### 1. Part No. Expression:

<u>W 3 F 9</u>	00	- <u>R D</u> –	- 🗌 🗌
(a) (b)(c)	(d)	(e)(f)	(g)

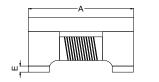
- (a) Series Code
- (b) Dimension Code
- (c) Material Code

(d) Impedance Code

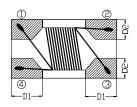
(e) Packaging Code

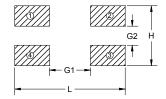
- (f) Current Rating Code D = 400mA
- (g) Internal controlled number

# 2. Configuration & Dimensions







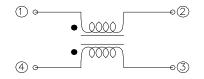


Recommended PCB layout

Unit: mm

А	В	С	D1	D2	E	L	G1	G2	Н
2.0±0.2	1.2±0.2	1.2±0.2	0.55±0.1	0.46±0.1	0.15±0.1	2.60	1.10	0.45	1.25

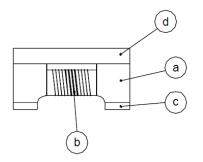
# 3. Schematic



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# 4. Material List



- (a) Core
- (b) Wire
- (c) Terminal
- (d) Upper Plate

# 5. General Specification

(a)Operating Temp. : -40°C to +125°C

- (b) Storage Temp. : -40°C to +125°C (on board)
- (c) Humidity Range: 85 ± 2% RH
- (d) Storage Condition (Component in its packaging)
  - i) Temperature: Less than 40°C
  - ii) Humidity : 60% RH

Part Number	Common Mode Impedance (Ω)	Test Frequency (MHz)	DC Resistance (Ω) Max.	Rated Current (mA) Max.	Rated Volt. (Vdc) Max.	Withstand Volt. (Vdc) Max.	IR (Ω) Min.
W3F670-RD-10	67±25%	100	0.25	400	50	125	10M
W3F900-RD-10	90±25%	100	0.30	400	50	125	10M
W3F121-RD-10	120±25%	100	0.30	400	50	125	10M
W3F161-RC-10	160±25%	100	0.35	350	50	125	10M
W3F181-RC-10	180±25%	100	0.35	350	50	125	10M
W3F201-RC-10	200±25%	100	0.40	300	50	125	10M
W3F221-RC-10	220±25%	100	0.40	300	50	125	10M
W3F261-RC-10	260±25%	100	0.40	300	50	125	10M
W3F361-RC-10	360±25%	100	0.50	300	50	125	10M
W3F371-RA-10	370±25%	100	0.50	100	50	125	10M

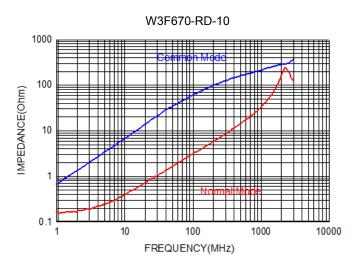
# 6. Electrical Characteristics

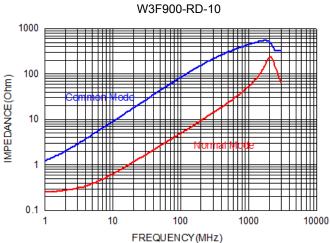
NOTE: Specifications subject to change without notice. Please check our website for latest information.

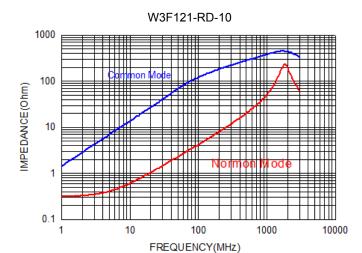


### 7. Characteristics Curves

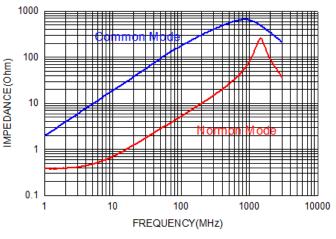
7-1 Impedance vs Frequency

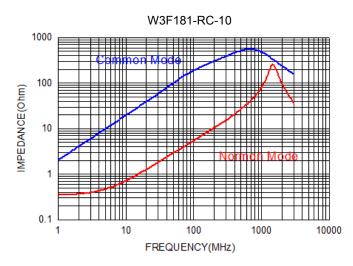


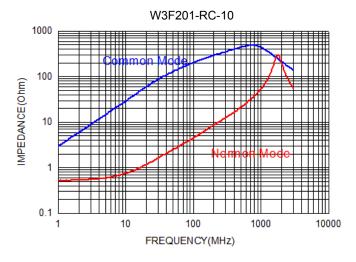




W3F161-RC-10





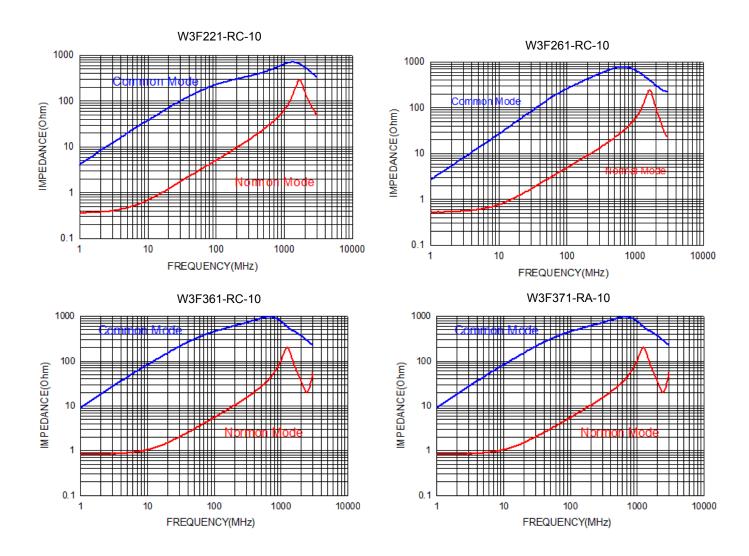


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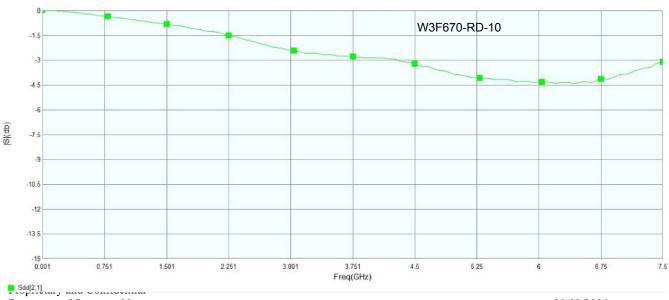
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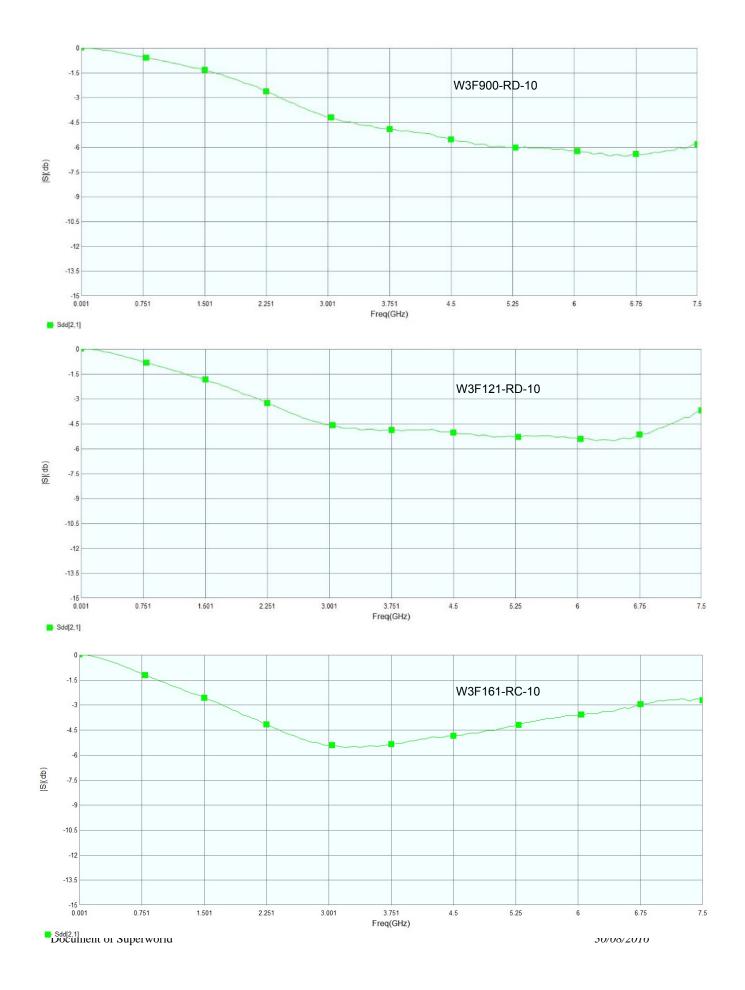
30/08/2016

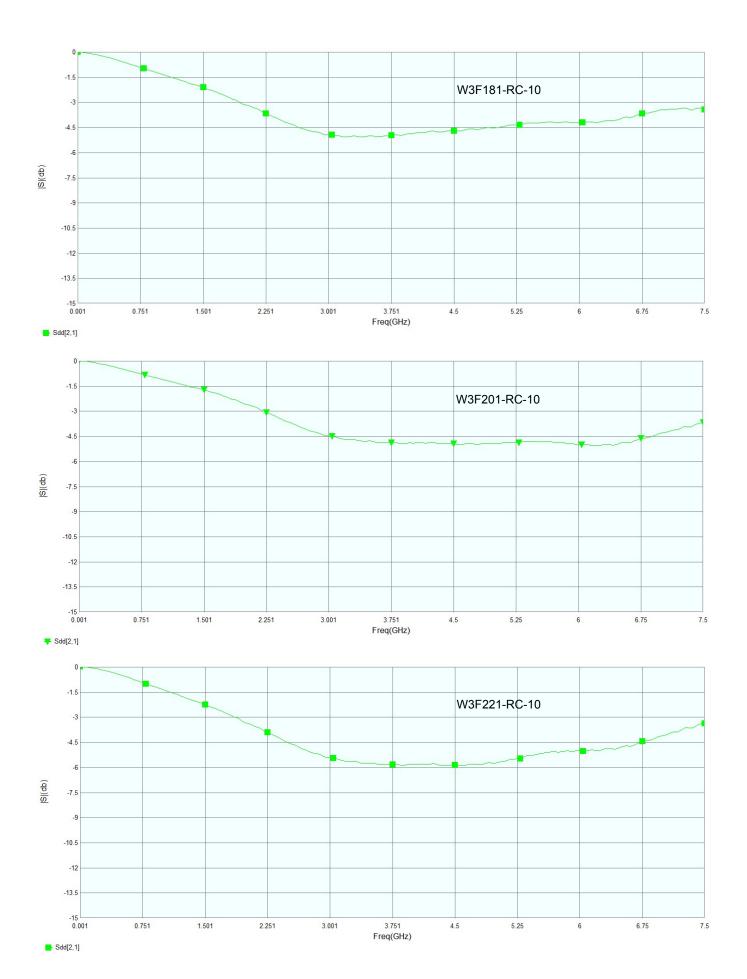


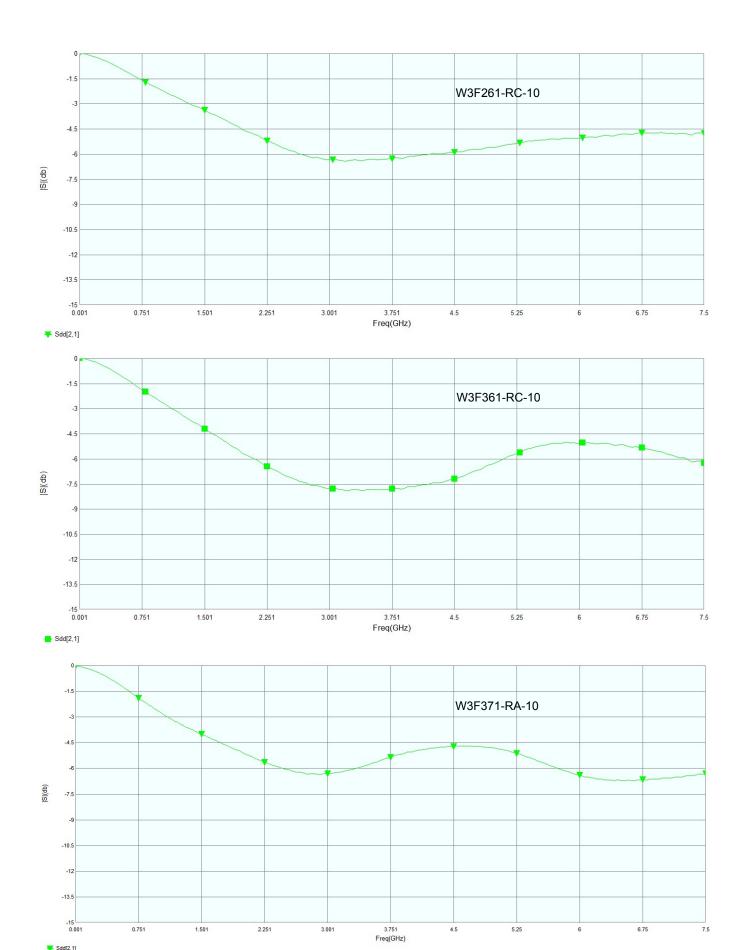
7-2 Insertion Loss Test



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### 8. Soldering

Mildly activated rosin fluxes are preferred. Our terminations are suitable for all re-flow soldering systems. If hand soldering cannot be avoided, the preferred technique is the utilization of hot air soldering tools.

#### 8-1 Solder Re-flow:

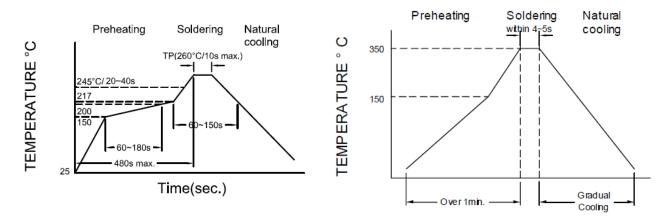
Recommended temperature profiles for re-flow soldering in Figure 1.

#### 8-2 Soldering Iron (Figure 2):

Products attachment with soldering iron is discouraged due to the inherent process control limitations. In the event that a soldering iron must be employed the following precautions are recommended.

Note :

- a) Preheat circuit and products to 150°C.
- b) 355°C tip temperature (Max.)
- c) Never contact the ceramic with the iron tip
- d) 1.0mm tip diameter (Max.)
- e) Use a 20 watt soldering iron with tip diameter of 1.0mm
- f) Limit soldering time to 4~5 sec.

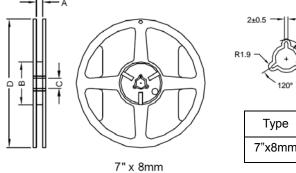


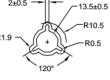
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# 9. Packaging Information:

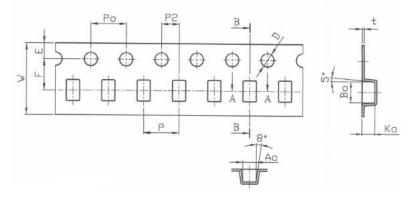
### 9-1 Reel Dimension





Туре	A(mm)	B(mm)	C(mm)	D(mm)
7"x8mm	9.0±0.5	60.0±2.0	13.5±0.5	178.0±2.0

### 9-2 Tape Dimension



Size	W(mm)	P(mm)	E(mm)	F(mm)	P2(mm)	D(mm)	P0(mm)	A0(mm)	B0(mm)	K0(mm)	t(mm)
W3	8.00±0.10	4.00±0.10	1.75±0.10	3.50±0.05	2.00±0.05	1.50+0.10/-0.00	4.00±0.10	1.50±0.10	2.35±0.10	1.45±0.10	0.28±0.05

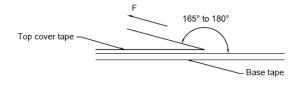
### 9-3 Packaging Quantity

NOTE: Specifications subject to change without notice. Please check our website for latest information.

# Wirewound Type Common Mode Filter - W3 Series

Chip Size	W3
Chip/Reel	2,000
Inner Box	10,000
Middle Box	50,000
Carton	100,000

### 9-4 Tearing Off Force



The force for tearing off cover tape is 15 to 80 grams in the arrow direction under the following conditions.

Room Temp. (°C)	Room Humidity (%)	Room atm (hPa)	Tearing Speed mm/min
5~35	45~85	860~1060	300

# **Application Notice:**

1. Storage Conditions:

To maintain the solderability of terminal electrodes:

- a) Recommended products should be used within 12 months from the time of delivery.
- b) The packaging material should be kept where no chlorine or sulfur exists in the air.
- 2. Transportation:
  - a) Products should be handled with care to avoid damage or contamination from perspiration and skin oils.
  - b) Vacuum pick up is strongly recommended for individual components.
  - c) Bulk handling should ensure that abrasion and mechanical shock are minimized.

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