SPECIFICATION FOR APPROVAL

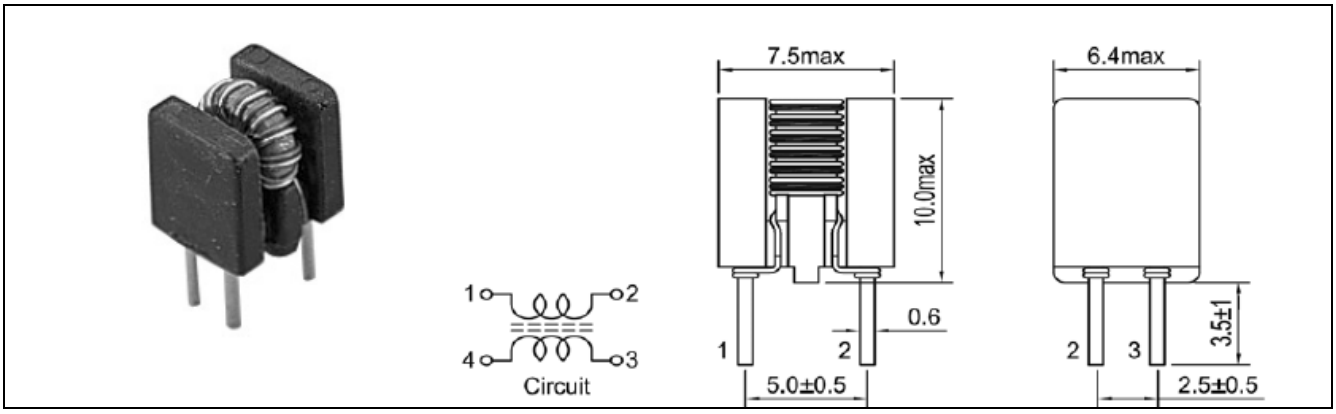
INDEX

- COVER PAGE
- INDEX ……0
- DLFD648075 TYPE ……1
- DLFD707010 TYPE ……2
- IMPEDANCE TO FREQUENCY CURVE……3
- RELIABILITY AND TEST CONDITION……4-6

RoHS

DLFD648075 TYPE

SHAPES AND DIMENSIONS



PART NUMBER CODE

DLFD	648075-	150-	401
1	2	3	4

1. Series Name
2. Style：Base Size
3. Inductance：Example: 150 is 15uH
4. Impedance：401 is 400ohm Min.

ELECTRICAL CHARACTERISTICS

Part No.	L1=L2(uH) ±35%	DCR(mOhm) max	Z(Ohm) min
DLFD648075-150-401	15	35	400
DLFD648075-400-801	40	45	800
DLFD648075-600-102	60	50	1000

Test Instruments

L：HP4284A Precision LCR meter @ 1KHz 1V.
DCR：Milli-ohm meter.
Z：HP4191A RF impedance analyzer @ 100MHz

Characteristic

Rated Current: 500mA Max, obtained when temperature rise to 20℃.
Rated voltage：DC 50V.
Operating temperature：-25℃ to 85℃.

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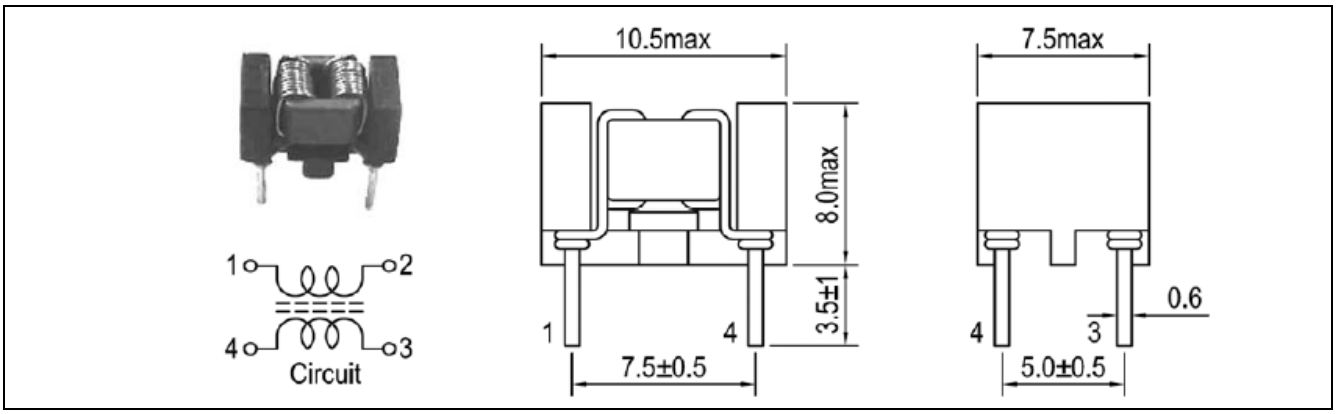
DLFD707010 TYPE

SHAPES AND DIMENSIONS



PART NUMBER CODE

DLFD	707010-	7R7	U	-	3A
1	2	3	4		5

1. Series Name
2. Style：Base Size
3. Inductance：Example: 7R7 is 7.7 uH
4. Tolerance: “U” : Minimum
5. Rate Current: 3A

ELECTRICAL CHARACTERISTICS

Part No.	L1=L2(uH) min	DCR(mOhm) max	Rated Current (A) max
DLFD707010-6R75U-3A	6.75	20	3.0
DLFD707010-7R7U-2.5A	7.7	30	2.5
DLFD707010-11R9U-2A	11.9	45	2.0

Test Instruments

L：HP4284A Precision LCR meter @ 100KHz 1mA.
DCR：Milli-ohm meter.
Z：HP4191A RF impedance analyzer @ 100MHz

Characteristic

Rated DC Current：The current when temperature of coil increases up to Max. △T=20℃.
Rated voltage：DC 50V.
Operating temperature：-25℃ to 85℃.

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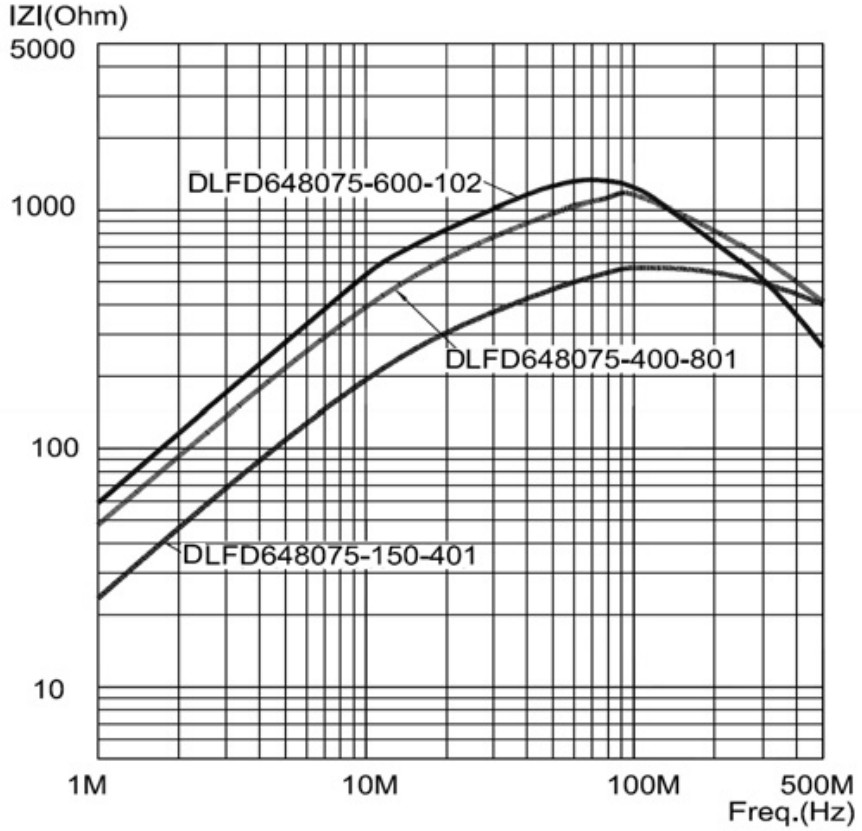
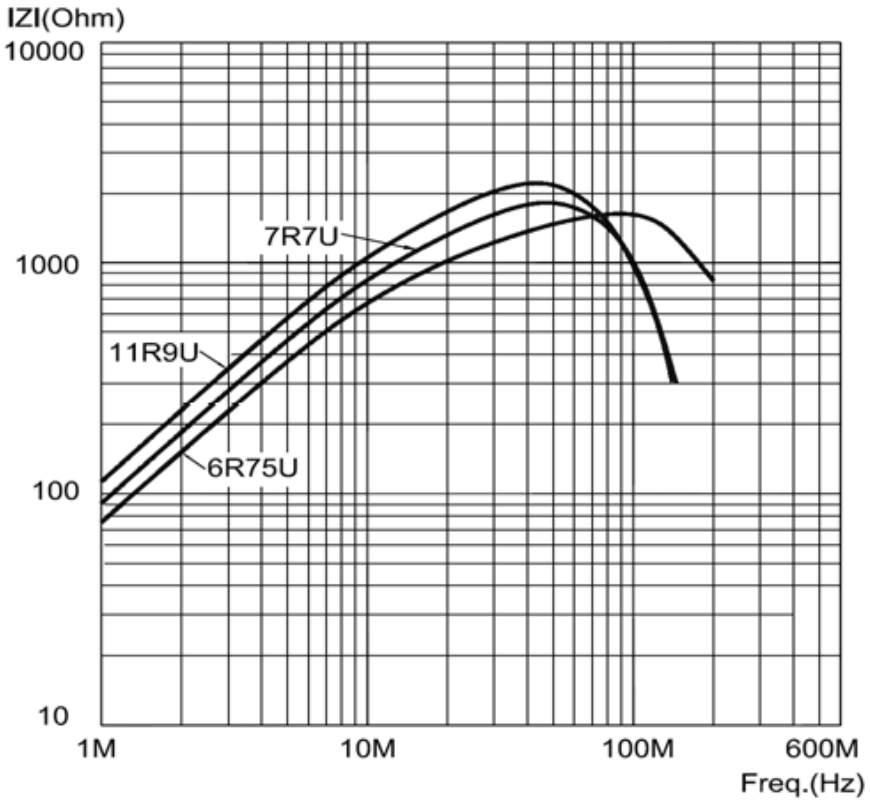
IMPEDANCE TO FREQUENCY CURVE

DLFD648075 TYPE



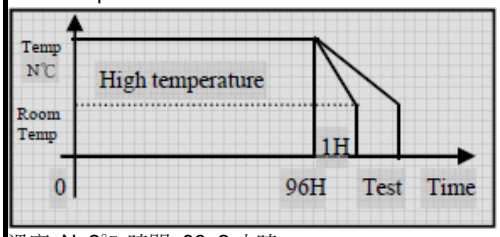
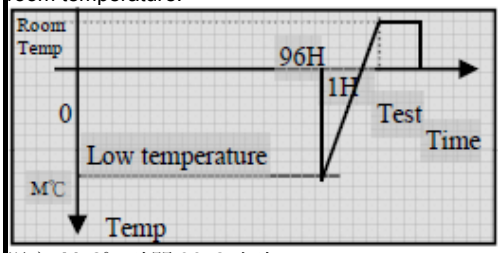
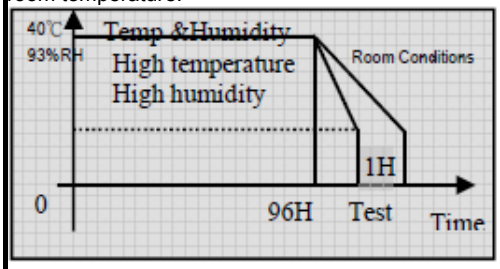
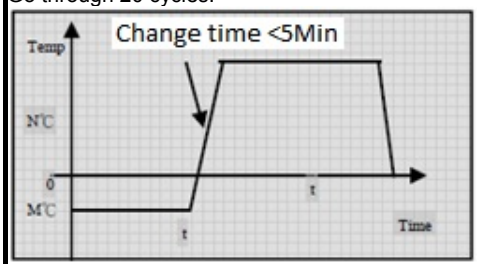
DLFD707010 TYPE



RoHS

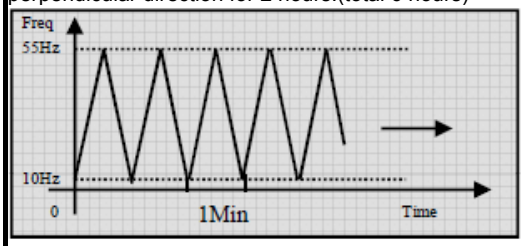
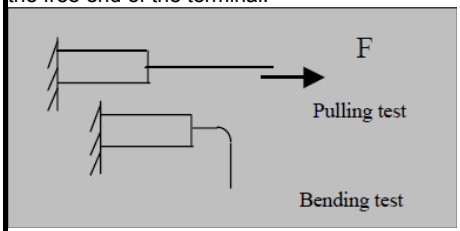
RELIABILITY AND TEST CONDITION

Environmental tests conditions (DIP wire wound Inductor)

Item (項目)	Required Characteristics (要求)	Test Method/Condition (測試方法)
High temperature Storage test Reference documents: MIL-STD-202G Method 108A 高溫儲存試驗	1.No case deformation or change in appearance. 2.ΔL/L≦10% 3.ΔDCR/DCR≦10% N：The High temperature, depend on the spec. N：高溫設定，依據產品規格設定 1.無明顯的外觀缺陷 2.感值變化不超過 10% 3.直流電阻變化不超過 10%	Temperature: N±2℃ Time : 96±2 hours Tested not less than 1 hour, nor more than 2 hours at room temperature.  溫度: N±2℃,時間: 96±2,小時 樣品在室溫下放置 1 小時,不超過 2 小時間必須測試.
Low temperature Storage test Reference documents: IEC 68-2-1A 6.1 6.2 低溫儲存試驗	1.No case deformation or change in appearance. 2.ΔL/L≦10% 3.ΔDCR/DCR≦10% M：The Low temperature, depend on the spec. M：低溫設定，依據產品規格設定 1.無明顯的外觀缺陷 2.感值變化不超過 10% 3.直流電阻變化不超過 10%	Temperature: M±2℃ Time : 96±2 hours Tested not less than 1 hour, nor more than 2 hours at room temperature.  溫度: M±2℃,時間:96±2,小時 樣品在室溫下放置 1 小時,不超過 2 小時間必須測試.
Humidity test Reference documents: MIL-STD-202G Method 103B 濕度測試	1.No case deformation or change in appearance. 2.ΔL/L≦10% 3.ΔDCR/DCR≦10% 1.無明顯的外觀缺陷 2.感值變化不超過 10% 3.直流電阻變化不超過 10%	Temperature: 40±2℃ , Humidity: 93±3%RH Time : 96±2 hours Tested not less than 1 hour, nor more than 2 hours at room temperature.  溫度:40±2℃， 濕度: 93±3%RH 時間 :96±2 hours 樣品在室溫下放置 1 小時,不超過 2 小時間必須測試.
Thermal shock test Reference documents: MIL-STD-202G Method 107G 熱衝擊測試	1.No case deformation or change in appearance. 2.ΔL/L≦10% 3.ΔDCR/DCR≦10% N：The High temperature, depend on the spec. M：The Low temperature, depend on the spec. For T: weight≦28g : 15Min; 28g≦weight≦136g : 30Min 1.無明顯的外觀缺陷 2.感值變化小於 10% 3.直流電阻變化小於 10%	First M℃ for T time, next N℃ for T time as 1 cycle. Go through 20 cycles.  從 M℃作用 T 分鐘,然後溫度衝擊到 N℃ 作用 T 分鐘, 作為一個循環,共作用 20 次.

RoHS

Physical characteristic tests conditions (DIP wire wound Inductor)

Item (項目)	Required Characteristics (要求)	Test Method/Condition (測試方法)
Solderability test Reference documents: MIL-STD-202G Method 208H IPC J-STD-002B 可焊性測試	Terminals area must have 95% min. Solder coverage 端子必須有 95%以上著錫	● Dip pads in flux then dip in solder pot at 245±5°C for 5 second. ● Soler: lead free ● Flux: rosin flux ● 端子侵入著焊劑，然後侵入 245±5°C 錫爐中 5 秒 ● 焊料 ：無鉛焊料 ● 助焊劑: 松香助焊劑
Heat endurance of flow soldering Reference documents: MIL-STD-202G Method 210F 波峰焊耐熱試驗	● No case deformation or change in appearance. ● ΔL/L≦10% ● ΔDCR/DCR≦10% ● 無明顯的外觀缺陷 ● 感值變化不超過 10% ● 直流電阻變化不超過 10%	● Dip pads in flux then dip in solder pot at 260±5°C for 10 second. ● Soler: lead free ● Flux: rosin flux ● 端子侵入著焊劑，然後侵入 260±5°C 錫爐中 10 秒 ● 焊料 ：無鉛焊料 ● 助焊劑: 松香助焊劑
Vibration test Reference documents: MIL-STD-202G Method 201A 振動測試	● No case deformation or change in appearance. ● ΔL/L≦10% ● ΔDCR/DCR≦10% ● 無明顯的外觀缺陷 ● 感值變化不超過 10% ● 直流電阻變化不超過 10%	Apply frequency 10~55Hz. 1.5mm amplitude in each of perpendicular direction for 2 hours.(total 6 hours)  用 10~55Hz 振動頻率 1.5mm 振幅沿 X,Y,Z 方向各振動 2 小時.(共 6 小時)
Drop test Reference documents: MIL-STD-202G Method 203C 落下試驗	● No case deformation or change in appearance. ● ΔL/L≦10% ● ΔDCR/DCR≦10% ● 無明顯的外觀缺陷 ● 感值變化不超過 10% ● 直流電阻變化不超過 10%	Packaged & Drop down from 1m with 981m/s^2(100G) attitude In 1 angle 1 ridges & 2 surfaces orientations. 將產品包裝後從 1 米高度自然落下至試驗板上 1 角 1 棱 2 面
Terminal strength Reference documents: IEC 68-2-21:1992 Test A & C 端子強度試驗	1.Terminal should not come out 2.Meet require test condition A&C For: Wire-leaded components-Test A&C For: Others leaded components-Test A 1.端子不會松脫 2.滿足要求的測試條件 A&C	A Pull Force:0.45kg;the force shall be applied gradually to the terminal and then maintained for 10 seconds. C. Wire-lead bend:0.23kg,The rate of bending shall be approximately 3 seconds per bend in each direction. The load shall be suspended at a point within 1/4 inch from the free end of the terminal.  A.拉力:0.45 公斤力,拉力逐漸到最大值維持 10 秒. C.線腳彎曲:0.23 公斤力,每個方向彎曲 3 次.負載應該加在離端子末端 1/4 英寸處
Resistance to solvent test Reference documents: IEC 68-2-45:1993 耐溶劑性試驗	No case deformation or change in appearance, or obliteration of marking 無外觀破壞及標記破損	To dip parts into IPA solvent for 5±0.5Min, then drying them at room temp for 5Min,at last ,to brushing making 10 times. 在 IPA 溶劑中浸泡 5±0.5 分鐘,室溫下乾燥 5 分鐘,然後擦拭 10 次.

RoHS

Electrical Characteristic test (DIP wire wound Inductor)

Item (項目)	Required Characteristics(要求)	Test Method / Condition (測試方法)
Electronic characteristic test of major products 主要產品電特性測試	Refer to catalogue of specific products 參照具體產品目錄頁	Refer to catalogue of specific products 參照具體產品目錄頁書
Overload test Reference documents: JIS C5311-6.13 過負荷試驗	1.During the test no smoke, no peculiar, smell, no fire 2.The characteristic is normal after test 1.試驗過程中無冒煙,異味,著火等, 2.試驗後產品特性正常	Apply twice as rated current for 5 minutes. 通兩倍額定電流 5 分鐘
Voltage resistance test Reference documents: MIL-STD-202G method 301 絕緣耐壓測試	1. During the test no breakdown 2. The characteristic is normal after test 1.試驗過程中無擊穿, 2.試驗後產品特性正常	Refer to product's specification 參照產品的具體規格

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