ZA SERIES

## 1. PART NO. EXPRESSION:

ZAW100-RE-

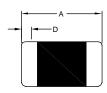
- (a) Series code
- (d) R : Reel

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

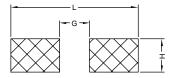
- (e) Current code
- (b) Material code (c) Impedance code
- (f) 10: Standard

11 ~ 99 : Internal control number

## 2. CONFIGURATION & DIMENSIONS:









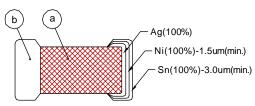
PC Board Pattern

Unit:m/m

А	В	С	D	L	G	Н
0.40± 0.02	0.20± 0.02	0.20± 0.02	0.10+0.04/-0.03	0.5 Ref.	0.20 Ref.	0.15~0.30

## 3. SCHEMATIC:

## 4. MATERIALS:



- (a) Body: Ferrite
- (b) Termination : Ag/Ni/Sn

# 5. GENERAL SPECIFICATION:

- a) Operating temp. : -40° C to +125° C (including self-temperature. rise )
- b) Storage condition (component in its packaging)
  - i) Temperature : -10 to 40° C
  - ii) Humidity: 60%



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



# ZA SERIES

## 6. ELECTRICAL CHARACTERISTICS:

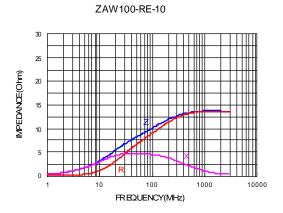
Part Number	Impedance (Ω)	Test Frequency ( Hz )	DC Resistance (Ω) Max.	Rated Current ( mA ) Max.
ZAW100-RE-10	10±5	100	0.10	540
ZAW700-RB-10	70± 25%	100	0.37	280
ZAW121-RB-10	120± 25%	100	0.53	240
ZAH750-RB-10	75± 25%	100	0.45	260
ZAH121-RB-10	120± 25%	100	0.60	220

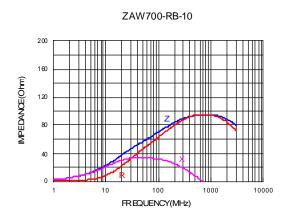


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# ZA SERIES

## 7. CHARACTERISTICS CURVES:

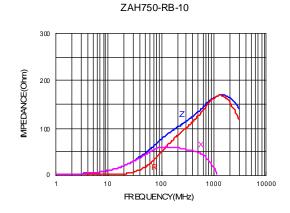


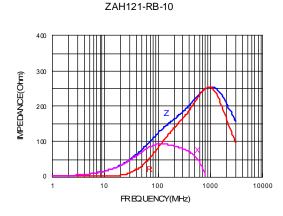


ZAW121-RB-10

300
200
100
1000
10000

REQUENCY(MHz)





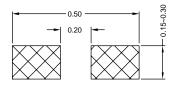


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#### 8. SOLDERING AND MOUNTING:

#### 8-1. Recommended PC Board Pattern



PC board should be designed so that products are not sufficient under mechanical stress as warping the board.

Products shall be positioned in the sideway direction against the mechanical stress to prevent failure.

#### 8-2. Soldering

Mildly activated rosin fluxes are preferred. The minimum amount of solder can lead to damage from the stresses caused by the difference in coefficients of expansion between solder, chip and substrate. The terminations are suitable for all wave and re-flow soldering systems. If hand soldering cannot be avoided, the preferred technique is the utilization of hot air soldering tools.

Note.

If Use Wave soldering is there will be some risk.

Re-flow soldering temperatures below 240 degrees, there will be unwitting risk

#### 8-2.1 Lead Free Solder Re-flow:

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

#### 8-2.2 Soldering Iron:

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. for Iron Soldering in Figure 2.

- a) Preheat circuit and products to 150° C.
- b) 350° C tip temperature for Ferrite chip bead (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 secs.

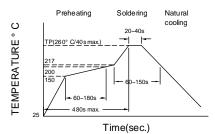


Figure 1. Re-flow Soldering:3 times max

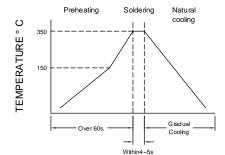


Figure 2. Wave Soldering:1 times max



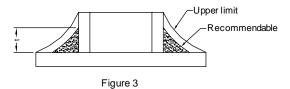
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## 8-3. Solder Volume

Accordingly increasing the solder volume, the mechanical stress to product is also increased. Exceeding solder volume may cause the failure of mechanical or electrical performance. Solder shall be used not to be exceed as shown in Fig. 3. Minimum fillet height = soldering thickness + 25% product height

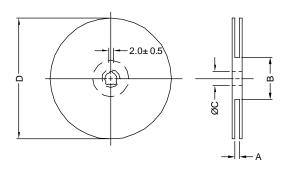


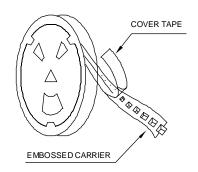


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## 9. PACKAGING INFORMATION:

## 9-1. Reel Dimension

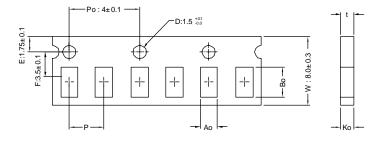




Туре	A(mm)	B(mm)	C(mm)	D(mm)
7" x 8mm	10±1.5	50 or more	13.0±0.2	178.0±2.0

## 9-2 Tape Dimension / 8mm

## Material of taping is paper



Bo(mm)	Ao(mm)	Ko(mm)	P(mm)	t(mm)
0.45± 0.04	0.25± 0.04	0.36max	2.0± 0.05	0.36max



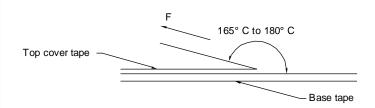
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## 9-3. Packaging Quantity

Series	ZA
Chip / Reel	20000
Inner Box	100000
Middle box	500000
Carton	1000000

## 9-4. Tearing Off Force



The force for tearing off cover tape is 15 to 60 grams in the arrow direction under the following conditions.

Room Temp.	Room Humidity	Room atm	Tearing Speed (mm/min)
(° C)	(%)	(hPa)	
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) The use of tweezers or 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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