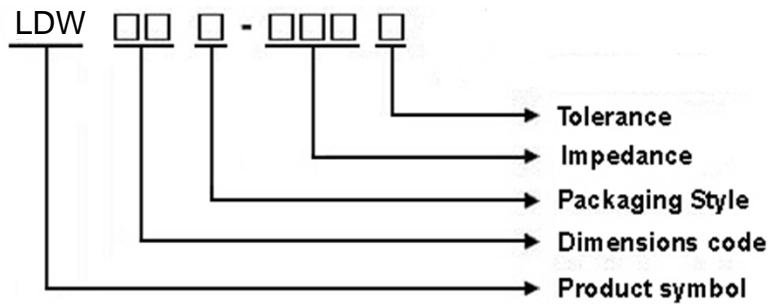


**1 Scope:** This specification applies to LDW11T FILTER

**2 Part Numbering:**



**3 Rating:**

Operating Temperature:  $-40^{\circ}\text{C} \sim 105^{\circ}\text{C}$  (Including self - temperature rise)

Storage Temperature:  $20^{\circ}\text{C} \sim 25^{\circ}\text{C}$  R.H. 65% (In Tape & Reel Condition)

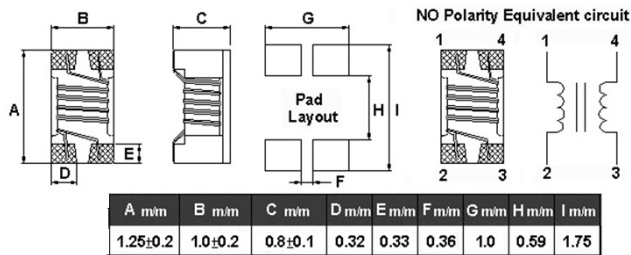
**4 Marking:**



**5 Standard Testing Condition**

	Unless otherwise specified	In case of doubt
Temperature	Ordinary Temperature(15 to 35°C)	20 to 30°C
Humidity	Ordinary Humidity(25 to 85% RH)	50 to 80 %RH

## 6 Configuration and Dimensions:



## 7 Electrical Characteristics:

Part No.	Z (Ω)	RDC (Ω)Max.	IDC (mA)	Rated Voltage (Vdc)	Insulation Resistance (MΩ)(min)	Tolerance (±%)	Test Freq. (MHz)
LDW11T-250M	25	0.3	400	20	10	30	100
LDW11T-600M	60	0.4	300	20	10	20	100
LDW11T-670M	67	0.25	300	50	10	20	100
LDW11T-900M	90	0.3	250	50	10	20	100
LDW11T-121M	120	0.4	200	50	10	20	100
LDW11T-161M	160	0.43	160	50	10	20	100
LDW11T-201M	200	0.8	120	50	10	20	100
LDW11T-331M	330	1.3	100	50	10	25	100

**NOTE:** □-tolerance M=±20% / Y=±25% / T=±30%

1. Operating temperature range – 40 °C ~ 105 °C (Including self - temperature rise)

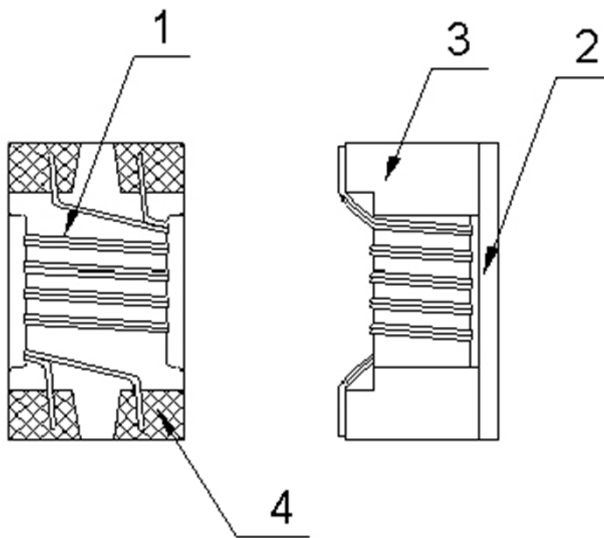
2. RDC: SINGLE WIRE TEST VALUE

3. IDC for Inductance drop 10% from its value without current.

"-N" FOR COMPLETELY LEAD FREE TYPE (INCLUDING FERRITE BODY & SOLDER)

## 8 LDW11T Series

### 8.1 Construction:



### 8.2 Material List:

No	Part	Material	Supplies
1	WIRE	Grade 180	ELEKTRISOLA
2	Cover sheet	FERRITE	CHILISIN
3	CORE	FERRITE	CHILISIN
4	TERMINAL	Ag/Ni/Sn	

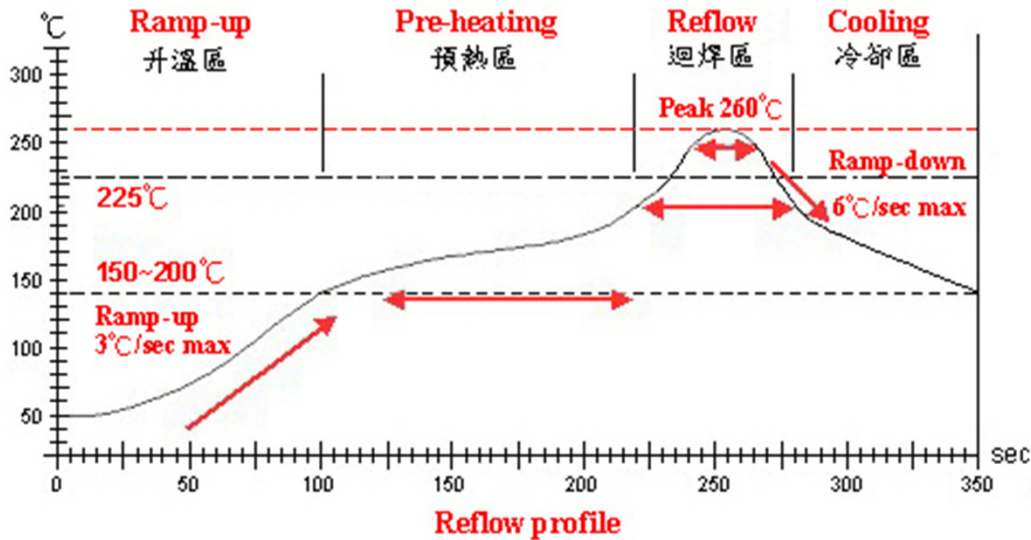
## 9 Common Mode Choke / RELIABILITY TEST

### 1-1.Environmental Performance

No	Item	Specification	Test Method															
1-1-1	Temperature Cycle	Appearance: No Damage Impedance: within±20% of initial value	One cycle: <table border="1"> <thead> <tr> <th>Step</th> <th>Temperature (°C)</th> <th>Time (min)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>-40±3</td> <td>30</td> </tr> <tr> <td>2</td> <td>25±2</td> <td>3</td> </tr> <tr> <td>3</td> <td>105±3</td> <td>30</td> </tr> <tr> <td>4</td> <td>25±2</td> <td>3</td> </tr> </tbody> </table> Total: 5 cycles Measured After Exposure in The Room Condition For 1hrs	Step	Temperature (°C)	Time (min)	1	-40±3	30	2	25±2	3	3	105±3	30	4	25±2	3
Step	Temperature (°C)	Time (min)																
1	-40±3	30																
2	25±2	3																
3	105±3	30																
4	25±2	3																
1-1-2	Humidity Resistance		Temperature: 40±2°C Relative Humidity: 90 ~ 95% Time: 100hrs Measured After Exposure In The Room Condition For 1hrs															
1-1-3	High Temperature Resistance		Temperature: 85±3°C Time: 50Hrs Measured After Exposure In The Room Condition For 1Hrs															
1-1-4	Low Temperature Resistance		Temperature: -40±3°C Time: 50Hrs Measured After Exposure In The Room Condition For 1Hrs															
1-1-5	High Temperature Load Life	There should be no evidence of short or open circle	Temperature: 85±3°C Load: Allowed DC Current Time: 500Hrs															
1-1-6	Humidity Load Life		Temperature: 40±2°C Relative Humidity: 90~95% Load: Allowed DC Current Time: 500Hrs															

### 1-2.Mechanical Performance

No	Item	Specification	Test Method
1-2-1	Resistance To Soldering Heat	Appearance: No Damage	1. The device should be reflow soldered on PCB (peak 260°C±5°C for 10 seconds) 2. Solder Composition: Sn/Ag3.0/Cu0.5 3. Test time: 6 minutes
1-2-2	Solder ability	The electrodes shall be at least 95% covered with new solder coating	1. Pre-Heating: 150°C, 1min. 2. Solder Composition: Sn/Ag3.0/Cu0.5 3. Solder Temperature: 245±5°C. 4. Immersion Time: 4±1 sec.
1-2-3	Component Adhesion (Push Test)	1 Lbs. For CUW11/MCF11 2 Lbs. For other	The device should be reflow soldered (245±5°C For 10 seconds) to a tinned copper substrate. A force gauge should be applied to the side of the component. The device must withstand a minimum force of 2 pounds without a failure of the termination attached to component



**Lead-Free(LF) 標準溫度分析範圍**

Refer to J-STD-020C

管制項目 Item.	升温區 Ramp-up	預熱區 Pre-heating	迴焊區 Reflow	Peak Temp	冷卻區 Cooling
溫度範圍 Temp.scope	R.T. ~ 150°C	150°C ~ 200°C	225°C	260±5°C	Peak Temp. ~ 150°C
實際時間 Time result	—	60 ~ 180 sec	20 ~ 60 sec	5 ~ 10 sec	—

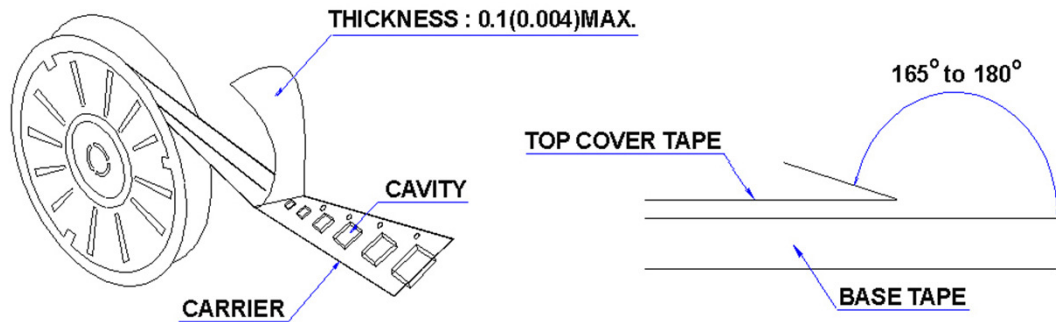
**NOTE :**

1. Re-flow possible times : within 2 times
2. Nitrogen adopted is recommended while in re-flow

## 10 Packaging:

### 10.1 Packaging -Cover Tape

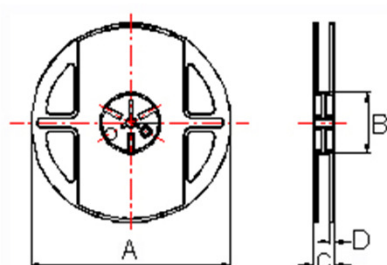
The force for tearing off cover tape is 10 to 100 grams in the arrow direction.



### 10.2 Packaging Quantity

TYPE	PCS/REEL
LDW11T	2000

### 10.3 Reel Dimensions

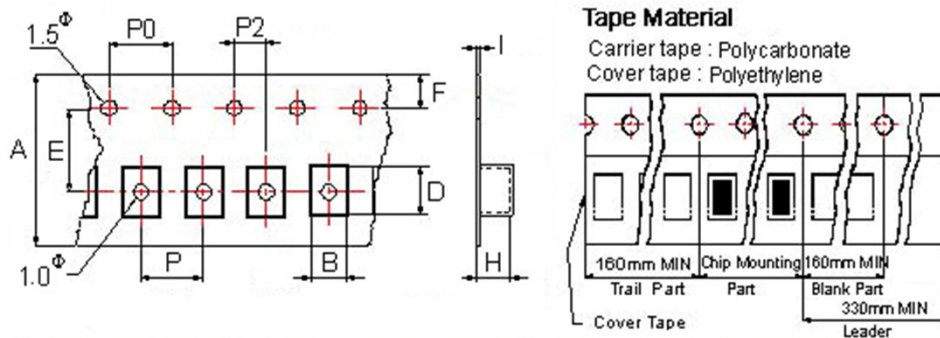


Reel Dimensions : m/m

TYPE	A	B	C	D
LDW11T	178	60	12	1.5

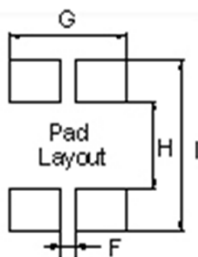
## 10 Packaging:

### 10.4 Tape Dimensions in mm



TYPE	A	B	D	E	F	H	I	P	P0	P2
LDW11T	8	1.15	1.45	3.5	1.75	1.00	0.24	4	4	2

## 11 Recommended Land Pattern:



Dimensions in mm

TYPE	F(in/mm)	G(in/mm)	H(in/mm)	I(in/mm)
LDW11T	0.014/0.36	0.039/1.0	0.023/0.59	0.069/1.75

## 12 Note:

1. Please make sure that your product has been evaluated and confirmed against your specifications when our product is mounted to your product.
2. Do not knock nor drop.
3. All the items and parameters in this product specification have been prescribed on the premise that our product is used for the purpose, under the condition and in the environment agreed upon between you and us. You are requested not to use our product deviating from such agreement.
4. Please keep the distance between transformer/coil and other components (refer to the standard IEC 950)
5. The moisture sensitivity level (MSL) of products is classified as level 1.

## 13 Graph:

