1. Part No. Expression:

WAQ7FND110-RC-10

- (a)
- (b) (c)
- (d)

(e)(f)

(g)

(a) Series Code

(e) Packaging Code

(b) Dimension Code

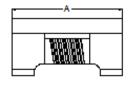
(f) Current Rating Code

(c) Material Code

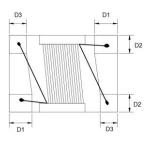
(g) Internal Controlled Number

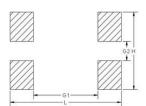
(d) Inductance Code

2. Configuration & Dimensions:







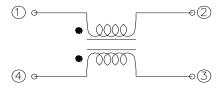


Recommended PCB layout

Unit: mm

Ī	Α	В	С	D1	D2	D3	L	Н	G1	G2
	4.50±0.2	3.20±0.2	2.80±0.2	0.75±0.2	0.85±0.2	0.60±0.2	5.00 Ref.	3.60 Ref.	3.40 Ref.	1.70 Ref.

3. Schematic:

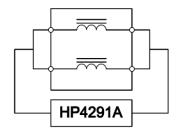


NOTE: Specifications subject to change without notice. Please check our website for latest information.

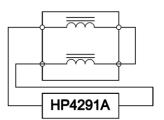


4. Measuring Circuits:

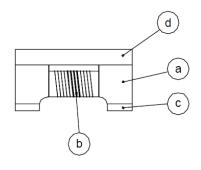
Common mode



Differential mode



5. Material List:



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

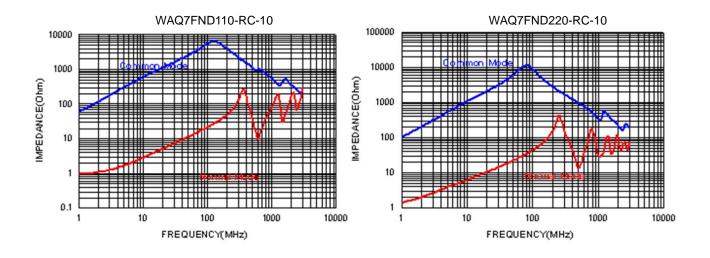
6. General Specification:

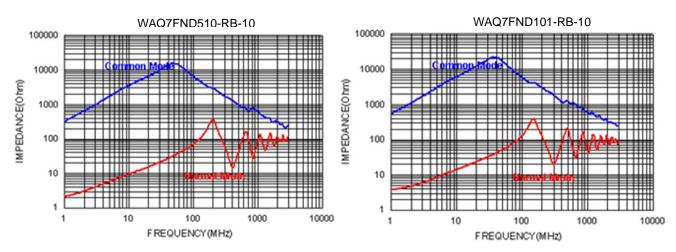
- (a) Reliability test for this part meets AEC-Q200 standard.
- (b) Operating Temp. : -55°C to +150°C.
- (c) Storage Temp. : -55°C to +150°C (on board).
- (d) Temperature Rise: 20°C Max. At Rated Current <1A.
- (e) Storage Condition (Component in its packaging)
 - i) Temperature: Less than 40°C
 - ii) Humidity: 60% RH

7. Electrical Characteristics:

Part Number	Common Impedar 10M Min.	nce (Ω)	Inductance (uH)+50/-30% [0.1V/100K]	DC Resistance (Ω) Max.	Rated Current (mA)	Rated Volt. (Vdc)	IR (MΩ) Min.
WAQ7FND110-RC-10	300	600	11	0.6	360	50	10
WAQ7FND220-RC-10	500	1200	22	1.0	310	50	10
WAQ7FND510-RB-10	1000	2800	51	1.0	230	50	10
WAQ7FND101-RB-10	2000	5800	100	2.0	200	50	10

8. Characteristics Curves:





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



9. 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.

9-1 Solder Re-flow

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

9-2 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.

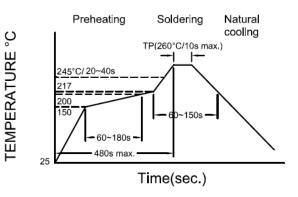


Figure 1. : Re-flow Soldering time 3 times Max.

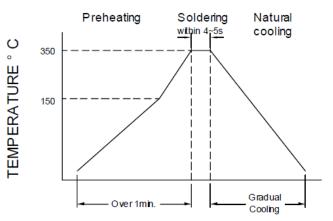
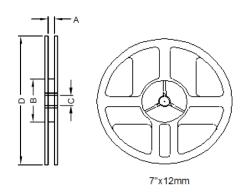
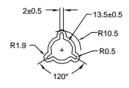


Figure 2. : Iron Soldering time 1 times Max.

10. Packaging Information:

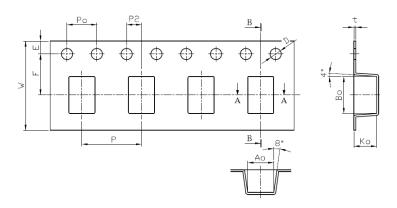
10-1 Reel Dimension





Туре	A(mm)	B(mm)	C(mm)	D(mm)	
7"x12mm	13.5±0.5	60.0±2.0	13.5±0.5	178±2.0	

10-2 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)
WAQ7FND	12.0±0.1	8.0±0.1	1.75±0.1	5.5±0.05	2.0±0.05	1.05+0.1/-0	4.0±0.1	3.6±0.1	4.9±0.1	3.0±0.1	0.26±0.05

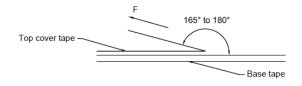
10-3 Packaging Quantity

Chip Size	WAQ7FND		
Chip/Reel	500		
Inner Box	2,000		
Middle Box	10,000		
Carton	20,000		

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



10-4 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.