



SPECIFICATION FOR APPROVAL

产品规格承认书

Inverter Inductor

逆变电感

CUSTOMER.

MODEL NO.

MBJ456022-241M

CUSTOMER'S PART NO.

LILE NO.

DATE.

2023.07.24

REVISION.

A/0

| | | |
|-------------------------|-----------------|--------------------|
| CUSTOMER APPROVE | | |
| | | |
| DATE: | | |
| DRAWING | | |
| DRAWN BY | CHECK BY | APPROVAL BY |
| 林思思 | 陈健波 | 曾伟 |
| DATE:2023.07.24 | | |



**深圳市迈翔科技有限公司
惠州市迈翔电子有限公司**

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| CUSTOMER | | MODEL NO. | MBJ456022-241M | REVISION | A/0 |
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| 1.PRODUCT DIMENSION | | UNIT:mm | |
|---------------------|---|----------|--|
| | A | 63.5Max | |
| | B | 61Max | |
| | C | 32.5Max | |
| | D | 3.5±0.5 | |
| | E | 30±0.5 | |
| | F | 34±0.5 | |
| | G | 30.0±0.5 | |
| | H | 61Max | |
| | I | 63.5Max | |

| 2.ELECTRICAL REQUIREMENTS | | | |
|---------------------------|----------------------|-------------|---------------------|
| PARAMETER | SPECIFICATION | CONDITION | TEST INSTRUMENTS |
| L(uH)(1-4) | 240±20% 短路PIN2, 3脚 | 10KHz/1V | MICROTEST 6377 |
| Q(1-4) | 120 Min 短路PIN2, 3脚 | 10KHz/1V | MICROTEST 6377 |
| DC(A)(1-4) | >72uH 80A 短路PIN2, 3脚 | 10KHz/1V | MICROTEST 6377+6220 |
| DCR(mΩ)(1-2)(3-4) | 6.5Max | At 25°C | TH16502 |
| HI-TOP (PIN1,3-CORE) | 1500V AC | 3S/50Hz/1mA | AC/DC/IR 19052 |
| HI-TOP (PIN1-PIN3) | 1500V AC | 3S/50Hz/1mA | AC/DC/IR 19052 |

| 3.MATERIAL LIST | | |
|-----------------|--------------------------|----------------------|
| ITEM | MATERIAL | SUPPLIER |
| CORE | NPH4555180898V1-60 | POCO/PULEHUA |
| WIRE | EIW-H 1.4*5.0 | TAIYI-JIATENG-SONGYE |
| SOLDER | 无铅焊锡条 Sn-0.7Cu | YUNXI |
| 助焊剂 | JS-807 | JIANXING |
| TUBE | | |
| 环氧板 | FR-4/50*30*1.5 | / |
| | 63*60*0.8 | / |
| 复合纸 | 34*76*0.13mm GUBANG-NMN | FUWEI |
| 胶带 | #PF-301 0.025*15.0MM 咖啡色 | YAHUA |
| | #2901-65G 0.29*8.0MM 白色 | YAHUA |
| 环氧胶 | G500 | AIMASENKANGMING |
| | 3300A-1(浓-K) | LIDUO |
| 无纺布 | #2901-65G;0.29*5MM;白色 | / |
| 绝缘漆 | 5183SW | AILUNTASI |
| 稀释剂 | T003 | AILUNTASI |
| 固化剂 | C10 | AILUNTASI |
| INK | 9155E 黑色 | / |

| 4.SPECIAL REQUEST | | |
|-------------------|----------------|---------------------|
| (1)Lettering | COILMX YYWW | on top of the body. |

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5.PRODUCT IDENTIFICATION

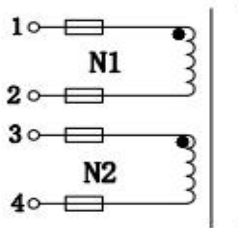
XXX XXX - XXX X

① ② ③ ④

①、Coilmx Series Name ②、 Dimensions ③、 Inductance

④、 Tolerance: M±20%, N±30%.

6.ELECTRICAL SCHEMATICS



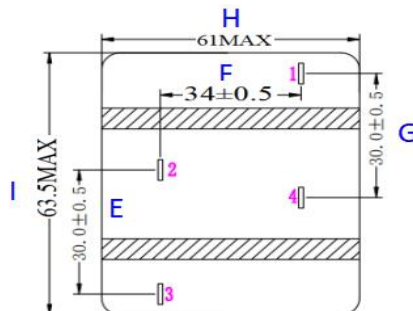
7.APPLICATION

- (1)Low profile,high current power supplies.
- (2)Energy storage, voltage boost, filtering, EMI elimination
- (3)DC/DC converters in distributed power systems.
- (4)DC/DC converters for field programmable gate array.

8.FEATURES

- (1)Assemblage design, sturdy structure.
- (2)High inductance, high current, low magnetic loss,low ESR, small parasitic capacitance.
- (3)Flat wire winding, achieve a low D.C. Resistance.
- (4)Temperature rise current and saturation current is less influenced by environment.

9.RECOMMENDED PCB LAYOUT



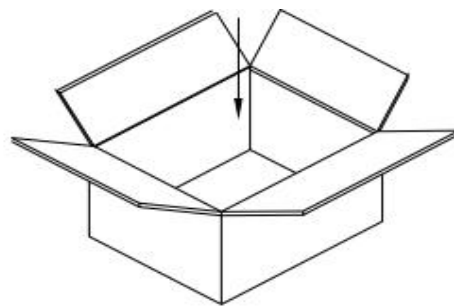
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| SORT | ITEM | A | B | C | D | E | F | G | H | I |
| PRODUCT & DIMENSION | SPEC | 63.5Max | 61Max | 32.5Max | 3.5±0.5 | 30±0.5 | 34±0.5 | 30.0±0.5 | 61Max | 63.5Max |
| | 1 | 63.02 | 60.23 | 32.02 | 3.55 | 30.26 | 34.12 | 30.24 | 60.23 | 63.03 |
| | 2 | 63.05 | 62.24 | 32.03 | 3.51 | 30.25 | 34.1 | 30.23 | 60.23 | 63.06 |
| | 3 | 63.04 | 60.22 | 32.04 | 3.56 | 30.19 | 34.21 | 30.21 | 60.23 | 63.05 |
| | 4 | 63.06 | 60.23 | 32.06 | 3.62 | 30.26 | 34.23 | 20.19 | 60.24 | 63.04 |
| | 5 | 63.08 | 60.25 | 32.06 | 3.61 | 30.27 | 34.15 | 30.19 | 60.35 | 63.09 |
| | X | 63.05 | 60.63 | 32.04 | 3.57 | 30.25 | 34.16 | 28.21 | 60.26 | 63.05 |
| | R | 0.06 | 2.02 | 0.04 | 0.11 | 0.08 | 0.13 | 10.05 | 0.12 | 0.06 |
| ELECTRICAL & REQUIREMENTS | ITEM | L(uH)(1-4) | DCR (mΩ)(1-2) | DCR (mΩ)(3-4) | DC(A)(1-4) | SHAPE: | | | | |
| | SPEC | 240±10% | 6.5Max | 6.5Max | >72uH 80A | | | | | |
| | 1 | 227.80 | 5.75 | 5.75 | 88.90 | | | | | |
| | 2 | 228.50 | 5.76 | 5.78 | 89.50 | | | | | |
| | 3 | 228.50 | 5.75 | 5.76 | 90.10 | | | | | |
| | 4 | 228.80 | 5.76 | 5.78 | 90.20 | | | | | |
| | 5 | 227.90 | 5.78 | 5.79 | 89.80 | | | | | |
| | X | 1.63 | 5.76 | 5.77 | 89.70 | | | | | |
| | R | 1.00 | 0.03 | 0.04 | 1.30 | | | | | |

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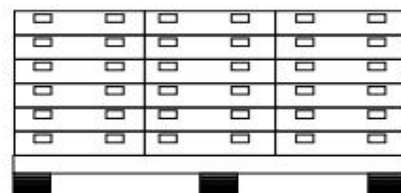
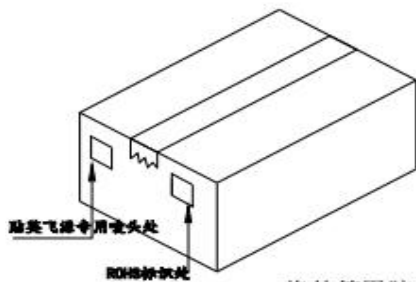
11、包装 Packaging



1PCS/孔; 12PCS/层



2层/箱, 层与层之间用隔板隔开, 最上一层加盖1张珍珠棉



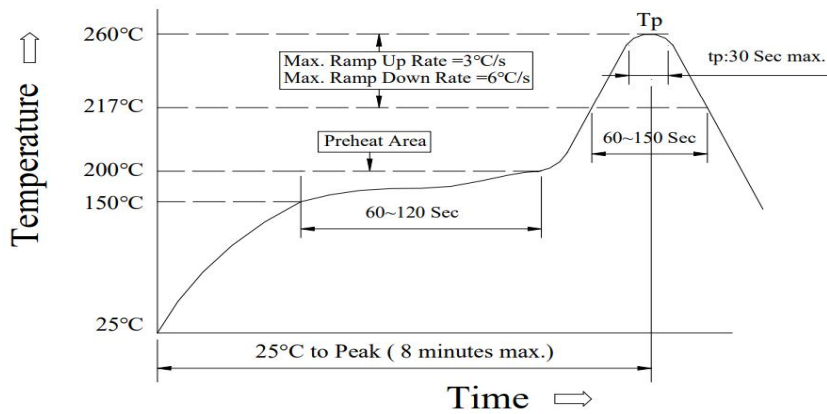
将外箱用胶带封好, 贴上对应的客户的唛头与ROHS唛头, 整齐摆放于栈板上, 每层摆放5箱, 最高摆放6层

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Reflow curve

※ Reflow Profile

Power Choke Coil Type



1. Reflow Soldering Method

| | | |
|-------------------------------|----------------|-----------------------|
| Reflow Soldering | Tp:255~260°C | Max.30 seconds (tp) |
| | 217°C | 60~150 seconds |
| Pre-Heat | 150 ~ 200°C | 60~120 seconds |
| Time 25°C to peak temperature | 8 minutes max. | |

2. Soldering iron method : 350±5°C Max.3 seconds.