



# 零 件 承 认 书

SPECIFICATION FOR APPROVAL

客户名称: 立创

客户料号:

增益料号: AL0510-561K

规格描述: AL0510-561K

日 期: 2023/10/18

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

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物料类型: 色环电感

日 期: 2023/10/18

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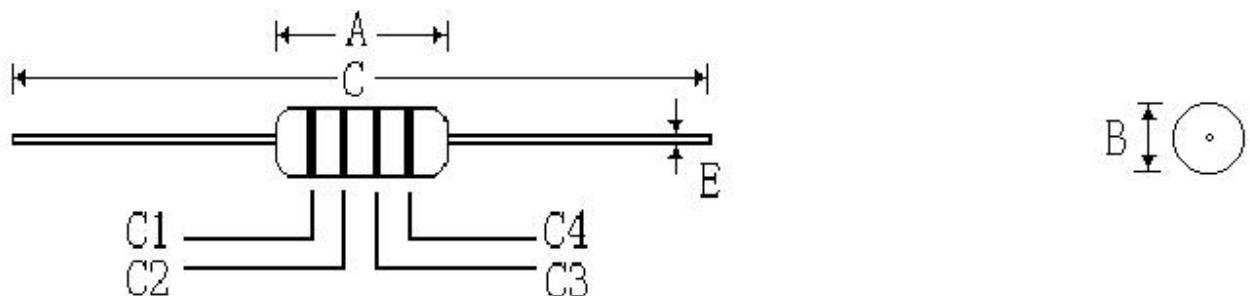
## 图面规格变更履历表

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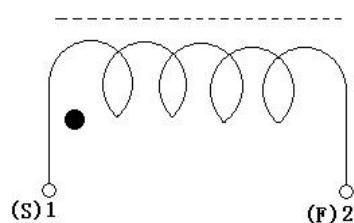
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MODEL No.		DATE	
PART No.	AL0510-561K-LF	PAGE	
DESCRIPTION	FIXED INDUCTORS	REVISION	A1.0

**1、SHAPE & DIMENSION (UNIT: m/m)**



C1	Green	C2	Blue	C3	Brown	C4	Silver
SYMBOL	A		B		C		E
DIMENSIONS	10max		5max		62±2		0.6±0.1

**2. ELECTRICAL SCHEMATICS**



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### 3.ELECTRICAL SPECIFICATION & TEST INSTRUMENTS

MEAS. ITEM	L	Q	DCR	Rated Dccur rent
UNIT	μH		Ω	MA
SPEC	560±10%	35min	7.5max	120MAX
TEST FREQ	1KHZ/0.25V	0.796MHz/1V		
TEST STRUMENTS	1061A	HP-4285A	502BC	

### 4.MATERIAL LIST

No	Item	Material		Vendor	Rating	UL File	ROSHS state
1	Core	DRWW 4×6 B2.0	D6	hualicheng	或 同 等 材 质 供 应 商	150°C	Yes
2	Wire Winding	2UEWΦ0.09mm	TURNS:170 Ts	HOILUEN		130°C	E164409 Yes
3	EPOXY RESIN	NC-G		homeTown		200°C	Yes
4	PIN	Φ0.6	CP	BAICHUAN		130°C	Yes

※REMARK※

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**5. TEST DATA FOR PREPRODUCTION SAMPLE**

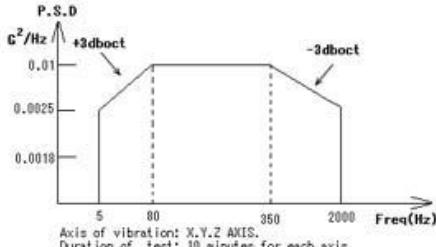
MEAS.ITEM	L ( $\mu$ H)	Q	DCR ( $\Omega$ )
SPEC	560 $\pm$ 10%	35min	7.5max
1	560	62	4.1
2	563	60	4.0
3	571	69	4.0
4	569	68	4.1
5	570	63	4.2
6	568	60	4.1
7	569	62	4.2
8	558	63	4.3
9	556	65	4.1
10	558	61	4.1
$\bar{x}$			
R			
YOUR SAMPLE			
TEST CONDITION:	TEMP: 20°C(REF.)	R.H.:	60%(REF.)

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## 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	$\Delta L/L_0 \leq \pm 5\%$ $\Delta Q/Q_0 \leq \pm 20\%$ 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	$\Delta L/L_0 \leq \pm 5\%$ $\Delta Q/Q_0 \leq \pm 20\%$ There is no evidence of any mechanical failures	 <p>P.S.D G<sup>2</sup>/Hz +3db/oct -3db/oct 0.01 0.0025 0.0018 Axis of vibration: X,Y,Z AXIS. Duration of test: 10 minutes for each axis.</p>
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).

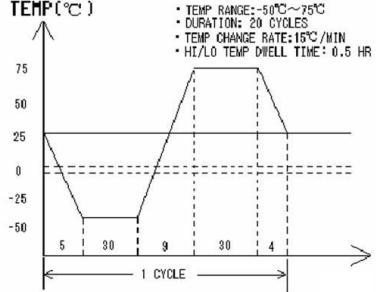
### 6-2.ELECTRICAL

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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#### 6-3.ENVIRONMENT CHARACTERISTICS

TEST ITEM	SPECIFICATION	TEST DETAILS
High temperature storage	$\Delta L/L_0 \leq \pm 5\%$ $\Delta Q/Q_0 \leq \pm 25\%$ 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	$\Delta L/L_0 \leq \pm 5\%$ $\Delta Q/Q_0 \leq \pm 25\%$ 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	$\Delta L/L_0 \leq \pm 5\%$ $\Delta Q/Q_0 \leq \pm 30\%$ There is no evidence of any mechanical failures	 <p>TEMP (°C)</p> <ul style="list-style-type: none"> <li>• TEMP RANGE:-50°C~75°C</li> <li>• DURATION: 20 CYCLES</li> <li>• TEMP CHANGE RATE:15°C/MIN</li> <li>• HT/LO TEMP DWELL TIME: 0.5 HR</li> </ul>
Humidity life test	$\Delta L/L_0 \leq \pm 5\%$ $\Delta Q/Q_0 \leq \pm 30\%$ 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