



## 零件承认书

SPECIFICATION FOR APPROVAL

客户名称：001

增益型号：ZE0510-102-LSBD

规格描述：色环电感 0510 1mH 100mA 10% 立式编带

日期：2022/2/25

版本：A

增益签核：

| 制订 | 审核 | 核准 |
|----|----|----|
| 夏琳 |    | 李万 |

客户签核：

| 工程 | 审核 | 核准 |
|----|----|----|
|    |    |    |



东莞市增益实业有限公司

地址：东莞市塘厦镇林村塘厦大道北552号

电话：0769-87321000

传真：0769-87891229

物料类型：色环电感

日期：2022/2/25

版本：A

图 面 规 格 变 更 履 历 表

| 客户   |      | 0    | 料号        |    | 品名  |     |
|------|------|------|-----------|----|-----|-----|
| 客户版本 | 增益版本 | 变更内容 | 日期        | 制定 | 审核  | 核准  |
|      | A    | 初版   | 2022/2/25 | 张翔 | 刘业明 | 柯文学 |
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|              |                 |             |  |
|--------------|-----------------|-------------|--|
| CUSTOMER     |                 | FULL        |  |
| MODEL No.    |                 | APPROVED    |  |
| PART No.     | ZE0510-102-LSBD | CONDITIONAL |  |
| DATE         | 2022-2-25       | APPROVED    |  |
| REVISION No. | A               | REJECTED    |  |

**< INDEX >**

|                                             |      |
|---------------------------------------------|------|
| 1. SHAPE & DIMENSION                        | P1   |
| 2. ELECTRICAL SCHEMATICS                    | P1   |
| 3. ELECTRICAL SCHEMATICS & TEST INSTRUMENTS | P2   |
| 4. MATERIAL LIST                            | P2   |
| 5. TEST DATA FOR PREPRODUCTION SAMPLES      | P3   |
| 6. RELIABILITY TEST METHOD                  | P4-5 |

|                                                                                     |             |    |
|-------------------------------------------------------------------------------------|-------------|----|
|  | APPROVED BY |    |
|                                                                                     | CHECKED BY  |    |
|                                                                                     | MADE BY     | 张翔 |

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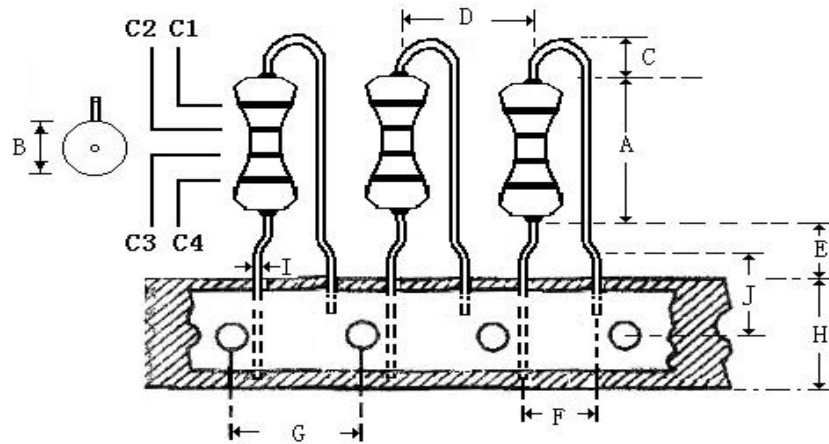
Fax: 0769-87891229

地址: 东莞市塘厦镇林村塘厦大道北 552 号

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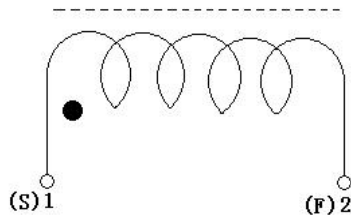
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| CUSTOMER    |                 | MADE     |           |
| MODEL No.   |                 | DATE     | 2022-2-25 |
| PART No.    | ZE0510-102-LSBD | PAGE     | 1         |
| DESCRIPTION | FIXED INDUCTORS | REVISION | A         |

**1、SHAPE & DI**



|    |         |    |          |    |          |    |          |
|----|---------|----|----------|----|----------|----|----------|
| C1 | 棕色      | C2 | 黑色       | C3 | 红色       | C4 | 银色       |
| A  | 10.0MAX | D  | 13.5±1.0 | G  | 12.7±0.5 | J  | 18.0±2.0 |
| B  | 5.0MAX  | E  | 12.0MAX  | H  | 18.0±1.0 |    |          |
| C  | 2.5MAX  | F  | 5.0±0.5  | I  | 0.6±0.1  |    |          |

**2. ELECTRICAL SCHEMATICS**



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| CUSTOMER    |                 | MADE     |           |
| MODEL No.   |                 | DATE     | 2022-2-25 |
| PART No.    | ZE0510-102-LSBD | PAGE     | 2         |
| DESCRIPTION | FIXED INDUCTORS | REVISION | A         |

3.ELECTRICAL SPECIFICATION & TEST INSTRUMENTS

|            |                |             |          |                |  |
|------------|----------------|-------------|----------|----------------|--|
| MEAS. ITEM | L              | Q           | DCR      | RatedDCCurrent |  |
| UNIT       | mH             |             | $\Omega$ | mA             |  |
| SPEC       | $1.0 \pm 10\%$ | 45Min       | 6.0Max   | 100MAX         |  |
| TEST FREQ  | 0.796MHz/1v    | 0.796MHz/1v |          |                |  |
| TEST       | HP-4285A       | HP-4285A    | 502BC    |                |  |

4. MATERIAL LIST

| No | Item         | Material           |                | Vendor     |          | Rating | UL File | ROHSstate |
|----|--------------|--------------------|----------------|------------|----------|--------|---------|-----------|
| 1  | Core         | DRWW 4×6<br>B 2.0  | D6             | hualicheng | 或同等材质供应商 | 150℃   |         | Yes       |
| 2  | Wire Winding | 2UEW $\Phi$ 0.10mm | URNS:233<br>Ts | HOILUEN    |          | 130℃   | E164409 | Yes       |
| 3  | EPOXY RESIN  | NC-G               |                | homeTown   |          | 200℃   |         | Yes       |
| 4  | PIN          | $\Phi$ 0.6         | CP             | BAI CHUAN  |          | 130℃   |         | Yes       |

※REMARK※

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| CUSTOMER                                                                                              |                        | MADE     |                     |
| MODEL No.                                                                                             |                        | DATE     | 2022-2-25           |
| PART No.                                                                                              | <b>ZE0510-102-LSBD</b> | PAGE     | 3                   |
| DESCRIPTION                                                                                           | <b>FIXED INDUCTORS</b> | REVISION | A                   |
| <b>5.TEST DATA FOR PREPRODUCTION SAMPLE</b>                                                           |                        |          |                     |
| MEAS.ITEM                                                                                             | L<br>(mH)              | Q        | DCR<br>( $\Omega$ ) |
| SPEC                                                                                                  | 1.00 $\pm$ 10%         | 45 MIN   | 6.0MAX              |
| 1                                                                                                     | 1.02                   | 58       | 4.5                 |
| 2                                                                                                     | 1.02                   | 55       | 4.4                 |
| 3                                                                                                     | 1.03                   | 58       | 4.3                 |
| 4                                                                                                     | 0.98                   | 55       | 4.4                 |
| 5                                                                                                     | 1.03                   | 63       | 4.3                 |
| 6                                                                                                     | 0.99                   | 50       | 4.4                 |
| 7                                                                                                     | 1.03                   | 58       | 4.4                 |
| 8                                                                                                     | 1.02                   | 50       | 4.3                 |
| 9                                                                                                     | 0.98                   | 66       | 4.3                 |
| 10                                                                                                    | 1.03                   | 57       | 4.4                 |
| $\bar{x}$                                                                                             |                        |          |                     |
| R                                                                                                     |                        |          |                     |
| YOUR SAMPLE                                                                                           |                        |          |                     |
| TEST CONDITION:                  TEMP:                  20℃(REF.)                  R.H.:    60%(REF.) |                        |          |                     |

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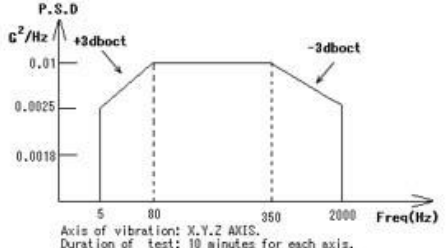
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| CUSTOMER    |                        | MADE     |           |
| MODEL No.   |                        | DATE     | 2022-2-25 |
| PART No.    | <b>ZE0510-102-LSBD</b> | PAGE     | 4         |
| DESCRIPTION | <b>FIXED INDUCTORS</b> | REVISION | A         |

## 6.RELIABILITY TEST METHOD

### 6-1. MECHANICAL

| TEST ITEM                    | SPECIFICATION                                                                                                | TEST DETAILS                                                                                                                                                                                                        |
|------------------------------|--------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Terminal pull strength       | 9.8(N)MIN                                                                                                    | A pulling load should be gradually applied to the leads in a downward direction and should be monitored the value at the point of destroy.                                                                          |
| Terminal bending strength    | 1CYCLE MIN                                                                                                   | A specified load of 4.9(N) should be suspended, From the terminal then slowly inclined the 90°C, and then return to normal position ,The consecutive bends shall be done in the opposite directions.(Total 1 cycle) |
| Dropping                     | $\Delta L/L0 \leq \pm 5\%$<br>$\Delta Q/Q0 \leq \pm 20\%$<br>There is no evidence of any mechanical failures | The sample shall be dropped on a concrete floor once from 1 meter height (39 inches) Total 3 cycles.                                                                                                                |
| Vibration                    | $\Delta L/L0 \leq \pm 5\%$<br>$\Delta Q/Q0 \leq \pm 20\%$<br>There is no evidence of any mechanical failures |                                                                                                                                 |
| Resistance to soldering heat | There is no evidence of any mechanical failures                                                              | The sample should be immersed to a depth of 1.5mm below the lower core surface into solder at a temperature of 260°C (+10,-0)for a duration of 5seconds(+1,-0).                                                     |

### 6-2.ELECTRICAL

| TEST ITEM             | SPECIFICATION                                                                         |
|-----------------------|---------------------------------------------------------------------------------------|
| Insulation Resistance | The insulation resistance between core to coil is over 100MΩ at500V, 3SEC.            |
| Withstand Voltage     | Apply AC 500V between core to coil for one minute there shall not be any abnormality. |

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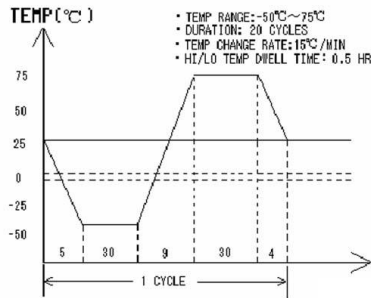
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| CUSTOMER    |                        | MADE     |           |
| MODEL No.   |                        | DATE     | 2022-2-25 |
| PART No.    | <b>ZE0510-102-LSBD</b> | PAGE     | 5         |
| DESCRIPTION | <b>FIXED INDUCTORS</b> | REVISION | A         |

### 6-3.ENVIRONMENT CHARACTERISTICS

| TEST ITEM                | SPECIFICATION                                                                                                | TEST DETAILS                                                                                                                                       |
|--------------------------|--------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|
| High temperature storage | $\Delta L/L0 \leq \pm 5\%$<br>$\Delta Q/Q0 \leq \pm 25\%$<br>There is no evidence of any mechanical failures | The coil should be stored at an ambient temperature of $+85 \pm 2^{\circ}\text{C}$ for 72 hours ,after which the measurement should be made.       |
| Low temperature storage  | $\Delta L/L0 \leq \pm 5\%$<br>$\Delta Q/Q0 \leq \pm 25\%$<br>There is no evidence of any mechanical failures | The coil should be stored at an ambient temperature of $-40 \pm 2^{\circ}\text{C}$ for 500 hours ,after which the measurement should be made.      |
| Thermal shock            | $\Delta L/L0 \leq \pm 5\%$<br>$\Delta Q/Q0 \leq \pm 30\%$<br>There is no evidence of any mechanical failures |                                                                |
| Humidity life test       | $\Delta L/L0 \leq \pm 5\%$<br>$\Delta Q/Q0 \leq \pm 30\%$<br>There is no evidence of any mechanical failures | The rated current shall be applied to the coil at an ambient temperature $+40 \pm 2^{\circ}\text{C}$ with relative humidity of 90% for 1000 hours. |

### 6-4.SAFETY

| TEST ITEM      | SPECIFICATION               | TEST DETAILS                                                                      |
|----------------|-----------------------------|-----------------------------------------------------------------------------------|
| Over load test | No abnormal smoking or fire | The twice current of the rated dc current should be applied to the coil for 5 min |

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