

# SPECIFICATION



ZenithTek

Brand **ZenithTek**  
 Product Series Code **ZLML-SERIES**  
 File Version **V1.0**  
 Description **SMD Wire Wound Common Mode Filter**

## Features

- SMD Type Common Mode Filter.
- High Rated Current.
- Noise Suppression for Power Line.
- Halogen Free, Lead Free, RoHS and REACH Compliance.

## Applications

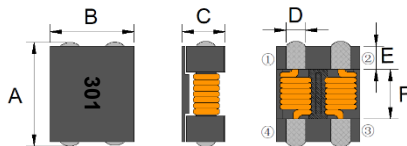
- Fit for Signal Line Filtering.

## Product Identification

ZLML 070640 F1 301 Y A  
 1 2 3 4 5 6

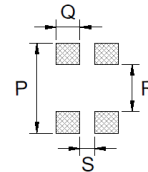
- 1.Product Code:  
ZLML = ZenithTek Code.
- 2.Dimension Code:  
070640 = 7.5 \* 6.0 \* 3.8 mm.
- 3.Type Code:  
F1.
- 4.Impedance Code:  
301 = 300Ω
- 5.Tolerance Code:  
Y = Typ.
- 6.Inner Code:  
A.

## Dimension (Unit: mm)



Type	A(±0.50)	B(±0.50)	C(Max.)	D(Ref.)	E(Ref.)	F(Ref.)
ZLML070640	7.50	6.00	3.80	1.50	1.70	3.50
ZLML090750	9.50	7.00	4.80	1.50	1.70	5.60
ZLML121164	12.50	10.80	6.40	2.70	2.50	7.00

## Land Pattern (Unit: mm)

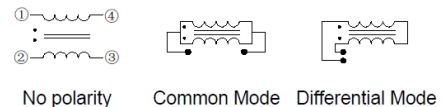


Type	P(Ref.)	Q(Ref.)	R(Ref.)	S(Ref.)
ZLML070640	8.00	2.00	3.00	1.00
ZLML090750	10.50	2.25	5.00	1.50
ZLML121164	12.50	3.25	6.50	2.00

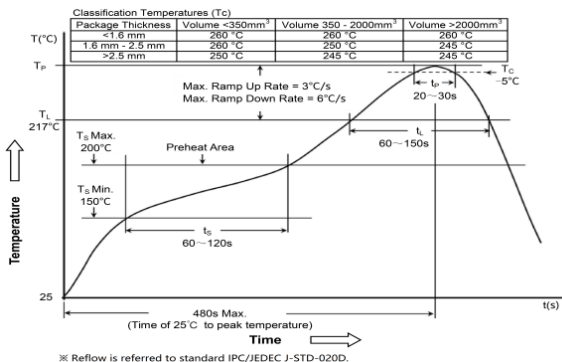
## Product Structure



## Schematic



## Reflow Heat Endurance



## Operating Conditions

Operating Temp. : -40°C~+125°C (including self-temp. rise).

## Standard & Atmospheric Condition

Ambient Temp. : 25°C±15°C / Relative Humidity : 65±20%.  
 If there may be any doubt on the result, measurement shall be made within the following limits :  
 Ambient Temp. : 25°C±2°C / Relative Humidity : 65±5%.

## Test Equipment

LCR Meter : Agilent E4991A.  
 Resistance Meter : HIOKI-RM3545.  
 Caliper : Mitsutoyo 150mm.

# SPECIFICATION



Brand **ZenithTek**  
Product Series Code **ZLML-SERIES**  
File Version **V1.0**  
Description **SMD Wire Wound Common Mode Filter**

## Electrical Characteristic

Part Number	Impedance (Ω)/(Typ.) (1,2)-(3,4)	Impedance (Ω)/(Min.) (1,2)-(3,4)	Test Frequency (MHz)	Rated Current (A)/(Max.)	Rated Voltage (Vdc)/(Max.)	DC Resistance (mΩ)/(Max.) (1,2)-(3,4)	Insulation Resistance (MΩ)/(Min.)
ZLML070640F1700YA	70	40	100	15	80	5.00	10
ZLML070640F1141YA	140	100	100	9.0	80	10	10
ZLML070640F1301YA	300	225	100	5.0	80	10	10
ZLML070640F1451YA	450	275	100	5.0	80	10	10
ZLML070640F1701YA	700	500	100	4.0	80	15	10
ZLML070640F1102YA	1020	800	100	3.0	80	17	10
ZLML070640F1132YA	1300	910	100	2.5	80	21	10
ZLML070640F1272YA	2700	2000	100	1.0	80	63	10
ZLML070640F1302YA	3000	2500	100	0.9	80	75	10

Note: The Rated current at which the temperature rises approximately  $\Delta T=40^{\circ}\text{C}$ .

# SPECIFICATION



ZenithTek

Brand **ZenithTek**  
Product Series Code **ZLML-SERIES**  
File Version **V1.0**  
Description **SMD Wire Wound Common Mode Filter**

## Electrical Characteristic

Part Number	Impedance (Ω)/(Typ.) (1,2)-(3,4)	Impedance (Ω)/(Min.) (1,2)-(3,4)	Test Frequency (MHz)	Rated Current (A)/(Max.)	Rated Voltage (Vdc)/(Max.)	DC Resistance (mΩ)/(Max.) (1,2)-(3,4)	Insulation Resistance (MΩ)/(Min.)
ZLML090750F1301YA	300	225	100	6.0	80	6.00	10
ZLML090750F1601YA	600	450	100	5.5	80	8.00	10
ZLML090750F1701YA	700	500	100	5.0	80	10	10
ZLML090750F1102YA	1000	750	100	4.0	80	13	10
ZLML090750F1222YA	2200	1700	100	3.0	80	50	10
ZLML090750F1272YA	2700	2000	100	2.0	80	80	10

Note: The Rated current at which the temperature rises approximately  $\Delta T=40^{\circ}\text{C}$ .

# SPECIFICATION



ZenithTek

Brand **ZenithTek**  
Product Series Code **ZLML-SERIES**  
File Version **V1.0**  
Description **SMD Wire Wound Common Mode Filter**

## Electrical Characteristic

Part Number	Impedance (Ω)/(Typ.) (1,2)-(3,4)	Impedance (Ω)/(Min.) (1,2)-(3,4)	Test Frequency (MHz)	Rated Current (A)/(Max.)	Rated Voltage (Vdc)/(Max.)	DC Resistance (mΩ)/(Max.) (1,2)-(3,4)	Insulation Resistance (MΩ)/(Min.)
ZLML121164F1231YA	230	80	100	10	80	2.00	10
ZLML121164F1701YA	700	500	100	8.0	80	6.00	10
ZLML121164F1801YA	800	600	100	8.0	80	8.00	10
ZLML121164F1102YA	1000	750	100	6.0	80	14	10

Note: The Rated current at which the temperature rises approximately  $\Delta T=40^{\circ}\text{C}$ .

# SPECIFICATION



**ZenithTek**

Brand **ZenithTek**  
 Product Series Code **ZLML-SERIES**  
 File Version **V1.0**  
 Description **SMD Wire Wound Common Mode Filter**

## Reliability Test

No.	Item	Specification	Test Method
1	Temperature Shock.	Appearance: No damage. Impedance: within $\pm 10\%$ of initial.	Temperature: $-40\pm 2^{\circ}\text{C}$ ~ $+125\pm 2^{\circ}\text{C}$ Kept for 30 minutes. Transition time : 5 minutes. 100 Cycles.
2	Humidity Resistance.	Appearance: No damage. Impedance: within $\pm 10\%$ of initial.	Temperature: $40\pm 2^{\circ}\text{C}$ . Relative Humidity: 90%. Duration: 500 +4/-0 hours.
3	High Temperature Resistance.	Appearance: No damage. Impedance: within $\pm 10\%$ of initial.	Temperature: $125\pm 2^{\circ}\text{C}$ . Duration: 1000 +4/-0 hours.
4	Low Temperature Resistance.	Appearance: No damage. Impedance: within $\pm 10\%$ of initial.	Temperature: $-40\pm 2^{\circ}\text{C}$ . Duration: 1000 +4/-0 hours.
5	Vibration test.	Appearance: No damage. Impedance: within $\pm 10\%$ of initial.	Oscillation Frequency: 10Hz to 55Hz to 10Hz in 60 seconds as a period. Total amplitude: 1.5mm. Testing Time: a period of 2 hours in each 3 mutually perpendicular directions (total of 6 hours).
6	Solderability Heat test.	Appearance: No damage. Impedance: within $\pm 10\%$ of initial.	Solder temperature: $260 +0/-5^{\circ}\text{C}$ . Duration: 5 sec. Allowed reflow time: 2 times.
7	Solderability test.	90% or more of electrode area shall be coated by new solder.	Preheating: $160^{\circ}\text{C}$ , 60sec. Solder temperature: $245\pm 5^{\circ}\text{C}$ . Duration : 5 sec.
8	Flexure Strength.	No visible mechanical damage.	Flexure: 2mm. Pressurizing Speed: 0.5mm/sec. Keep time: $30\pm 1$ sec.
9	Terminal Strength.	No visible mechanical damage.	Reflow 2 times. Force: 10N · Keep time: 5 sec · X,Y directs.

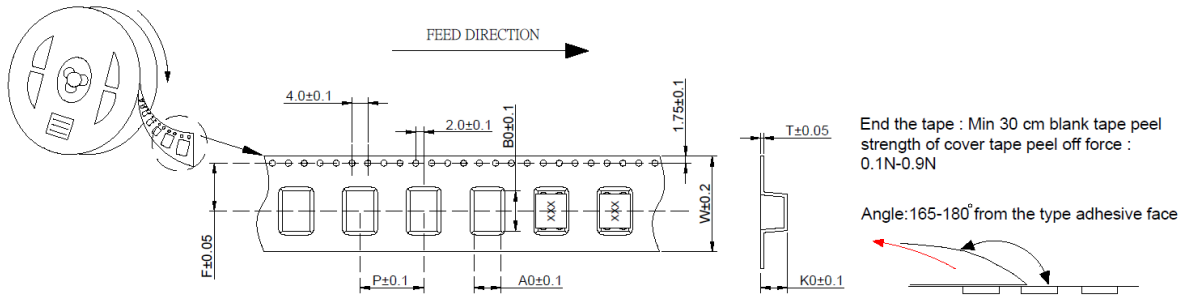
# SPECIFICATION



**Brand** ZenithTek  
**Product Series Code** ZLML-SERIES  
**File Version** V1.0  
**Description** SMD Wire Wound Common Mode Filter

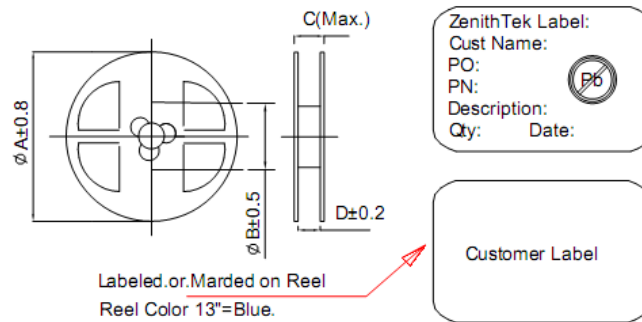
## Package

### Taping Dimension (mm)



Size(mm)	W	P	A0	B0	K0	T	F
ZLML070640	16.00	12.00	6.70	8.20	4.00	0.40	7.50
ZLML090750	24.00	16.00	7.70	10.20	5.00	0.40	11.50
ZLML121164	24.00	16.00	11.50	13.20	6.60	0.40	11.50

### Reel Dimension (mm)



Size(mm)	A	B	C	D	Reel/Size	Qty./Size
ZLML070640	330	100	22.4	16.4	13"	1500 Pcs
ZLML090750	330	100	30.4	24.4	13"	700 Pcs
ZLML121164	330	100	30.4	24.4	13"	500 Pcs

### Box Dimension (mm)

