# 承 認 書

# SPECIFICATION FOR APPROVAL

| | |
|---|---|
| CUSTOMER: | STD |
| DESCRIPTION: | WIRE WOUND CHIP INDUCTOR |
| PART NO: | MWI0402IF系列 |
| CUST. PART NO: | |
| REV. NO. | A0 |

| DRAWING | | |
|---|---|---|
| PREPARED | CHECKED | APPROVED |
| Yu | Lu | Zeng |
| DATE: | 2023/10/10 | |

| CUSTOMER APPROVE |
|---|
| |


铭易轩电子科技有限公司

Ming Yixuan Electronic Technology Co., LTD

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Specifications subjectto change withoutnotice.Please confirm according to our companyfor latestinformation

铭易轩电子 SPECIFICATION FOR APPROVAL

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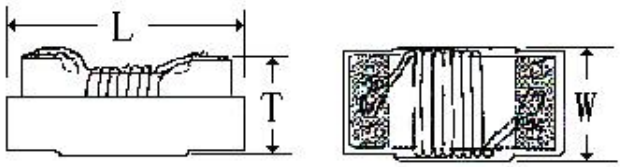
## MODIFY RECORD 变更履历

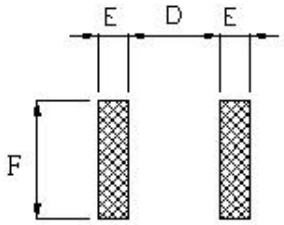
| Date | Rev. No. | Change Content | Prepared | Approved |
|---|---|---|---|---|
| 2023/10/10 | A0 | New issue | Yu | Zeng |
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**1. SHAPE & DIMENSION (UNIT:mm)**

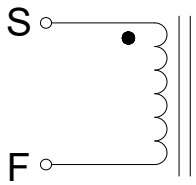



Recommended patterns

| L | W | T | E | F | D |
|---|---|---|---|---|---|
| 1.19 Max. | 0.7 Max. | 0.64 Max. | 0.36 Max. | 0.66 Typ. | 0.46 Typ. |

**2. SCHEMATIC**




**3. PART NUMBERING SYSTEM**

| MWI | xxx | IF | xxx | K | S | T | - | HF |
|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | | 8 |

1 PRODUCT SYMBOL（产品代号）
2 DIMENSIONS （规格尺寸）
3 MATERIAL （芯片类型）
4 INDUCTANCE（电感量）
5 TOLERANCE（公差） ：J±5%；K±10%；M±20%
6 TERMINAL （端电极材料）： S-锡端头；
7 PACKAGING （包装方式）：T-编带盘装；B –散装
8 E.P.（环保）：LF—Lead Free HF—Halogen Free FP—Red Phosphor Free

| APPROVED | CHECKED | PREPARED |
|---|---|---|
| Zeng | Lu | Yu |

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## 4. ELECTRICAL CHARACTERISTICS

| No. | Part Number | L | Freq | SRF | Rdc | Irms | Isat | Tolerance |
|---|---|---|---|---|---|---|---|---|
| | | (nH) | (MHz) | (MHz)Min. | (Ω) Max. | (mA) Max. | (mA) Max. | |
| 1 | MWI0402IF22N□ST-HF | 22 | 7.9 | 2500 | 0.065 | 1300 | 1400 | K,M |
| 2 | MWI0402IF36N□ST-HF | 36 | 7.9 | 2300 | 0.075 | 1300 | 1400 | K,M |
| 3 | MWI0402IF39N□ST-HF | 39 | 7.9 | 2200 | 0.115 | 830 | 1200 | K,M |
| 4 | MWI0402IF56N□ST-HF | 56 | 7.9 | 1900 | 0.095 | 1000 | 1200 | K,M |
| 5 | MWI0402IF75N□ST-HF | 75 | 7.9 | 1600 | 0.15 | 600 | 1200 | K,M |
| 6 | MWI0402IF78N□ST-HF | 78 | 7.9 | 1600 | 0.13 | 970 | 1200 | K,M |
| 7 | MWI0402IFR10□ST-HF | 100 | 7.9 | 1400 | 0.16 | 900 | 1200 | K,M |
| 8 | MWI0402IFR11□ST-HF | 110 | 7.9 | 1000 | 0.2 | 850 | 1000 | K,M |
| 9 | MWI0402IFR15□ST-HF | 150 | 7.9 | 1220 | 0.26 | 630 | 1000 | K,M |
| 10 | MWI0402IFR18□ST-HF | 180 | 7.9 | 1150 | 0.28 | 560 | 1000 | K,M |
| 11 | MWI0402IFR20□ST-HF | 200 | 7.9 | 1000 | 0.44 | 400 | 1000 | K,M |
| 12 | MWI0402IFR22□ST-HF | 220 | 7.9 | 1150 | 0.53 | 380 | 1000 | K,M |
| 13 | MWI0402IFR25□ST-HF | 250 | 7.9 | 900 | 0.9 | 360 | 900 | K,M |
| 14 | MWI0402IFR27□ST-HF | 270 | 7.9 | 860 | 0.9 | 360 | 900 | KM |
| 15 | MWI0402IFR30□ST-HF | 300 | 7.9 | 860 | 0.9 | 360 | 900 | K,M |
| 16 | MWI0402IFR33□ST-HF | 330 | 7.9 | 820 | 0.56 | 350 | 600 | J,K,M |
| 17 | MWI0402IFR36□ST-HF | 360 | 7.9 | 810 | 0.9 | 250 | 600 | J,K,M |
| 18 | MWI0402IFR39□ST-HF | 390 | 7.9 | 760 | 1.0 | 200 | 500 | J,K,M |
| 19 | MWI0402IFR47□ST-HF | 470 | 7.9 | 650 | 1.0 | 200 | 500 | J,K,M |
| 20 | MWI0402IFR56□ST-HF | 560 | 7.9 | 600 | 1.2 | 200 | 500 | J,K,M |
| 21 | MWI0402IFR68□ST-HF | 680 | 7.9 | 290 | 1.6 | 100 | 250 | J,K,M |
| 22 | MWI0402IFR82□ST-HF | 820 | 7.9 | 385 | 5.85 | 90 | 200 | J,K,M |
| 23 | MWI0402IF1R0□ST-HF | 1000 | 7.9 | 200 | 6.5 | 50 | 200 | J,K,M |
| 24 | MWI0402IF2R2□ST-HF | 2200 | 7.9 | 100 | 2.3 | 40 | 200 | J,K,M |

□ 表示产品公差：J±5%；K±10%；M±20%

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## 4. ELECTRICAL CHARACTERISTICS

| No. | Part Number | L | Freq | SRF | Rdc | Irms | Isat | Tolerance |
|---|---|---|---|---|---|---|---|---|
| | | (nH) | (MHz) | (MHz)Min. | (Ω) Max. | (mA) Max. | (mA) Max. | |
| 25 | MWI0402IF3R3□ST-HF | 3300 | 7.9 | 80 | 3.6 | 10 | 200 | J,K,M |
| 26 | MWI0402IF4R7□ST-HF | 4700 | 7.9 | 50 | 4.8 | 10 | 200 | J,K,M |
| 27 | MWI0402IF6R8□ST-HF | 6800 | 7.9 | 50 | 6.1 | 10 | 200 | J,K,M |
| 28 | MWI0402IF100□ST-HF | 10000 | 1 | 20 | 8.5 | 10 | 200 | J,K,M |

□ 表示产品公差：J±5%；K±10%；M±20%

**Test remarks**

(1).All test data is referenced to 25 ℃ ambient.

(2). Isat: DC current at which inductance drops approximate 30% from its value without current,
Irms: DC current that causes the temperature rise (△T ≦40℃ ) from 25℃ ambient.

## 5. GENERAL SPECIFICATION

(1). Operating temp.: -40℃ ~ +85℃ (Including self-generated heat).

(2). Storage temp.: -10℃ ~ +40℃ R.H.:60% Max.

(3). Moisture sensitivity level (MSL) 1

(4). Recommended products should be used within 12 months from the date of delivery

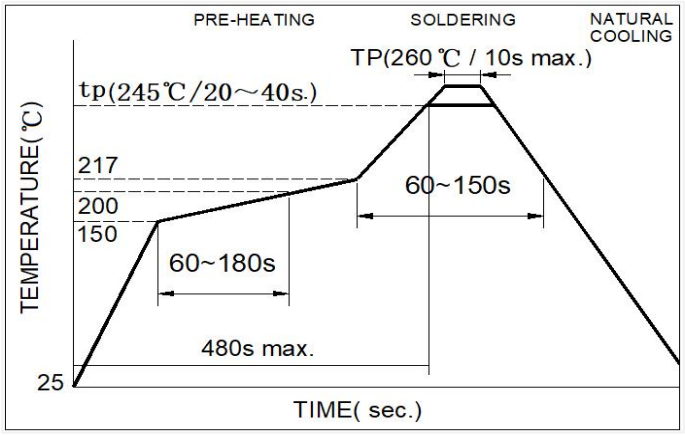
(5). The part temperature (ambient + temp rise) should not exceed 85 °C under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.

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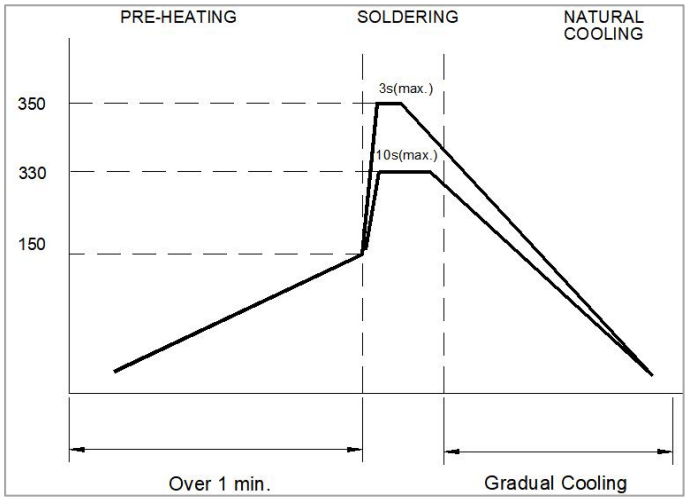
## 6. SOLDERING CONDITIONS

**Figure 1. Re-flow Soldering (Lead Free)**




Note：
Preheat circuit and products to 150℃
260℃ tip temperature (Max)
Reflow times: no more than 2 times
Solder paste thickness: the best 0.08mm is ,but max is 0.1mm

**Figure 2. Hand Soldering**



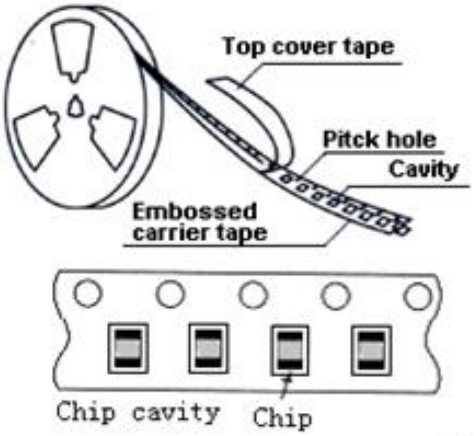


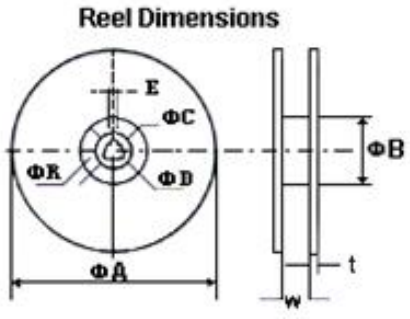

Note：
Use a 20 watt soldering iron with tip diameter of 1.0mm
Limit soldering time to 3 sec.

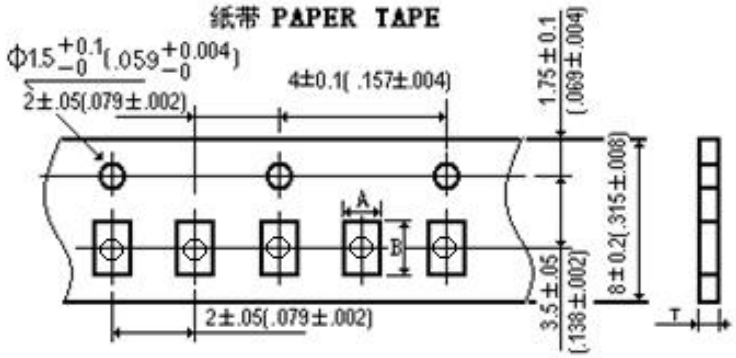
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**7. PACKAGE SPECIFICATION**



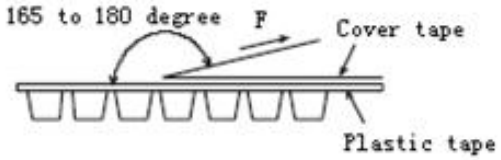




Peeling off force

Pull strength
0402~1210:20g~80g

Speed of peeling off:
300mm/min±10%




| | A | B | T |
|---|---|---|---|
| 0402纸带 | 0.74 | 1.23 | 0.75 |

| Type | ΦA | ΦB | ΦC | ΦD | E | W | t |
|---|---|---|---|---|---|---|---|
| 0402 | 178 | 60 | 13 | 21 | 2 | 8.4 | 2 |

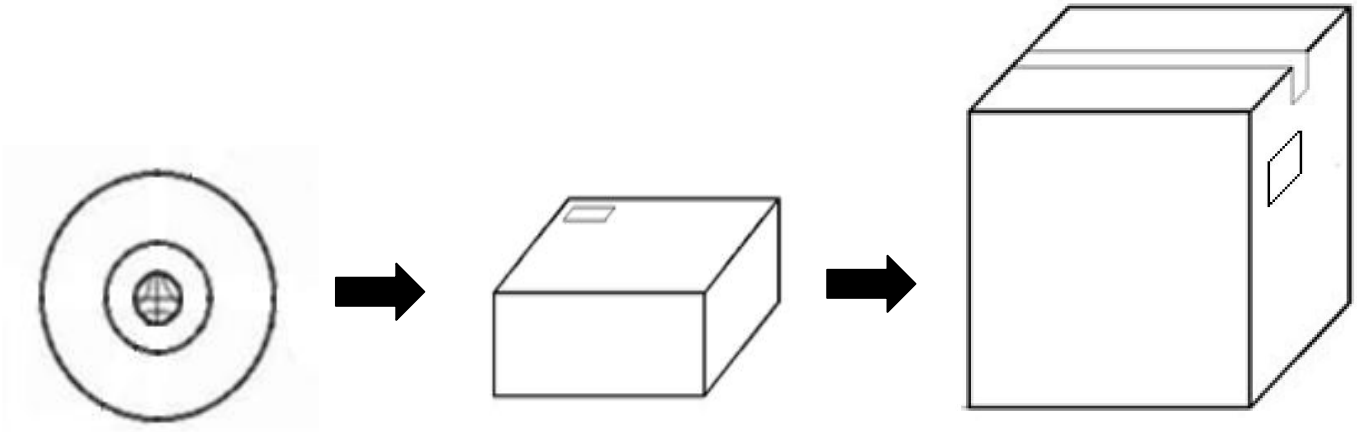
包装数量(PACKAGING QUANTITY):10000Pcs/盘

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**8.Package Specifications**

**Inside Box And Outside Carton**



| 卷轴数量 | → | 内盒包装数量 | → | 外箱包装数量 |
|---|---|---|---|---|
| **每卷:10000 PCS** | | **每盒四盘，共40000 PCS** | | **小箱6盒，共240000 PCS** |
| | | | | **中箱8盒，共320000 PCS** |
| | | | | **大箱10盒，共400000 PCS** |

| 内盒包装数量 | → | 外箱包装尺寸 |
|---|---|---|
| **20.3*19.3*5.5cm** | | **小箱，40.6*23*19.7cm** |
| | | **中箱，41*22*26cm** |
| | | **大箱，41*22*33cm** |

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