Customer	Qisda	Customer P/N	1J.40155.001	Spec Version	2-1
Supplier	LITEON	Maker P/N	CAC5001FL	Component Type	R6x15

Form Version: 3.0

Transformer / Coil Specification

Customer	Qisda
Customer P/N	1J.40155.001
Core Type	R6x15
Maker P/N	CAC5001FL
Create Date	28.MAY.2024
Spec Version	2-1
Maker Factory Address	惠州市力信電子有限公司 HUIZHOU LI SHIN ELECTRONIC LTD 廣東省惠州市博羅縣羅陽鎮義和宏博工業城 HONGBO INDUSTRIAL CITY LUOYANG TOWN BO LUO HSING HUIZHOU GUANGDONG 516000 CN TEL:(752)6863222 FAX:(752)6863234 . 6863235

These devices and their homogenous subcomponents are HF compliant.

Customer	Qisda	Customer P/N	1J.40155.001	Spec Version	2-1
Supplier	LITEON	Maker P/N	CAC5001FL	Component Type	R6x15

Form Version: 3.0

History

Version	Original	Change To	Date	Remark
1-0	Initial Release		10.OCT.2005	
2-0	1.WIRE 型號 THS4-U130 2.WIRE 廠商 SALOM 3. VARNISH BC-346A→ UL NO.E51047 4.CORE 廠商 HORNG YIH(Y2M)	1.刪除 WIRE THS4-U30 (UL 已查無此型號) 2.刪除 WIRE 廠商 SALOM (UL 已查無此廠商) 3. VARNISH BC-346A→ UL NO. E347463 (廠商 UL NO 變更) 4.CORE 廠商改成 ERCORE(A8)	17.OCT.2018	
2-1	1.WIRE 供應商: PACIFIC/ JUNG SHING 2.VARNISH 型號: BC-346A	1.WIRE 供應商: HENG YA/ TAI-I 2.VARNISH 型號: V1630FS	28.MAY.2024	

Customer	Qisda	Customer P/N	1J.40155.001	Spec Version	2-1
Supplier	LITEON	Maker P/N	CAC5001FL	Component Type	R6x15

Form Version: 3.0

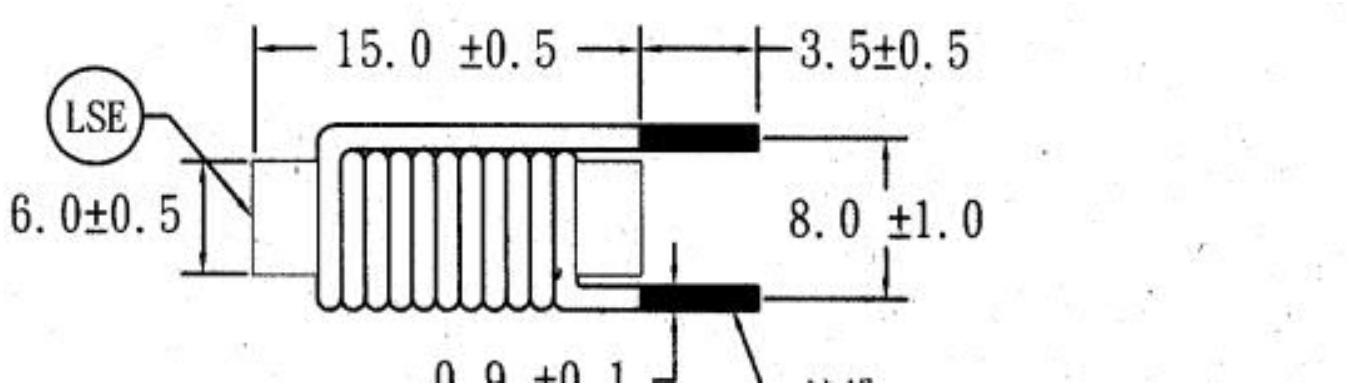
- Content:
  - Configuration & Dimension
  - Bobbin/Core Dimension
  - Winding Specification
  - Electrical Characteristics
  - Material List
  - Package Specification
  - Reliability Criteria
  - Qisda Check List

Customer	Qisda	Customer P/N	1J.40155.001	Spec Version	2-1
Supplier	LITEON	Maker P/N	CAC5001FL	Component Type	R6x15

Form Version: 3.0

● Configuration & Dimension

(Should be including Top View、Front View、Bottom view、Side View、Pin Pad Drawing、Picture of Core Tapping &Other note)



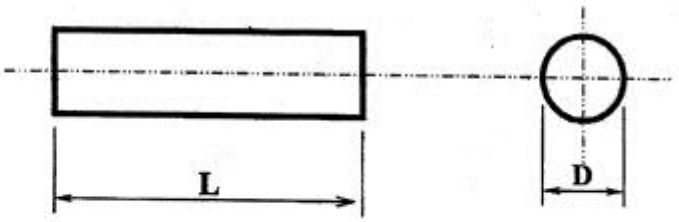
Note:

No.	Deacription	Remark
1	WEIGHT is 3.47 ± 2 g.	
3	Photo for Final sample.	

Customer	Qisda	Customer P/N	1J.40155.001	Spec Version	2-1
Supplier	LITEON	Maker P/N	CAC5001FL	Component Type	R6x15

Form Version: 3.0

● Core Dimension



UNIT : mm

D	6.0	±	0.15
L	15.0	±	0.30

● Winding Specification

➔ Winding List:

No	Winding No.	Terminal	Wire	Turns	Winding Rule
1	N1	S—F	UEW 0.9 ϕ x1P	10.5Ts	REF

● Electrical Characteristics

Item	Test Terminal	Specification	Test Instrument
Inductance	L(S—F)	2.7uH±15%	WK-3620B @40KHz,1V
DC BIAS 10A	L(0A)*85% MIN		
D.C. Resistance @25℃	R(S—F)	8.0mΩ MAX	CH-502A
Operation Temp. Range	-20℃~+130℃		
Storage Temp. Range	-20℃~+60℃		

Customer	Qisda	Customer P/N	1J.40155.001	Spec Version	2-1
Supplier	LITEON	Maker P/N	CAC5001FL	Component Type	R6x15

Form Version: 3.0

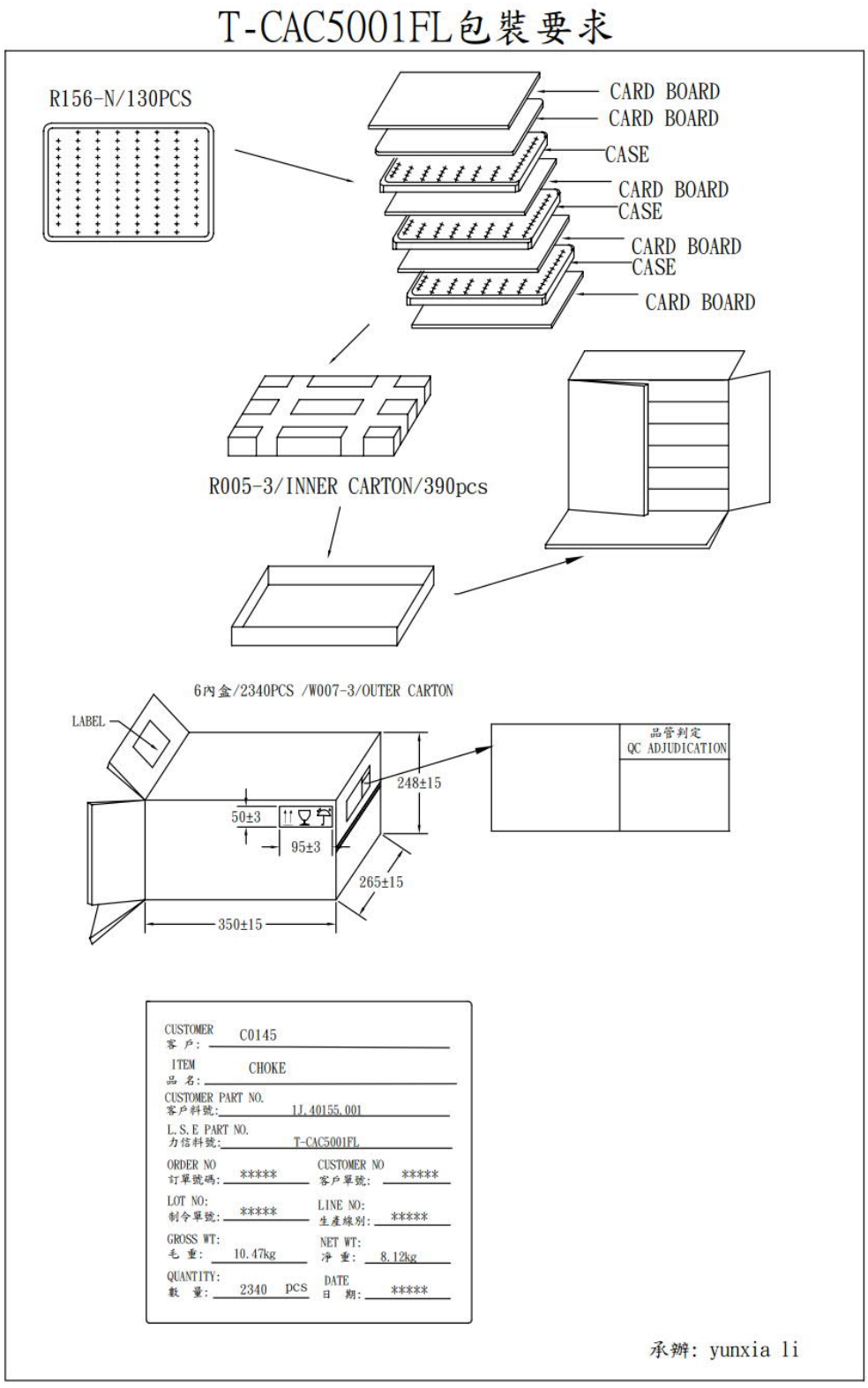
Material List

No	Sub Part	Supplier	Description	Type	Flame/ Temp.	UL No.
1	CORE	ERCORE CO.,LTD	FERRITE CORE R6X15	A8	N/A	N/A
2	WIRE	HENG YA ELECTRIC (DONGGUAN) LTD	POLYURETHANE (MW75-C)	TYPU-130(UEW/QA-B)	130℃	E197768
		TAI-I COPPER (GUANZHOU) CO LTD		UEW	130℃	E234896
3	VARNISH	ELANTAS PDG, Inc.	POLYESTER	V1630FS	180℃	E75225

Customer	Qisda	Customer P/N	1J.40155.001	Spec Version	2-1
Supplier	LITEON	Maker P/N	CAC5001FL	Component Type	R6x15

Form Version: 3.0

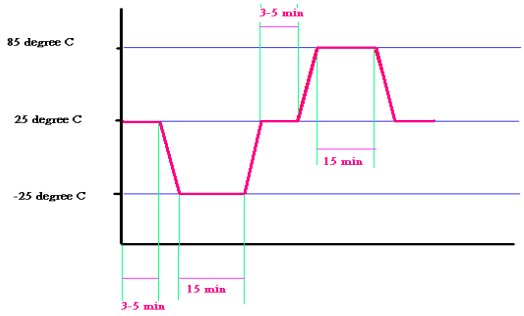
Package Specification



Customer	Qisda	Customer P/N	1J.40155.001	Spec Version	2-1
Supplier	LITEON	Maker P/N	CAC5001FL	Component Type	R6x15

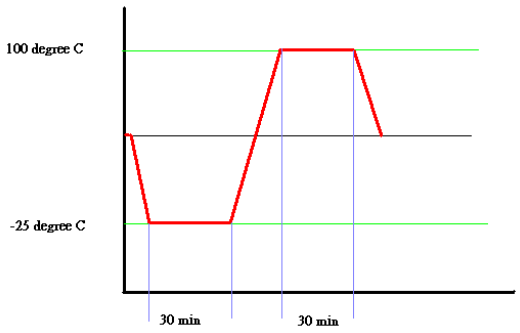
Form Version: 3.0

● Reliability Criteria (Qisda Version :2.0)

Test item	Test condition (Test Method)	inspection criteria
高溫無負荷壽命測試 (Hi-temp unload life test)	Condition: 85±2°C Duration: 120 hours 96 Hrs (工厂例行性抽验)	1. 外觀：無腐蝕、裂痕、其他機械損傷線圈鐵芯裝配牢固 2. 電氣特性：在原 SPEC 要求之規格內
低溫無負荷壽命測試 (Low-temp unload life test)	Condition: -25℃ ± 2℃ Duration: 120 hours 96 Hrs (工厂例行性抽验)	1. 外觀：無腐蝕、裂痕、其他機械損傷線圈鐵芯裝配牢固 2. 電氣特性：在原 SPEC 要求之規格內
耐濕性無負荷試驗 (Humidity unload test)	Condition: 65℃ ± 2℃ Humidity: 90 to 95% RH Duration: 120 hours	1. 外觀：無腐蝕、裂痕、其他機械損傷線圈鐵芯裝配牢固 2. 電氣特性：在原 SPEC 要求之規格內
溫度循環試驗 (Thermal cycle test)	Cycle: 25+/-5℃/ 3-5 min --> -25+/-3℃/ 15 min --> 25+/-3℃/ 3-5 min --> 85+/-5℃/ 15 min Times: 100 Cycles 	1. 外觀無斷裂,脫落,鬆動而且外觀無任何異常現象. 2. 電氣特性:在原 SPEC 規格內
焊錫耐熱性試驗 (Solder heat-resistance test) IR-Reflow or Wave solder	Pre-heating: 150±10℃ Time: 60 - 120 sec max Temperature: 260±5℃ max Time: 10 sec ±1 sec	1. 外觀：無腐蝕、裂痕，其他機械損傷,不能有焊錫不良,其焊錫面積需達到 95%. 2. 電氣特性：在原 SPEC 要求之規格內
焊錫附著性試驗 (Solderability test)	Temperature: 235±5℃ Time: 5±0.5 sec	1. 外觀：無斷裂、脫落而且外觀無任何異常現象 2. 焊錫面積需達到 95%

Customer	Qisda	Customer P/N	1J.40155.001	Spec Version	2-1
Supplier	LITEON	Maker P/N	CAC5001FL	Component Type	R6x15

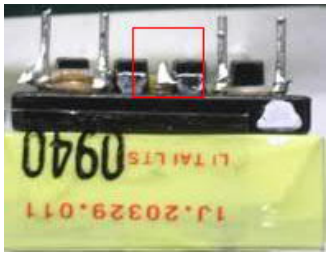
Form Version: 3.0

Test item	Test condition (Test Method)	inspection criteria
冷熱衝擊試驗 (Thermal shock test)	Cycle: -25℃ / 30 min -->100 ℃/ 30 min Times: 100 Cycles 	1. Inductance deviation within ±5.0%
振動試驗 (Vibration test)	Frequency:10 Hz --> 55 Hz --> 10Hz (for 1 min.) Time:6 hour Perpendicular directions (X,Y,Z)	1. 外觀;無裂痕,PIN 腳脫落與其他機械損傷. 2. 電性符合 SPEC 要求.
Solder Iron	Temperature: 390+/-10℃ Time: 4-5 sec	1. 外觀：無斷裂、脫落而且外觀無任何異常現象 2. 焊錫面積需達到 95%

Customer	Qisda	Customer P/N	1J.40155.001	Spec Version	2-1
Supplier	LITEON	Maker P/N	CAC5001FL	Component Type	R6x15

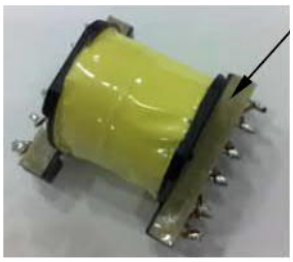
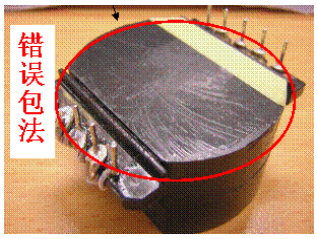
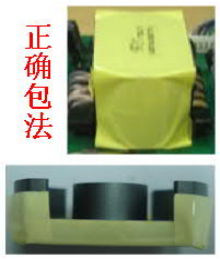
Form Version: 3.0

● Qisda Check List

No	Check Point	Remark	Supplier Confirm (Pass or N/A)
1	2Pin 以上 Choke 類零件需注意防呆		N/A
2	Transformer 的繞組需加註繞法疏繞需注意是否需平均疏繞。走線槽位是否可避免傷到漆包線及是否與 Core 距離太近. 需注明走線方向順時針？逆時針？		N/A
3	Transformer 如果繞線太細（低於 0.04mm）， 外部需包 TAPE。		N/A
4	是否標示研磨 Core 位置(打點)		N/A
5	Transformer 出入線結線：不可超過 BOBBIN stand off Cut off PIN ：需與 BOBBIN stand off 齊平 		N/A
6	Power Transformer 限定常用 Core 廠商： Others :TDK、TDG、SAMWHA、FERROXCUBE（PHILIPS）、TOKIN、NICERA Projector: TDK、FERROXCUBE（PHILIPS）、TOKIN、NICERA	*非限定 core 廠商勿用	N/A
7	Material List 標註 UL No.		Pass
8	規格書中需注明測試設備（指定測試設備：HP-4284A）。 電感測試條件一般為：40KHz 1V Hi-pot 測試條件一般為：3mA/ 1min	如需 CHEN HWA 量測，則須比較二種設備誤差，將誤差值加入到實際測試值中	N/A
9	使用 Ring choke, 引腳出線處需加 Teflon tube，tube 至少深入至線包不會短路，不得低於 core 底部；底部需加 PCB 板，起固定隔離作用。		N/A
10	Choke 類電感外部加熱縮套管，需保證套管高於線圈		N/A
11	Chock 類電感線徑若≤0.6mm，則不能由銅線直接沾錫作為 PIN 腳，必須加底座		Pass

Customer	Qisda	Customer P/N	1J.40155.001	Spec Version	2-1
Supplier	LITEON	Maker P/N	CAC5001FL	Component Type	R6x15

Form Version: 3.0

12	所有 Transformer 都要 "真空" 含浸, 以防止異音及耐壓不足		N/A
13	Transformer 需廠商提供包裝方式，注意每層之間需加隔板，避免零件受擠壓		Pass
14	Ring Choke 的測試頻率需定義為 100KHz/1V		N/A
15	臥式 ER2828 所用 BOBBIN，需在 BOBBIN 兩側貼 margin tape 		N/A
16	Transformer 需在規格書中定義:pin 腳需二次沾錫 (請確認剪腳處是否產生錫裂)		N/A
17	一二次側跨接的 power transformer，為保證其與 PCB 表面良好絕緣，要求：二次側需包 2 層膠布，成品外部再包 2 層膠布.具體如下圖  		N/A

Customer	Qisda	Customer P/N	1J.40155.001	Spec Version	2-1
Supplier	LITEON	Maker P/N	CAC5001FL	Component Type	R6x15

Form Version: 3.0

Qisda Format History

Date	Version	Change Notice	Owner
2010-12-3	V1.0	Org	
2011-01-3	V2.0	1.Add Qisda Logo 2.Add Power Transformer 限定常用 Core 廠商 (NICERA) 3.Reliability 設為必須符合條件	
2012-04-16	V3.0	1. Add photo for final sample. 2. Add Core dimension drawing. 3. Update material list form with thickness.	Carol.Sung