

零件承认书

SPECIFICATION FOR APPROVAL

客户名称： 立创

客户料号： _____

增益料号： AL0510-471K

规格描述： AL0510-471K

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

传真：0769-87891229

物料类型：

色环电感

日 期：

2023/10/18

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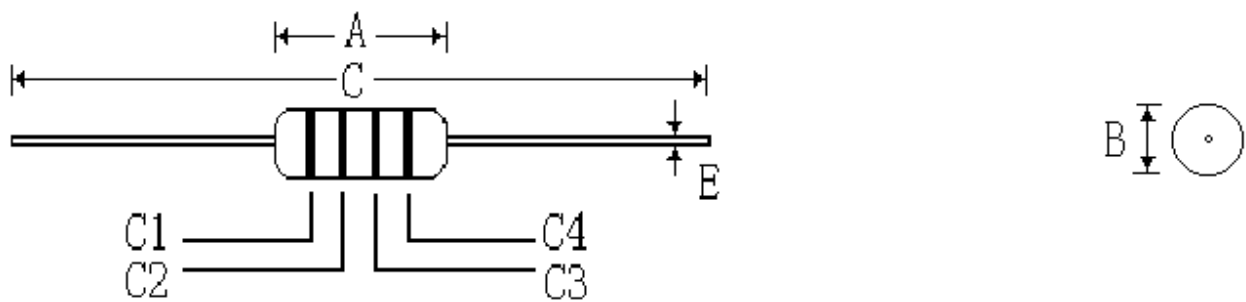
图 面 规 格 变 更 履 历 表

客户			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	2023/10/18	夏琳	李万	李万
 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	
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Dongguan ZengYi Industrial Co., LTD.

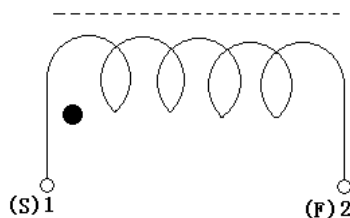
CUSTOMER		MADE	
MODEL No.		DATE	
PART No.	AL0510-471K-LF	PAGE	
DESCRIPTION	FIXED INDUCTORS	REVISION	A1.0

1、 SHAPE & DIMENSION (UNIT: m/m)



C1	Yellow	C2	Violet	C3	Brown	C4	Silver
SYMBOL	A		B		C		E
DIMENSIONS	10max		5max		62j 2		0.6j 0.1

2. ELECTRICAL SCHEMATICS



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3.ELECTRICAL SPECIFICATION & TEST INSTRUMENTS

MEAS. ITEM	L	Q	DCR	
UNIT	uH		Ω	
SPEC	470j 10%	30Min	3.5Max	
TEST FREQ	0.796MHz/1v	0.796MHz/1v		
TEST STRUMENTS	HP-4285A	HP-4285A	502BC	

4.MATERIAL LIST

No	Item	Material		Vendor	Rating		UL File	ROHS state
1	Core	DRWW 4j 6	D6	hualichen g	或同等材质供应商	150℃		Yes
2	Wire Winding	2UEWΦ0.11mm	TURNS: 156Ts	H01LUEN		130℃	E164409	Yes
3	EPOXY RESIN	NC-G		homeTown		150℃		Yes
4	PIN	Φ0.6	CP	BAI CHUAN		130℃		Yes

※REMARK※

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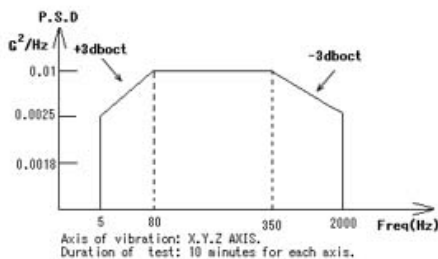
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5.TEST DATA FOR PREPRODUCTION SAMPLE			
MEAS.ITEM	L (uH)	Q	DCR (Ω)
SPEC	470j 10%	30MIN	3.5MAX
1	473	58	2.6
2	472	59	2.7
3	467	59	2.8
4	468	63	2.7
5	468	60	2.7
6	472	57	2.8
7	473	60	2.8
8	471	58	2.7
9	468	60	2.8
10	473	61	2.8
$\bar{x}$			
R			
YOUR SAMPLE			
TEST CONDITION: TEMP: 20℃(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	$\Delta L/L0 \leq \pm 5\%$ $\Delta Q/Q0 \leq \pm 20\%$ 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	$\Delta L/L0 \leq \pm 5\%$ $\Delta Q/Q0 \leq \pm 20\%$ 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).

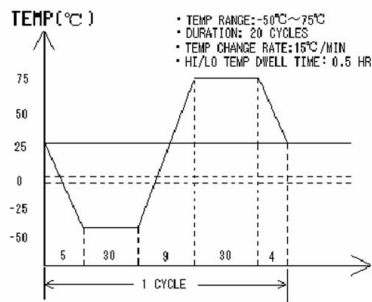
6-2.ELECTRICAL

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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6-3.ENVIRONMENT CHARACTERISTICS

TEST ITEM	SPECIFICATION	TEST DETAILS
High temperature storage	$\Delta L/L0 \leq \pm 5\%$ $\Delta Q/Q0 \leq \pm 25\%$ 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	$\Delta L/L0 \leq \pm 5\%$ $\Delta Q/Q0 \leq \pm 25\%$ 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	$\Delta L/L0 \leq \pm 5\%$ $\Delta Q/Q0 \leq \pm 30\%$ There is no evidence of any mechanical failures	
Humidity life test	$\Delta L/L0 \leq \pm 5\%$ $\Delta Q/Q0 \leq \pm 30\%$ 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