

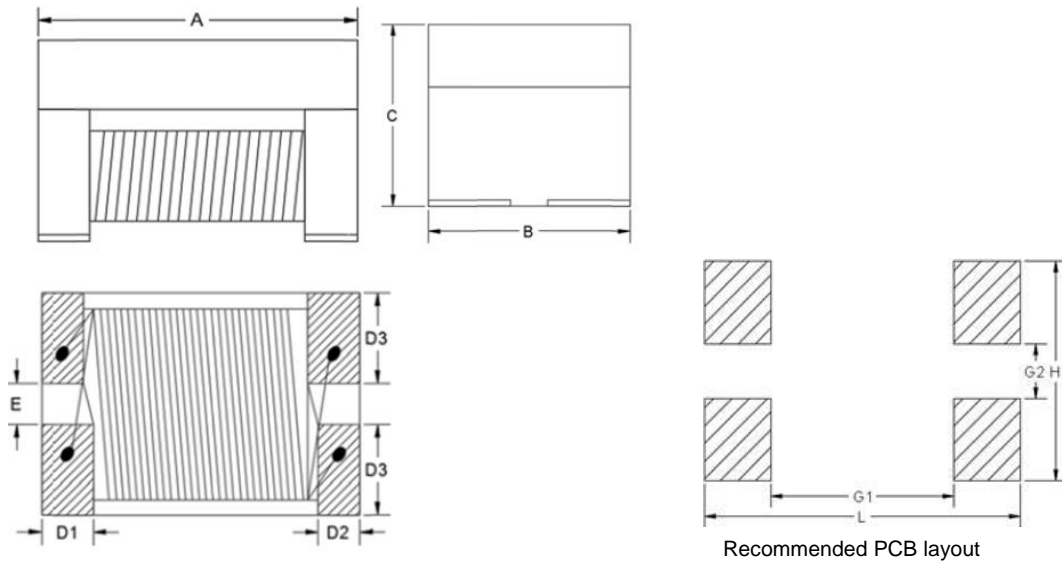
1. Part No. Expression:

WAQ7FNT101-RD-10

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

- (a) Series Code
- (b) Dimension Code
- (c) Material Code
- (d) Inductance Code
- (e) Packaging Code
- (f) Current Rating Code
- (g) Standard Code

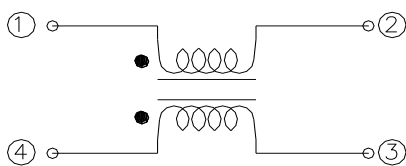
2. Configuration & Dimensions:



Unit: mm

A	B	C	D1	D2	D3	E	L	H	G1	G2
4.6±0.2	3.2±0.2	2.9±0.15	0.75±0.2	0.6±0.2	1.3±0.2	0.6±0.2	5.0 Ref.	3.2 Ref.	3.5 Ref.	0.9 Ref.

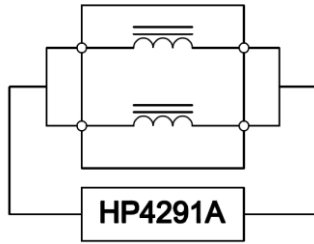
3. Schematic:



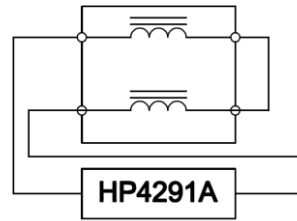
NOTE: Specifications subject to change without notice. Please check our website for latest information.

4. Measuring Circuits:

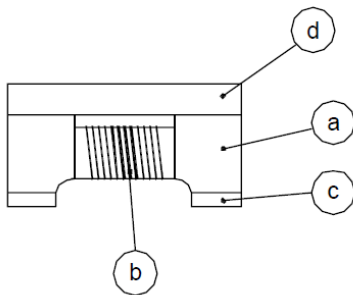
Common mode



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. : -40°C to +125°C (Including self - temperature rise).
- (c) Storage Temp. : -40°C to +125°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

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



7. Electrical Characteristics:

Part Number	Inductance (uH)Typ. [0.1V/100KHz]	DCR (Ω) Max.	Rated Current (mA) Max.	Insertion loss Max.		Return Loss (Min.) (Z OUT=100Ω ±1%)			
				10-100MHz	100-400MHz	30-80MHz	200MHz	400MHz	
WAQ7FNT101-RD-10	100	4.2	100	-1.0 dB	-1.7 dB	-22 dB	-17 dB	-15 dB	
	Common To Common- Mode Rejection (Min.)				Common To Differential- Mode Rejection (Min.)				Turns Ratio and Polarity
	30-80MHz	200MHz	400MHz	1000MHz	10-30MHz	100MHz	200MHz	1000MHz	
	-45 dB	-35 dB	-32 dB	-25 dB	-60 dB	-47 dB	-40 dB	-38 dB	1.00±2%,PER SCHEMATIC

Part Number	Inductance (uH)Typ. [0.1V/100KHz]	DCR (Ω) Max.	Rated Current (mA) Max.	Insertion loss Max.		Return Loss (Min.) (Z OUT=100Ω ±1%)			
				100 KHz	1-60 MHz	1-10MHz	30MHz	60MHz	
WAQ7FNT161-RA-10	160	5.0	100	-0.5 dB	-1.0 dB	-26 dB	-21.1 dB	-18 dB	
	Common To Common- Mode Rejection (Min.)				Common To Differential- Mode Rejection (Min.)				Turns Ratio and Polarity
	1 MHz	10-100MHz	400MHz	1000MHz	1-10MHz	100MHz	1000MHz		
	-23 dB	-42 dB	-25 dB	-15 dB	-70 dB	-50 dB	-24 dB	1.00±2%,PER SCHEMATIC	

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



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.
- 350°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.

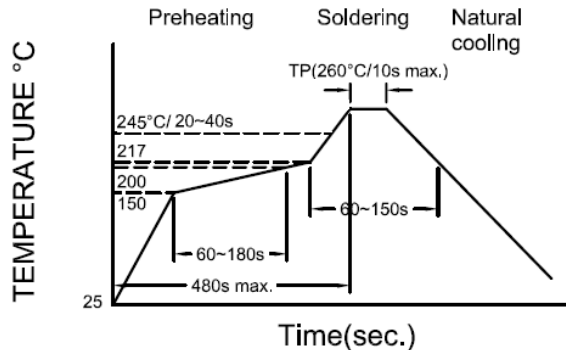


Figure 1. : Re-flow Soldering time
3 times Max.

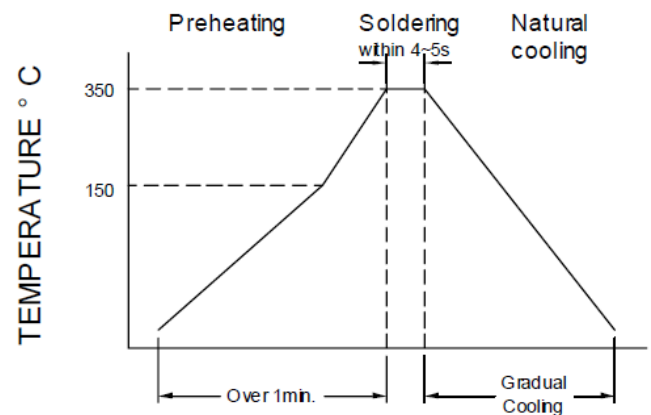
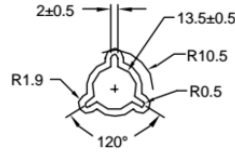
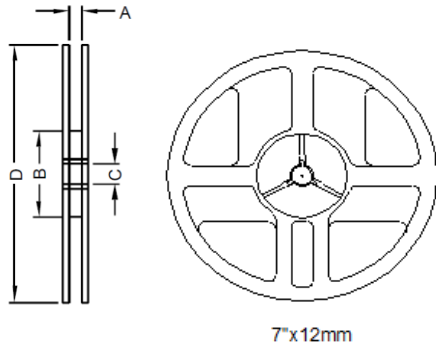


Figure 2. : Iron Soldering time
1 times Max.

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

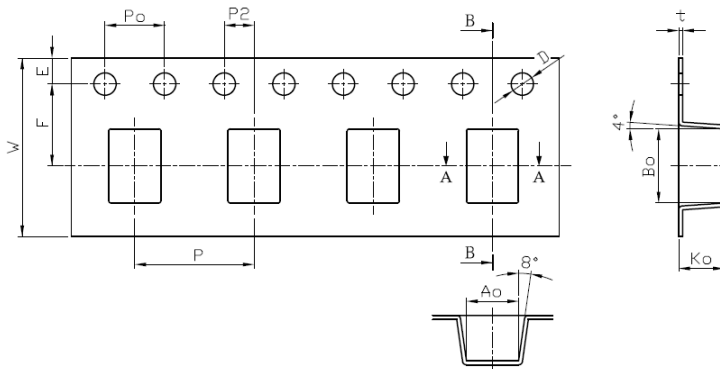
9. Packaging Information:

9-1 Reel Dimension



Type	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

9-2 Tape Dimension



Size	P(mm)	Po(mm)	P2(mm)	Bo(mm)	Ao(mm)	Ko(mm)	D(mm)	E(mm)	F(mm)	W(mm)	t(mm)
WAQ7FNT	8.0±0.1	4.0±0.1	2.0±0.05	4.9±0.1	3.6±0.1	3.0±0.1	1.05 +0.1/-0	1.75±0.1	5.5±0.05	12.0±0.1	0.26±0.05

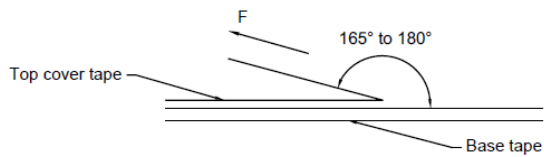
9-3 Packaging Quantity

Chip Size	WAQ7FNT
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.



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.

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