile:



Classification Wave Soldering Profile:

Profile Feature		Pb-Free Assembly
Preheat Temperature Min	$T_{s\ min}$	100 °C
Preheat Temperature Typical	$T_{s\ typical}$	120 °C
Preheat Temperature Max	$T_{s\ max}$	130 °C
Preheat Time t_s from $T_{s\ min}$ to $T_{s\ max}$	t_s	70 seconds
Ramp-up Rate	ΔT	150 °C max.
Peak Temperature	T_p	250 °C - 260 °C
Time of actual peak temperature	t_p	max. 10 seconds max. 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

refer to EN61760-1:2006