

1. Part No. Expression:

W 4 F 9 0 0 - R D -

(a) (b)(c) (d) (e)(f) (g)

(a) Series Code

(b) Dimension Code

(c) Material Code

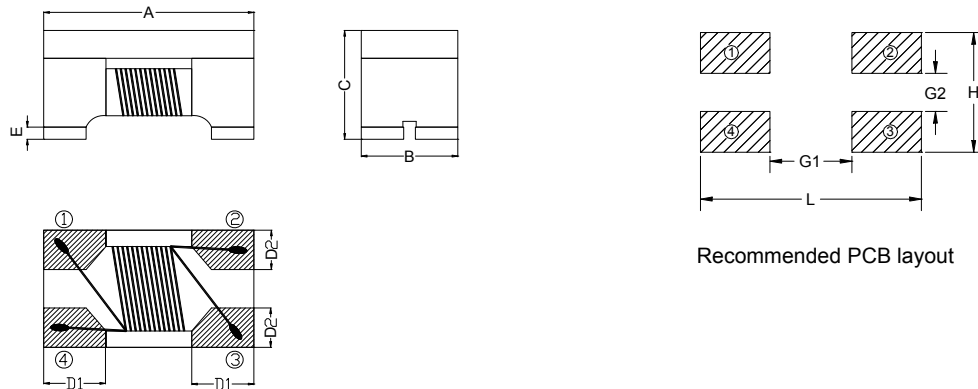
(d) Impedance Code

(e) Packaging Code

(f) Current Rating Code

(g) Internal controlled number

2. Configuration & Dimensions

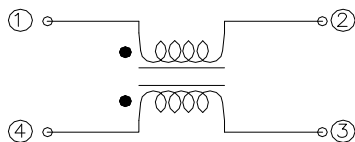


Recommended PCB layout

Unit: mm

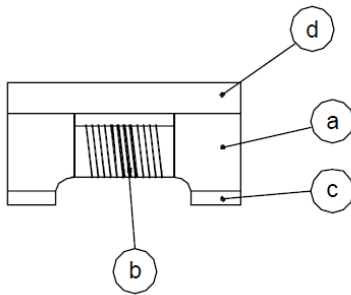
A	B	C	D1	D2	E	L	G1	G2	H
3.2±0.2	1.6±0.2	2.0±0.2	0.5±0.1	0.5±0.1	0.15±0.1	3.70	1.90	0.40	1.60

3. Schematic



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

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

6. Electrical Characteristics

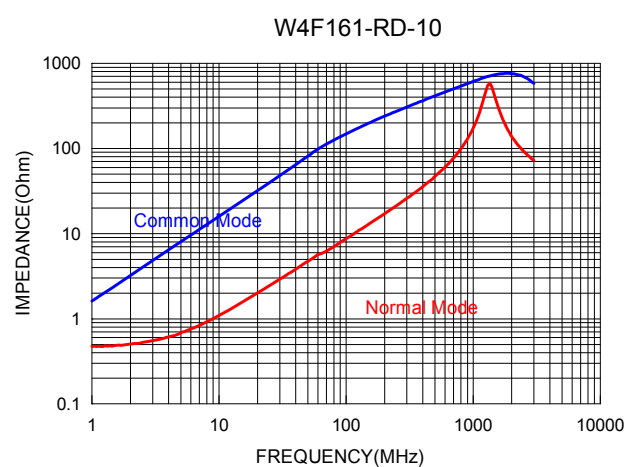
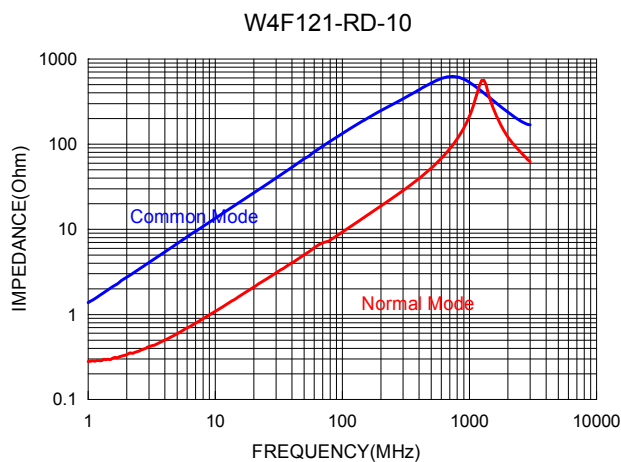
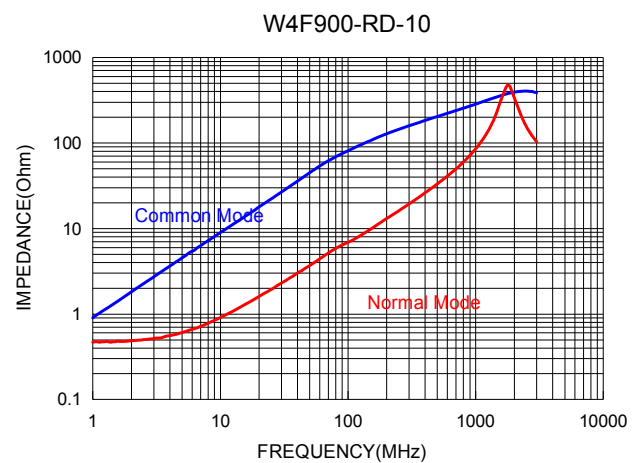
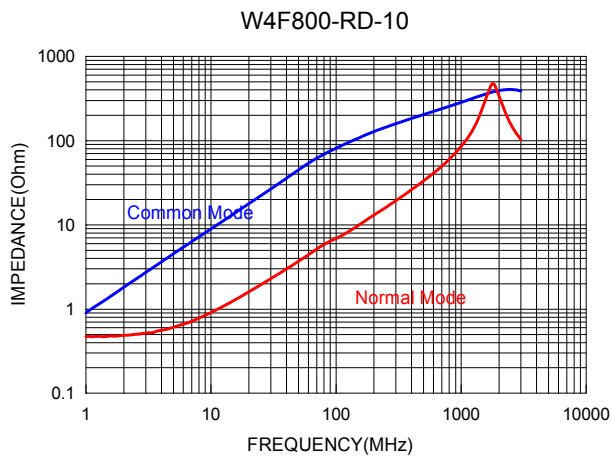
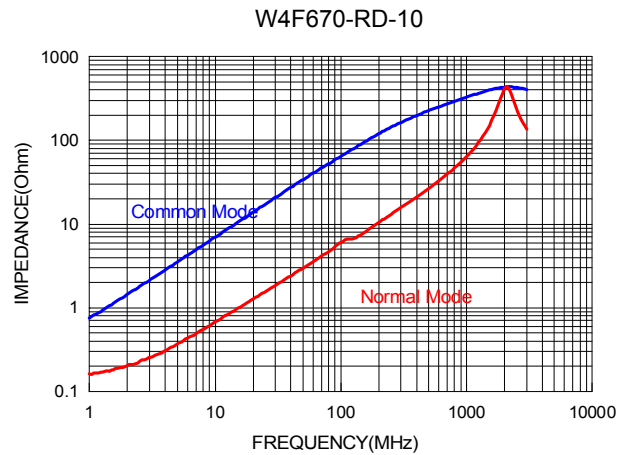
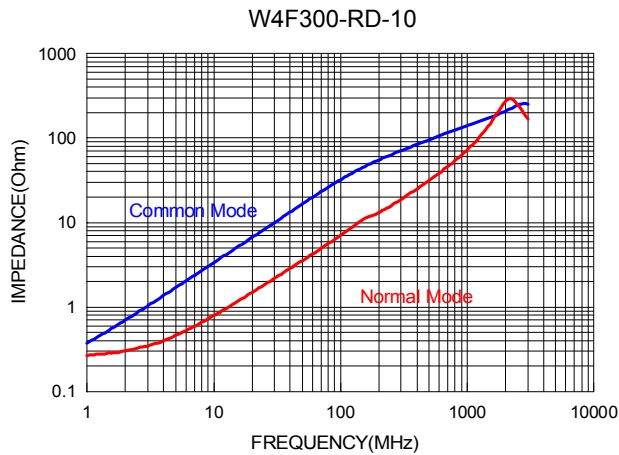
Part Number	Common Mode Impedance (Ω)	Test Frequency (MHz)	DC Resistance (Ω) Max.	Rated Current (mA) Max.	Rated Volt. (Vdc) Max.	Withstand Volt. (Vdc)	IR (Ω) Min.
W4F300-RD-10	30±25%	100	0.20	400	50	125	10M
W4F670-RD-10	67±25%	100	0.30	400	50	125	10M
W4F800-RD-10	80±25%	100	0.30	400	50	125	10M
W4F900-RD-10	90±25%	100	0.30	400	50	125	10M
W4F121-RD-10	120±25%	100	0.30	350	50	125	10M
W4F161-RD-10	160±25%	100	0.40	350	50	125	10M
W4F181-RD-10	180±25%	100	0.40	340	50	125	10M
W4F221-RC-10	220±25%	100	0.45	300	50	125	10M
W4F261-RC-10	260±25%	100	0.50	300	50	125	10M
W4F281-RC-10	280±25%	100	0.50	300	50	125	10M
W4F301-RC-10	300±25%	100	0.60	300	50	125	10M
W4F361-RC-10	360±25%	100	0.60	300	50	125	10M
W4F431-RC-10	430±25%	100	0.80	300	50	125	10M
W4F471-RC-10	470±25%	100	0.80	300	50	125	10M
W4F551-RC-10	550±25%	100	0.80	300	50	125	10M
W4F601-RC-10	600±25%	100	0.80	300	50	125	10M
W4F102-RB-10	1000±25%	100	1.00	200	50	125	10M
W4F222-RB-10	2200±25%	100	1.20	200	50	125	10M

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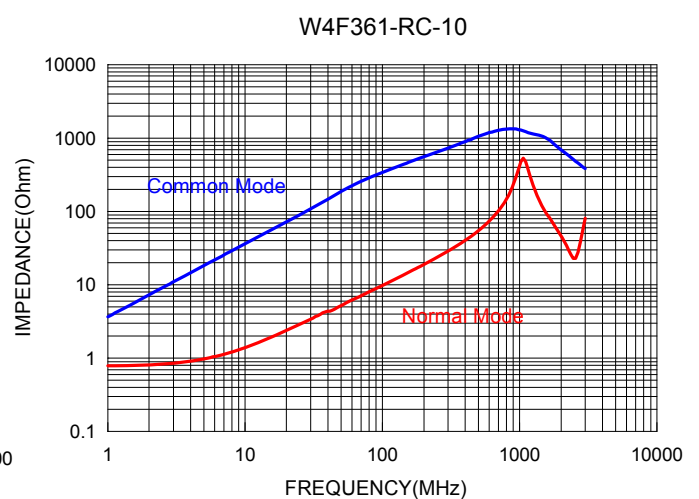
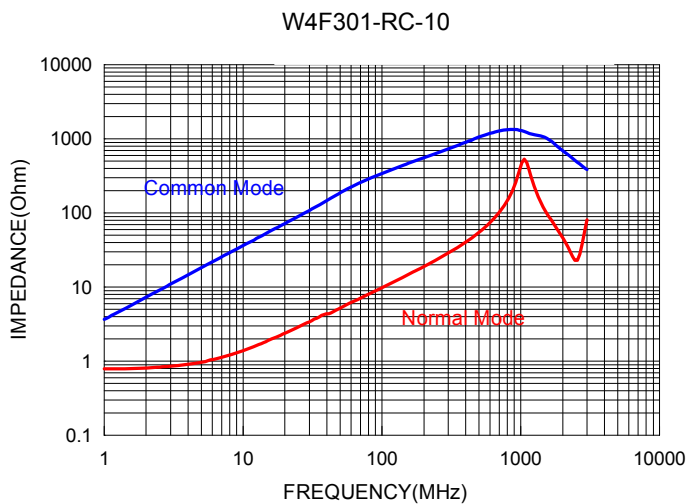
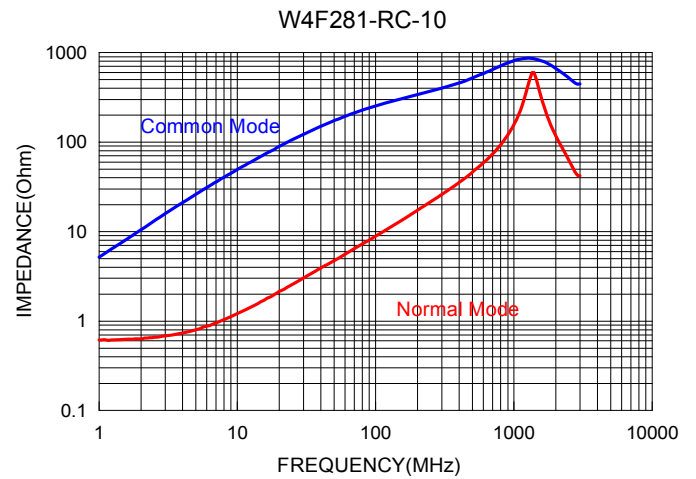
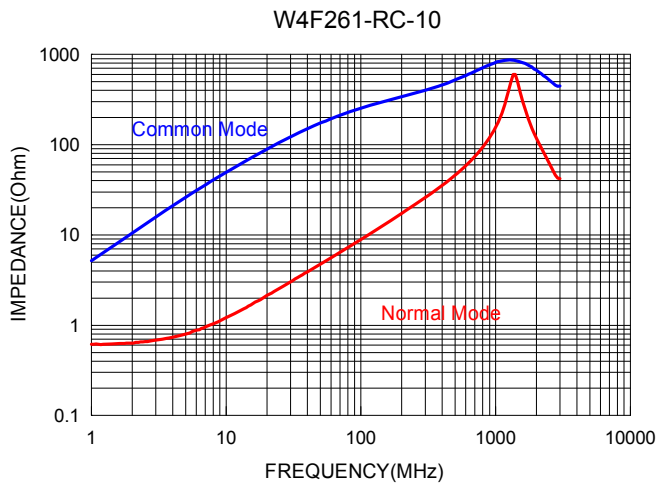
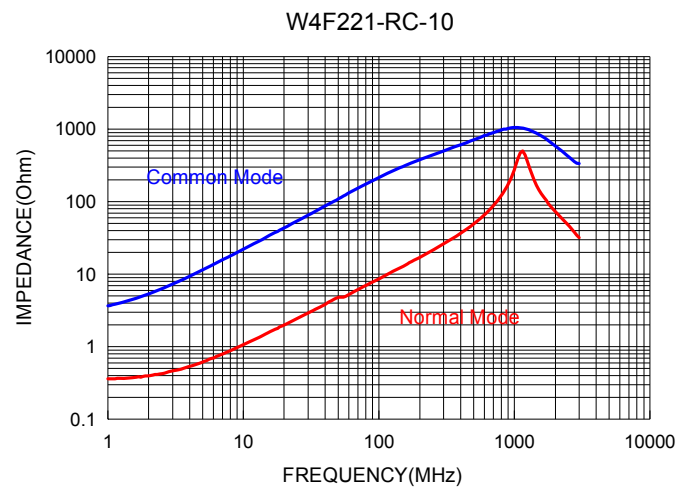
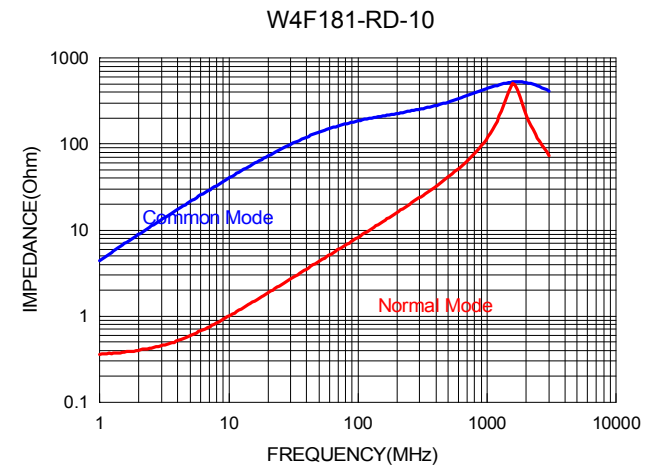
7. Characteristics Curves

7-1 Impedance vs Frequency



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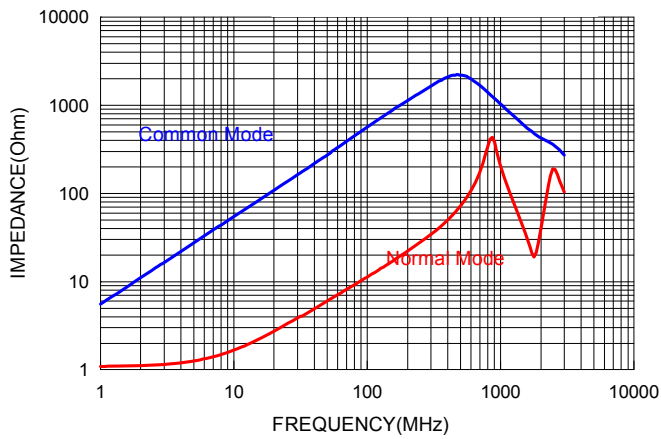




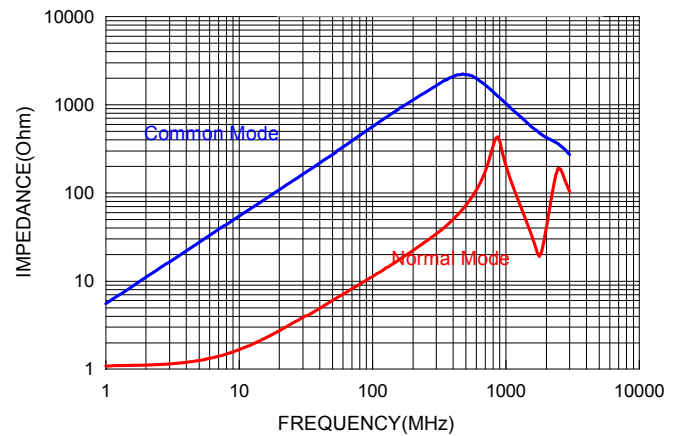
NOTE: Specifications subject to change without notice. Please check our website for latest information.



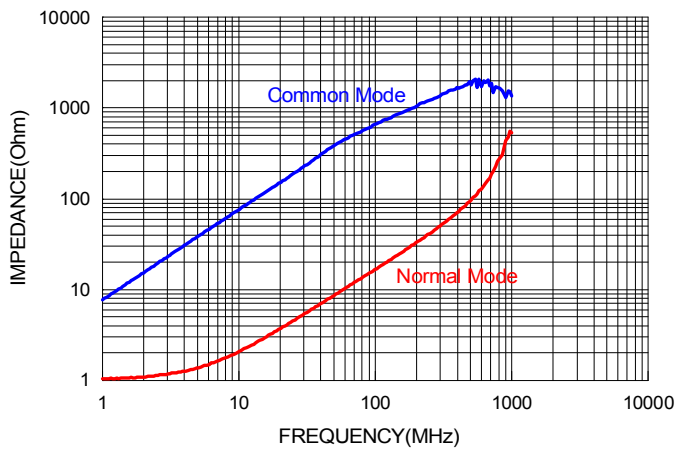
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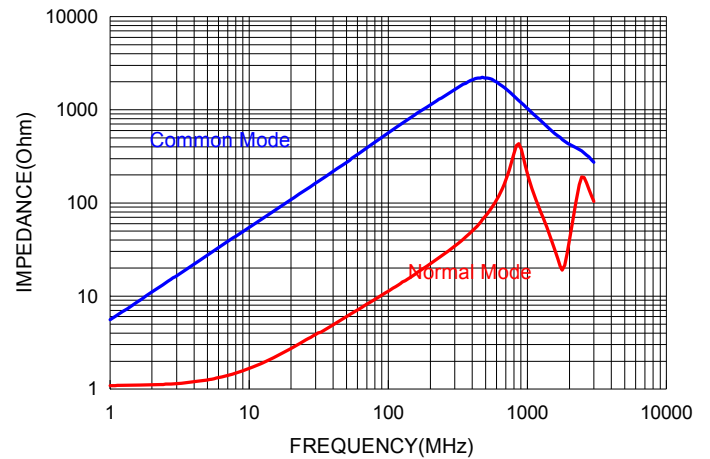
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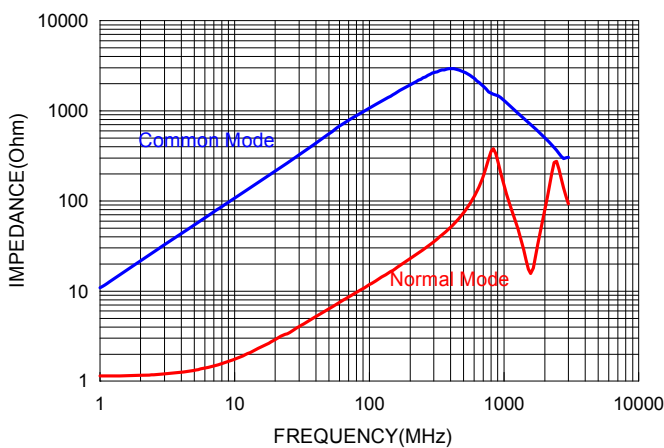
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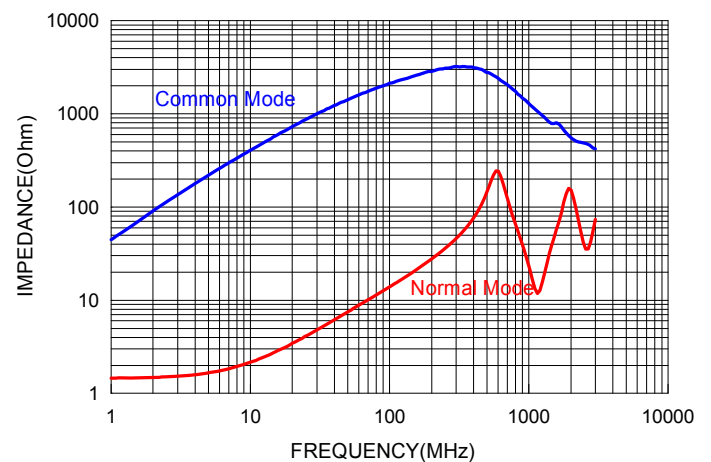
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W4F102-RB-10



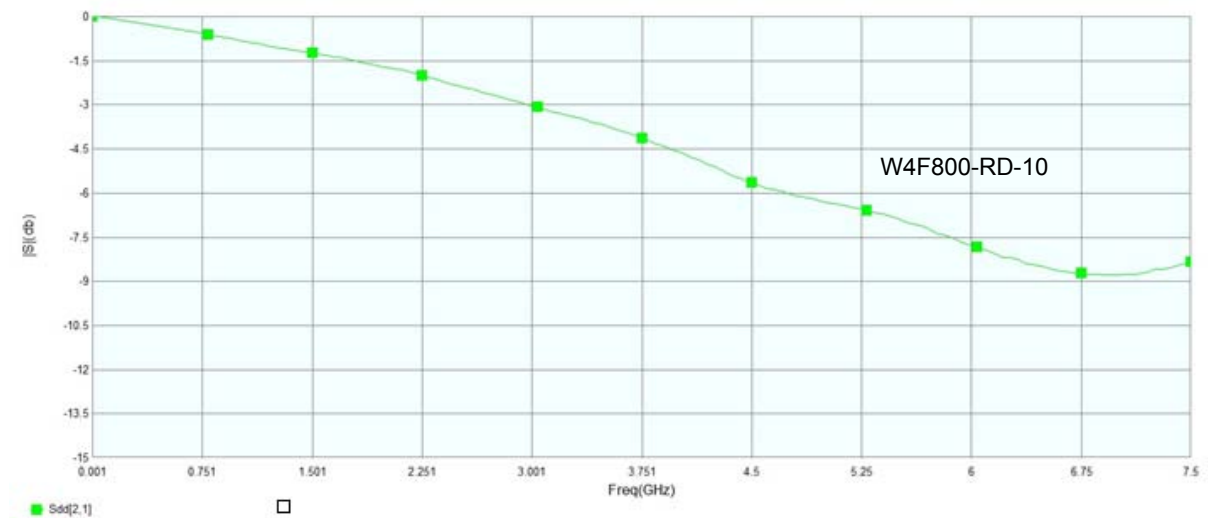
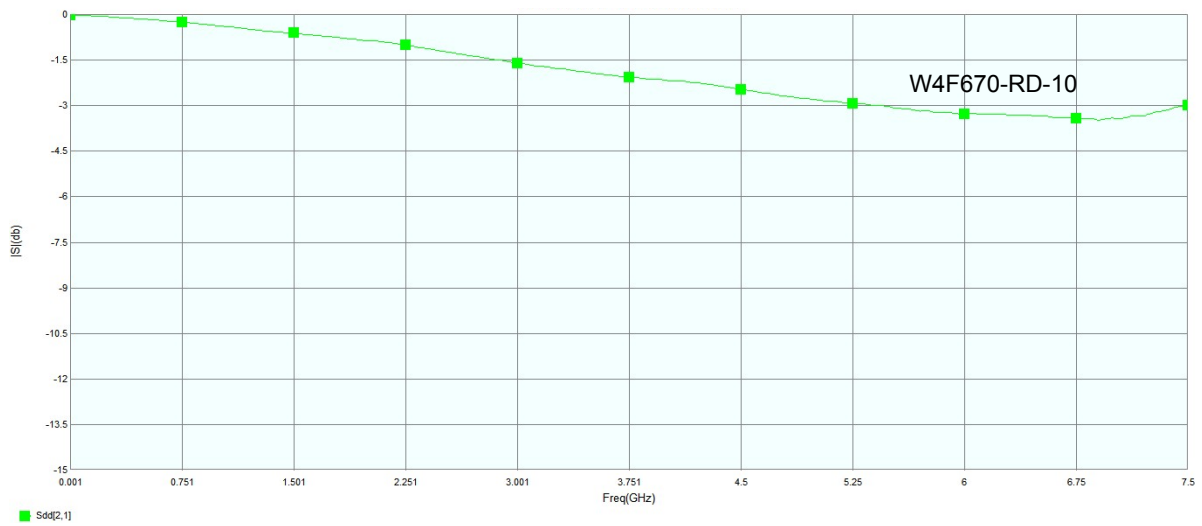
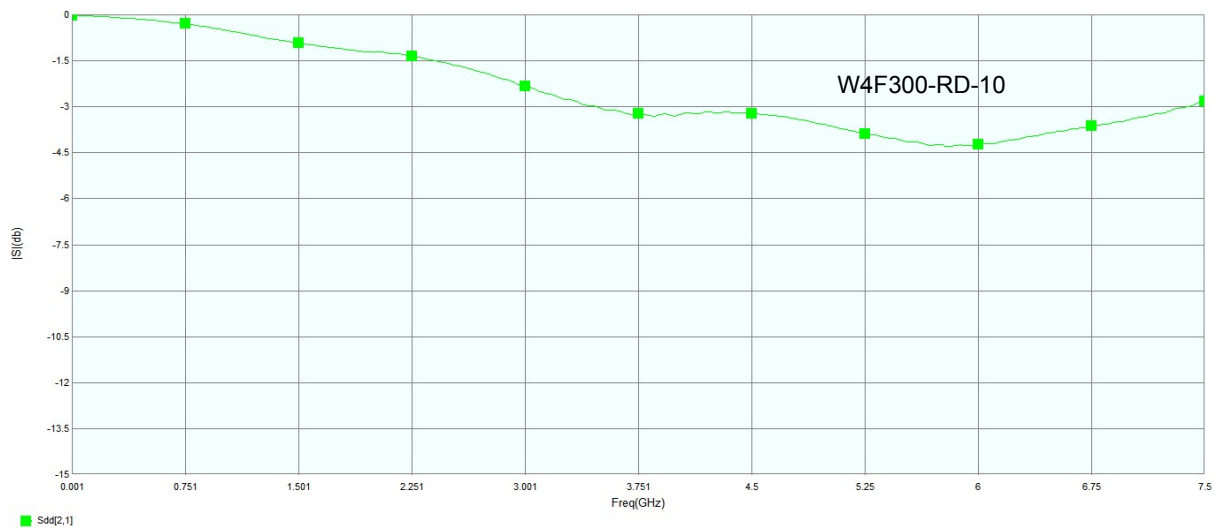
W4F222-RB-10



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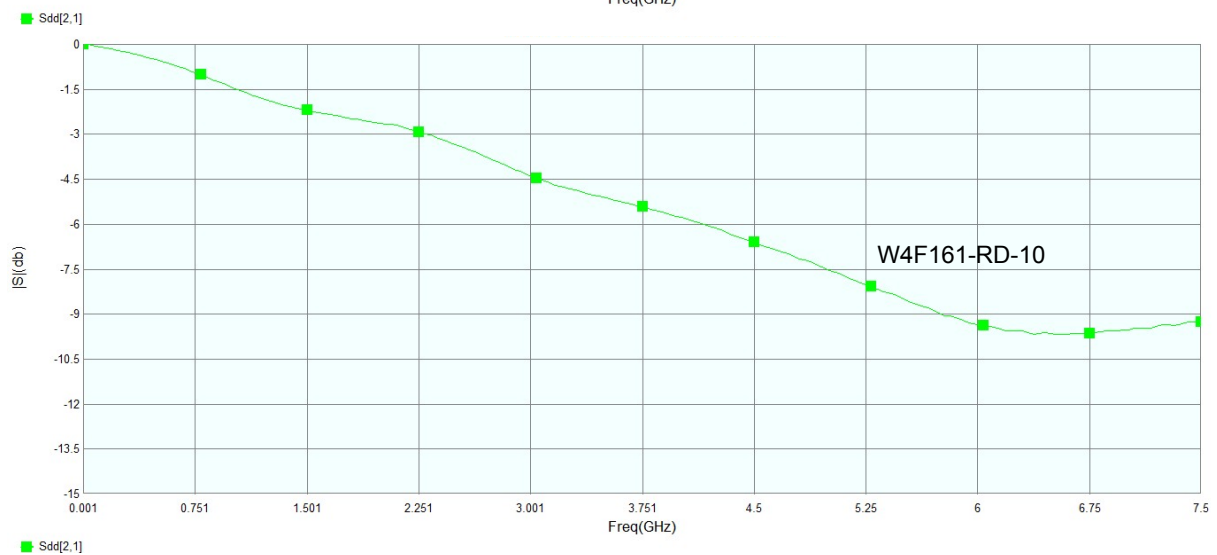
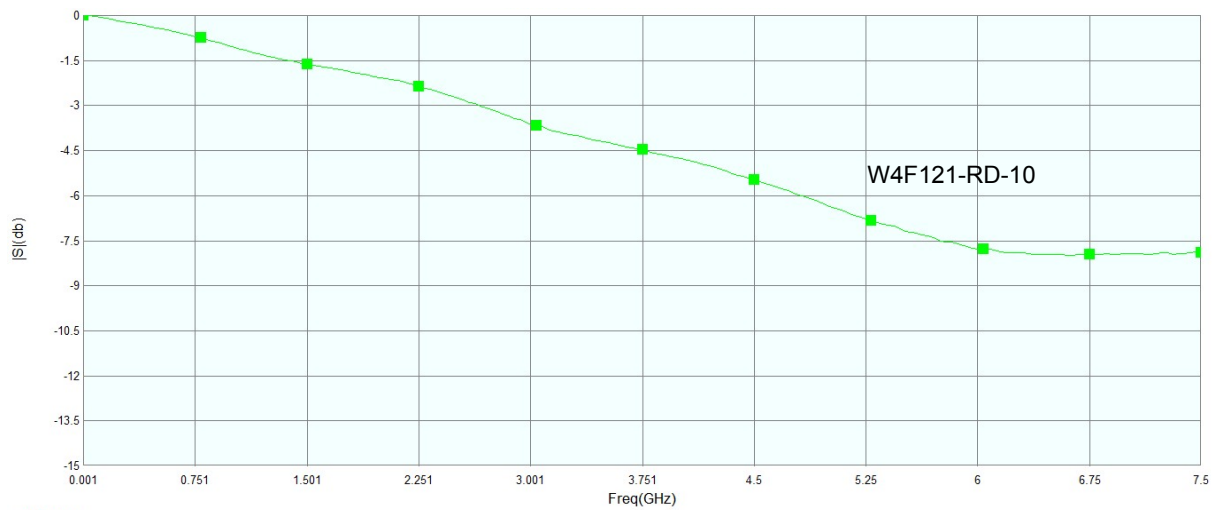
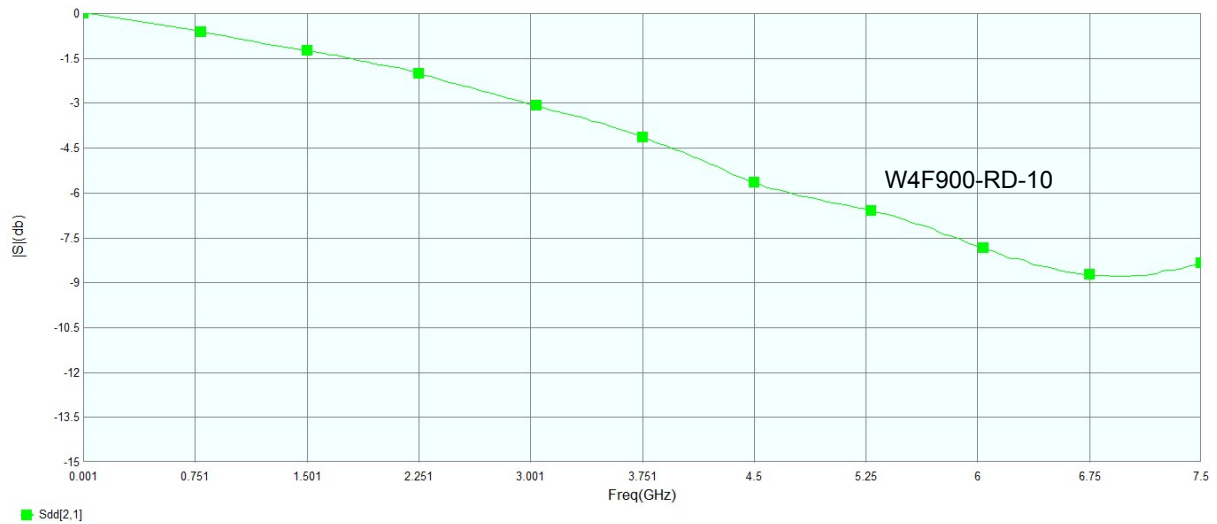


7-2 Insertion Loss Test



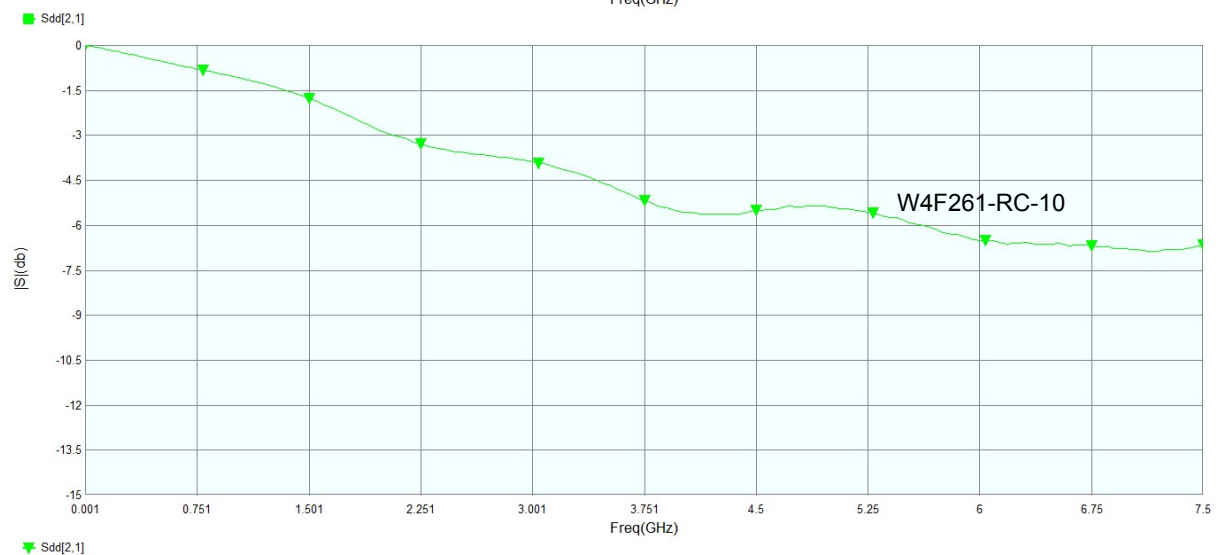
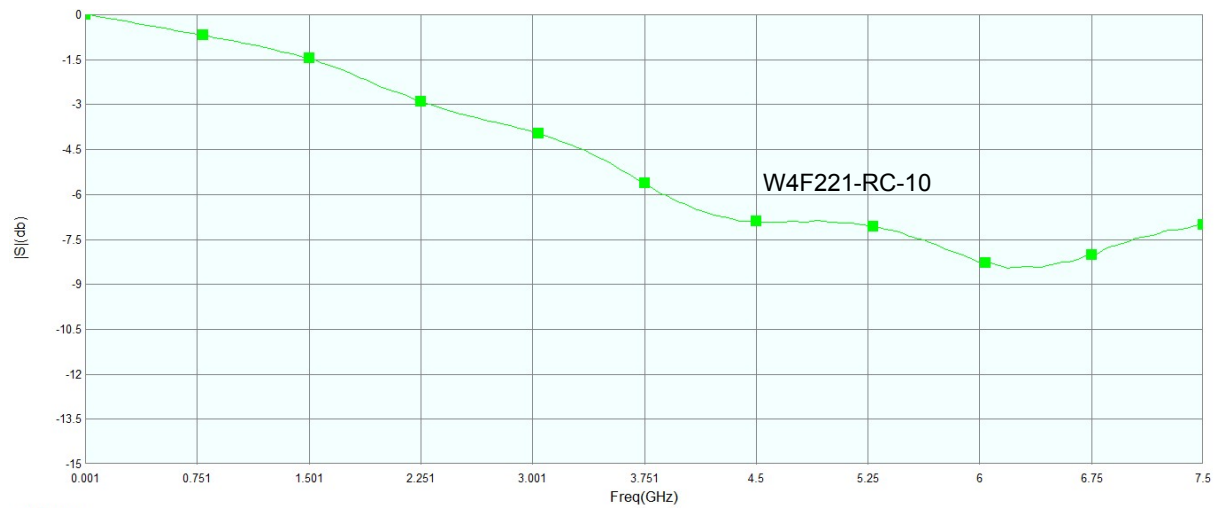
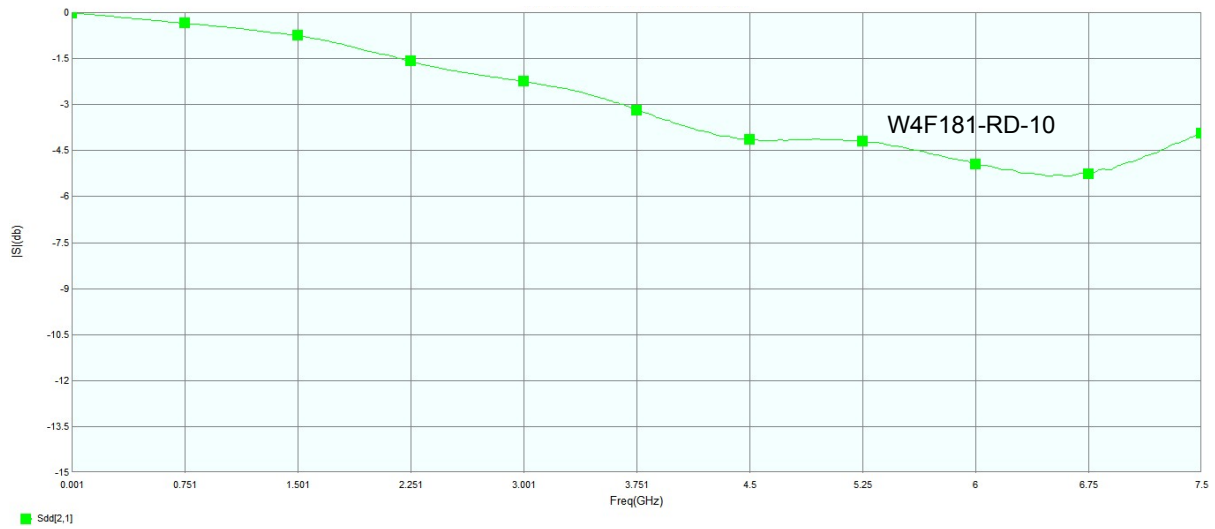
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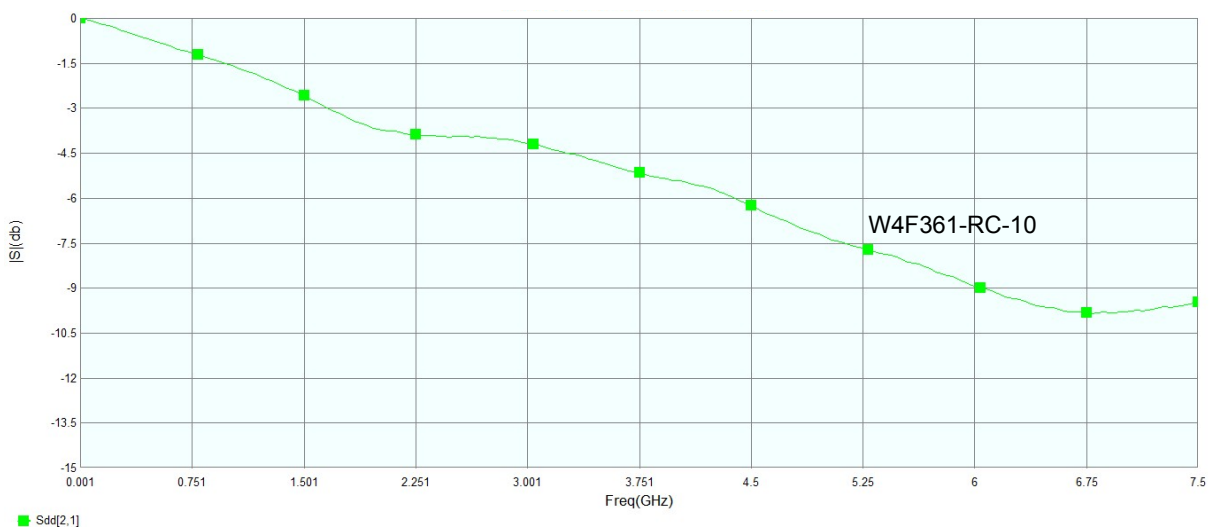
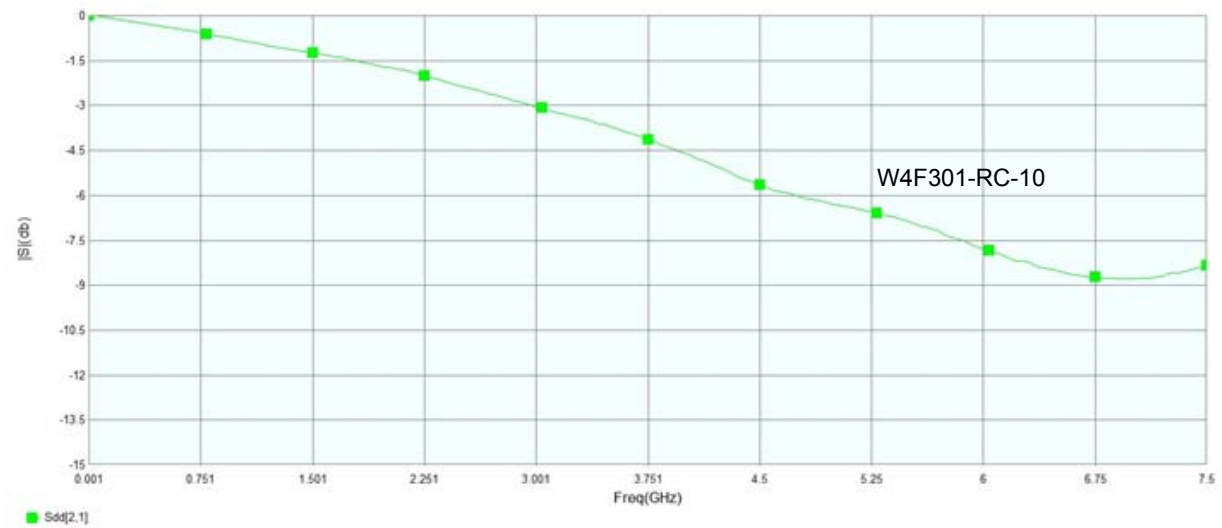
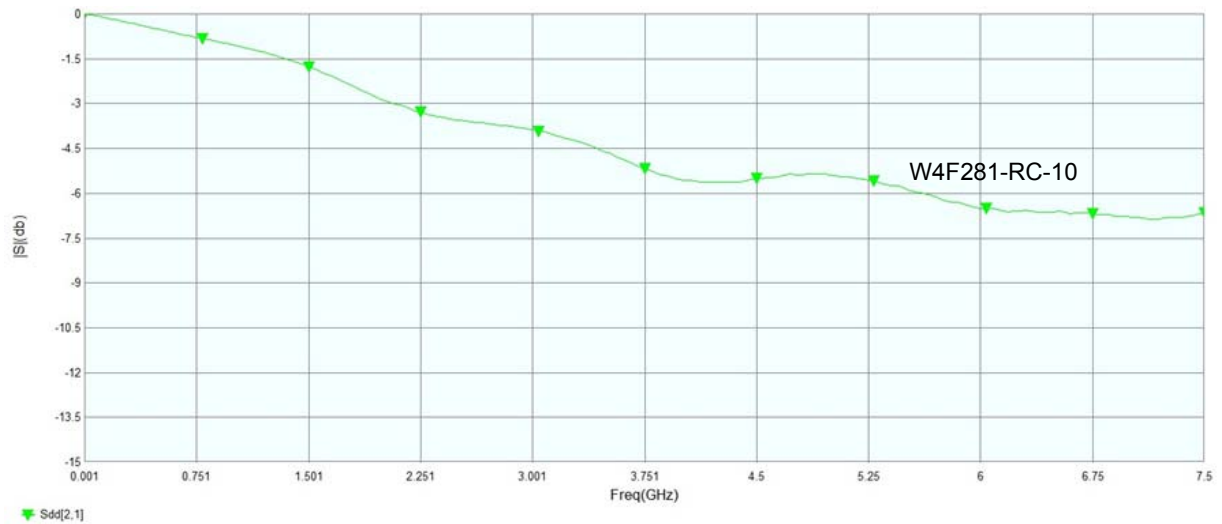
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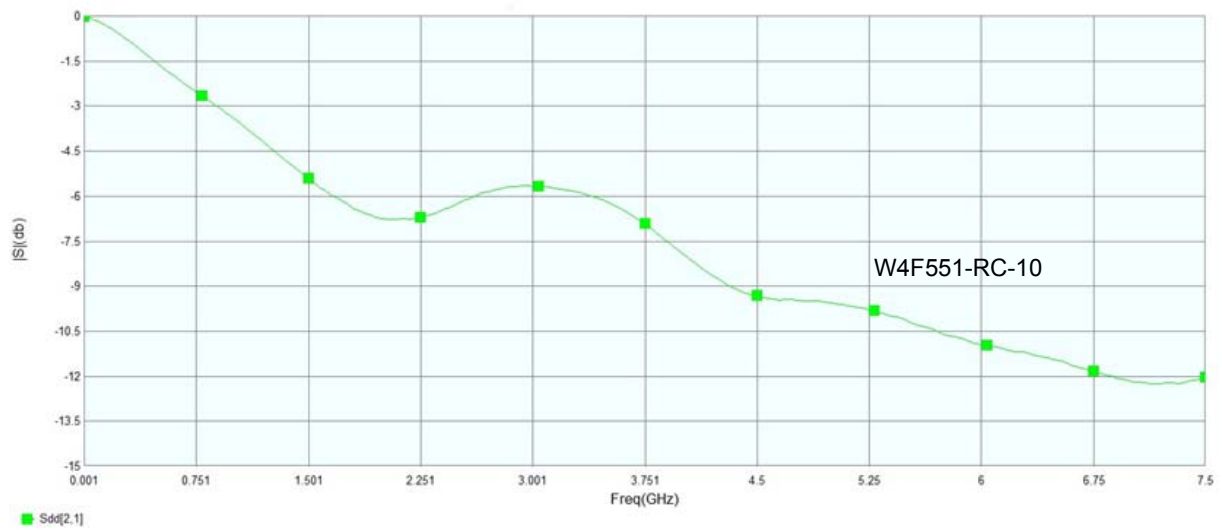
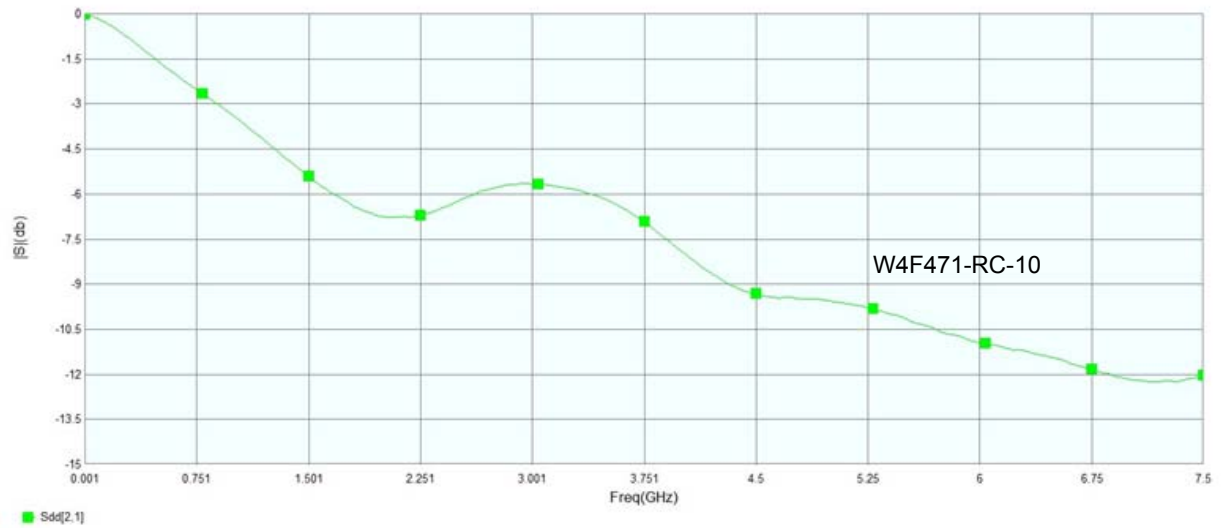
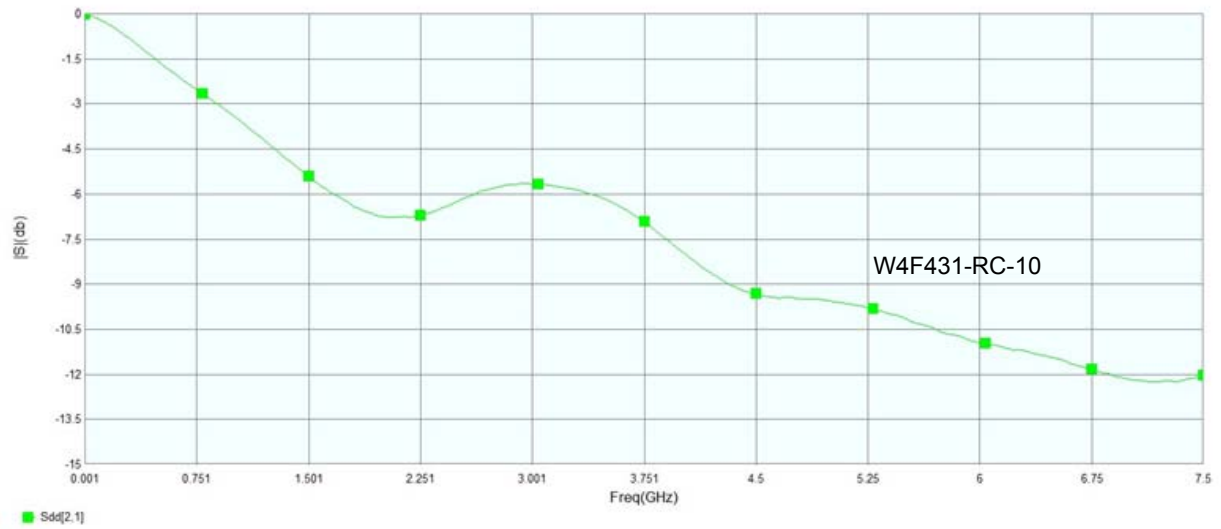
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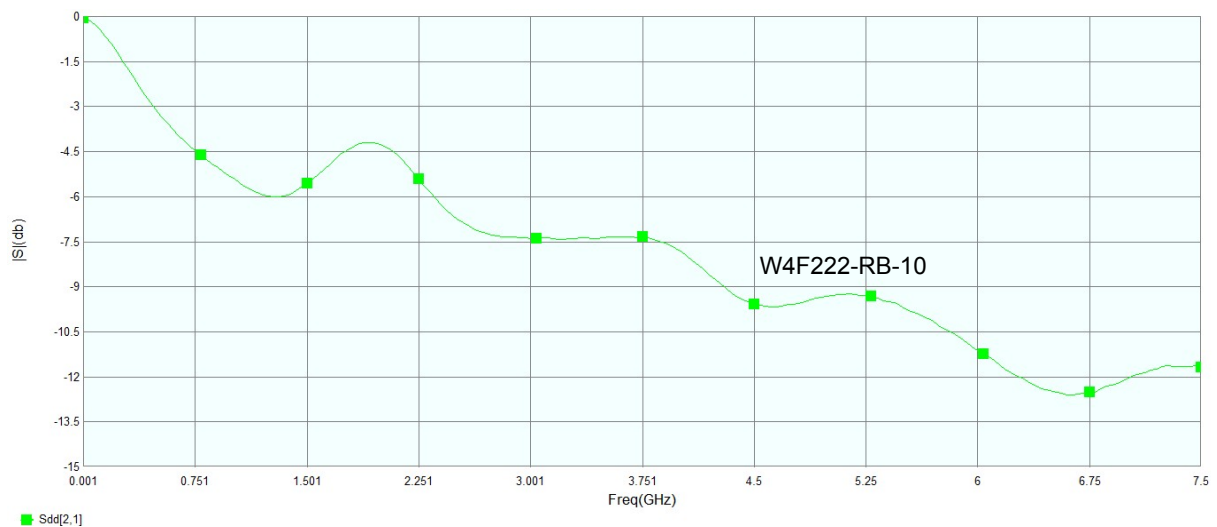
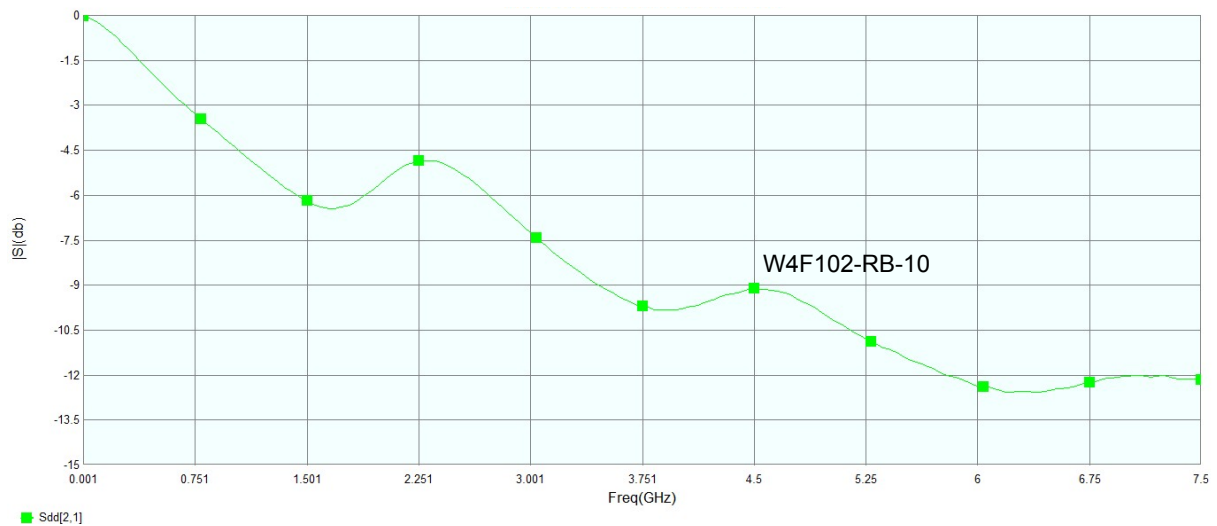
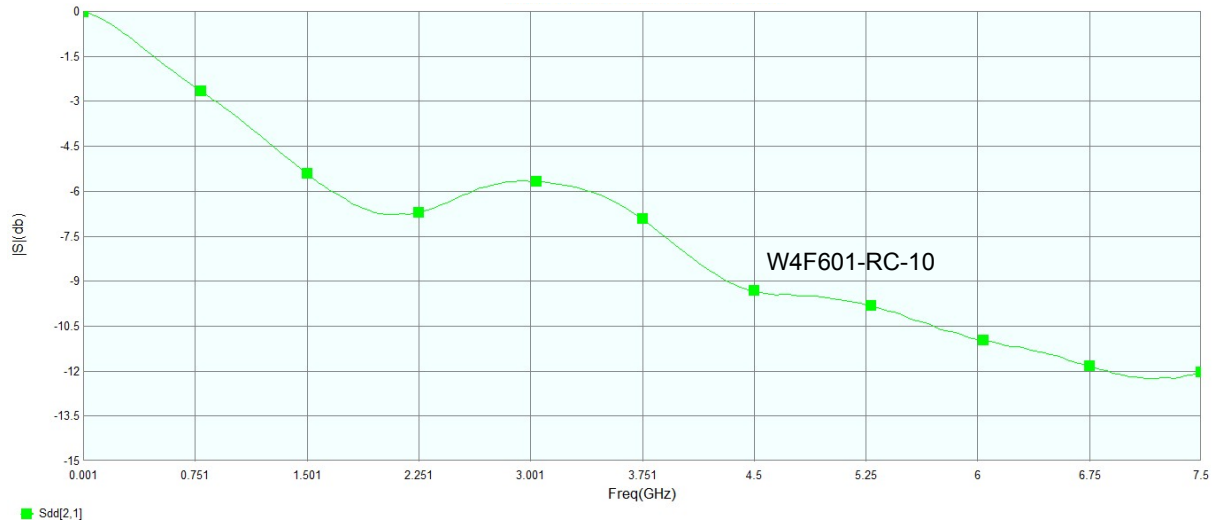
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8. Soldering

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 :

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

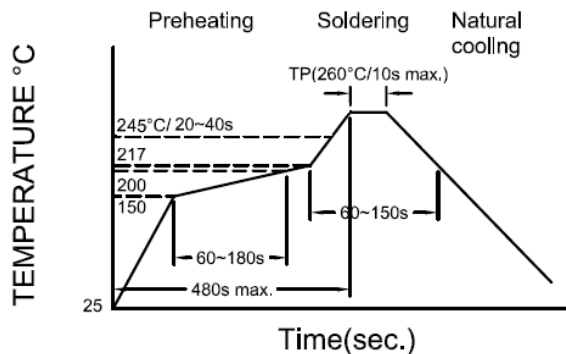


Figure 1. : Re-flow Soldering time
3 times max

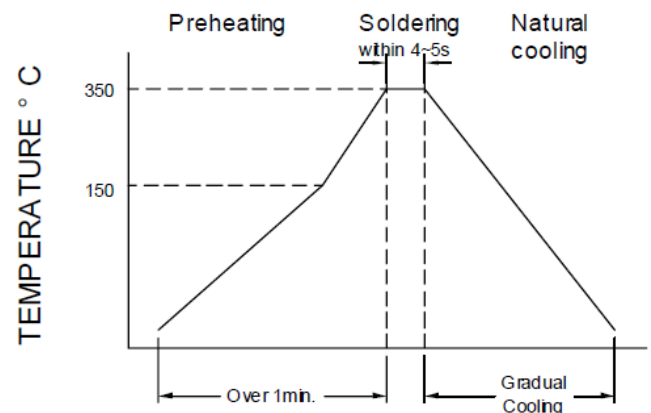
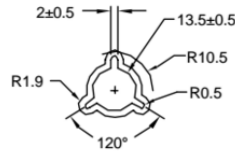
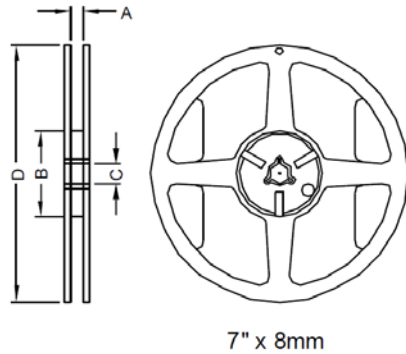


Figure 2. : Iron Soldering time
1 times max

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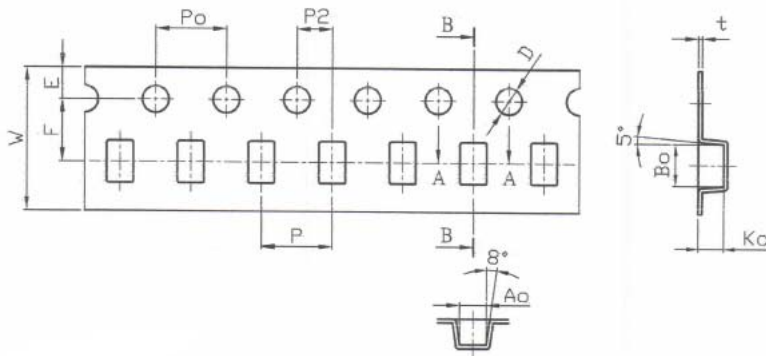
9. Packaging Information:

9-1 Reel Dimension



Type	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)
W4	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	1.88±0.10	3.50±0.10	2.20±0.10	0.26±0.05

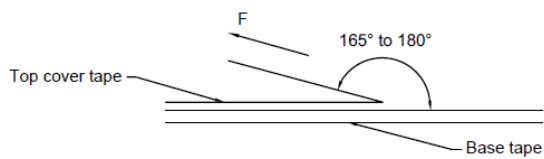
9-3 Packaging Quantity

Chip Size	W4
Chip/Reel	2,000
Inner Box	10,000
Middle Box	50,000
Carton	100,000

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



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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