

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



### Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China











### Noise Absorber

Controlled ESR Type

# YNA series

YNA15 1005 [0402 inch] YNA18 1608 [0603 inch] YNA21 2012 [0805 inch]

\* Dimensions Code JIS[EIA]



## Noise Absorber Controlled ESR Type

Conformity to RoHS Directive Lead-free Compatible

### **Overview of YNA Series**

### **FEATURES**

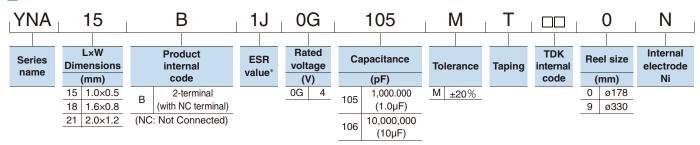
- The special laminated interior structure means ESR values can be controlled.
- OAn impedance waveform with no pole means anti-resonance is controlled.
- OWithout decreasing power efficiency, EMI measures can be taken.

#### APPLICATIONS

Countermeasures against ringing of switching power supply for smart phones, tablet PCs, etc.

Countermeasures against anti-resonance of impedance inside a decoupling circuit

### PART NUMBER IDENTIFICATION



<sup>\*</sup> An ESR value is shown in two characters with a m $\Omega$  unit. The first digit is the multiplier of the ESR value: 1: 10, 2: 100, and 3: 1000. The second digit shows the significant figure of the ESR value. A: 1.0, B: 1.5, C: 2.0, D: 2.5, E: 3.0, F: 3.5, G: 4.0, H: 4.5, J: 5.0, K: 5.5, L: 6.0, M: 6.5, N: 7.0, P: 7.5, Q: 8.0, R: 8.5, S: 9.0, T: 9.5, U: 1.2

### SPECIFICATIONS

	Specifications				
Type	Operating temperature	Storage temperature			
	range	range(After mount)			
YNA15	-55 to +85	-55 to +85			
YNA18	-55 to +85	-55 to +85			
YNA21	-55 to +85	-55 to +85			

### ■ PACKAGING STYLE AND SPECIFICATIONS

Type	Package quantit	Single weight (g)	
Type	ø178	ø330	Siligle weight (g)
YNA15	10,000	50,000	0.0008
YNA18	4,000	10,000	0.0051
YNA21	4,000	10,000	0.0095

Oconformity to RoHS Directive: This means that, in conformity with EU Directive 2002/95/EC, lead, cadmium, mercury, hexavalent chromium, and specific bromine-based flame retardants, PBB and PBDE, have not been used, except for exempted applications.

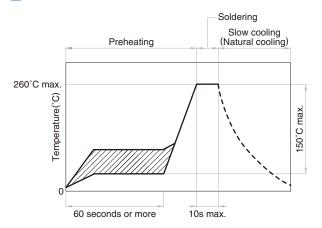
OPlease contact our Sales office when your application is considered the following:

The device's failure or malfunction may directly endanger human life (e.g. application for automobile/aircraft/medical/nuclear power devices, etc.)

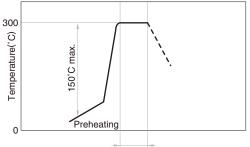
### **Overview of YNA Series**

### ■ RECOMMENDED SOLDERING CONDITION

### **□ REFLOW SOLDERING**



### ☐HAND SOLDERING



### Make as short as possible (within three seconds)

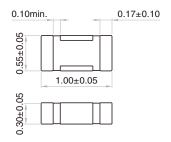
### **■ PRECAUTIONS FOR USE**

- $\bigcirc$  Before soldering, be sure to preheat components. The  $\Delta T$  preheating temperature must be 150°C max. with attention paid to thermal shock.
- ONatural cooling of components in the air is recommended. On the other hand, when dipping them in a solvent for purposes, such as cleaning, make sure that the temperature difference  $(\Delta T)$  is  $100^{\circ}$
- When performing hand soldering for circuit modification, apply the soldering iron to the copper foil area of the printed circuit board for 3 seconds or less. The temperature of the iron tip should not exceed 300°C.
- Use a wrist band to discharge static electricity in your body through the grounding wire.
- When incorporating the printed circuit board on which this product is mounted into a frame, etc., do not apply stress to the product through local bending of the board by tightening of screws, etc.

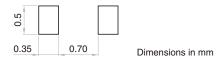


### YNA Series YNA15 Type

#### **SHAPES AND DIMENSIONS**



#### RECOMMENDED LAND PATTERN



The lateral terminals are not connected.

### **ELECTRICAL CHARACTERISTICS**

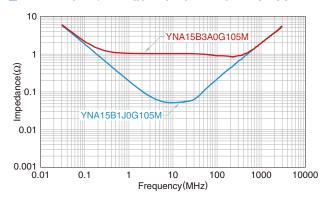
### **CHARACTERISTICS SPECIFICATION TABLE**

Part No.	Capacitance (μF)	Tolerance (%)	Rated voltage Edc (V)	ESR (mΩ)
YNA15B1J0G105MT00□N*	1	20	4	50 (±30%)
YNA15B2A0G105MT00□N	1	20	4	100 (±30%)
YNA15B2C0G105MT00□N	1	20	4	200 (±30%)
YNA15B2J0G105MT00□N	1	20	4	500 (±30%)
YNA15B3A0G105MT00□N	1	20	4	1000 (±30%)

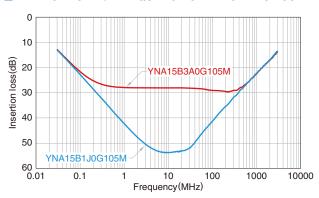
<sup>\*</sup> Any ESR value can be set if it is the same as or smaller than the maximum ESR value. Contact us if you need an ESR value other than ones shown in the table.

### **■ ELECTRICAL CHARACTERISTICS GRAPH (EXAMPLE)**

### □IMPEDANCE vs. FREQUENCY CHARACTERISTICS



### **ATTENUATION vs. FREQUENCY CHARACTERISTICS**

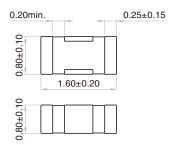


<sup>\* □:</sup> Please specify reel size code, 0 (ø178) or 9 (ø330)

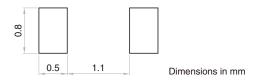


### YNA Series YNA18 Type

### **SHAPES AND DIMENSIONS**



### **RECOMMENDED LAND PATTERN**



The lateral terminals are not connected.

### **ELECTRICAL CHARACTERISTICS**

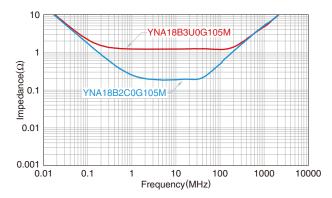
### **CHARACTERISTICS SPECIFICATION TABLE**

Part No.	Capacitance (μF)	Tolerance (%)	Rated voltage Edc (V)	ESR (mΩ)
YNA18B1J0G105MT00□N*	1	20	4	50 (±30%)
YNA18B2A0G105MT00□N	1	20	4	100 (±30%)
YNA18B2C0G105MT00□N	1	20	4	200 (±30%)
YNA18B2J0G105MT00□N	1	20	4	500 (±30%)
YNA18B3U0G105MT00□N	1	20	4	1200 (±30%)

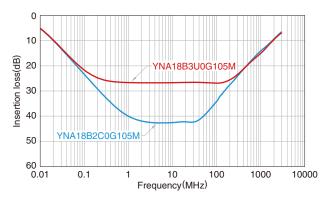
<sup>\*</sup> Any ESR value can be set if it is the same as or smaller than the maximum ESR value. Contact us if you need an ESR value other than ones shown in the table.

### ■ ELECTRICAL CHARACTERISTICS GRAPH (EXAMPLE)

### □ IMPEDANCE vs. FREQUENCY CHARACTERISTICS



### **ATTENUATION vs. FREQUENCY CHARACTERISTICS**

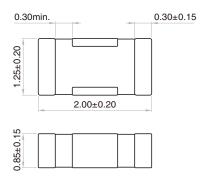


<sup>\* □:</sup> Please specify reel size code, 0 (ø178) or 9 (ø330)

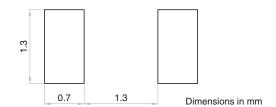


### YNA Series YNA21 Type

### **SHAPES AND DIMENSIONS**



### ■ RECOMMENDED LAND PATTERN



The lateral terminals are not connected.

### **ELECTRICAL CHARACTERISTICS**

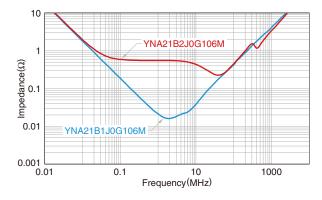
### **CHARACTERISTICS SPECIFICATION TABLE**

Part No.	Capacitance (μF)	Tolerance (%)	Rated voltage Edc (V)	ESR (mΩ)
YNA21B1J0G106MT00□N*	10	20	4	50 (±30%)
YNA21B2A0G106MT00□N	10	20	4	100 (±30%)
YNA21B2C0G106MT00□N	10	20	4	200 (±30%)
YNA21B2J0G106MT00 □ N	10	20	4	500 (±30%)

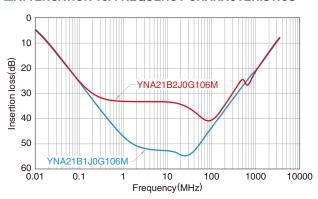
<sup>\*</sup> Any ESR value can be set if it is the same as or smaller than the maximum ESR value. Contact us if you need an ESR value other than ones shown in the table.

### ■ ELECTRICAL CHARACTERISTICS GRAPH (EXAMPLE)

### □IMPEDANCE vs. FREQUENCY CHARACTERISTICS



### **ATTENUATION vs. FREQUENCY CHARACTERISTICS**



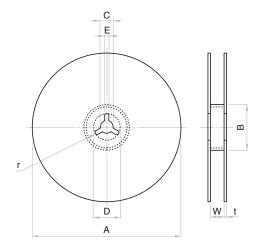
<sup>\* □:</sup> Please specify reel size code, 0 (ø178) or 9 (ø330)



### YNA series

### **Packaging Style**

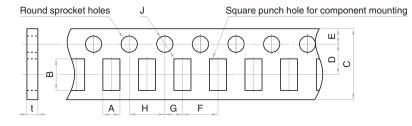
### **REEL DIMENSIONS**



Dimensions in mm

Reel	A	В	С	D	E	W	t	r
ø178	ø178±2.0	ø60±2.0	ø13±0.5	ø21±0.8	2.0±0.5	9.0±0.3	2.0±0.5	1.0
ø330	ø382 max.(ø330 nom.)	ø50 min.	ø13±0.5	ø21±0.8	2.0±0.5	10.0±1.5	2.0±0.5	1.0

### **TAPE DIMENSIONS**



Dimensions in mm

Туре	Α	В	С	D	E	F	G	Н	J	t
YNA15	0.65 typ.	1.15 typ.	8.00±0.30	3.50±0.05	1.75±0.10	2.00±0.05	2.00±0.05	4.00±0.10	ø1.50+0.10/-0	0.70 max.
YNA18	1.10 typ.	1.90 typ.	8.00±0.30	3.50±0.05	1.75±0.10	4.00±0.10	2.00±0.05	4.00±0.10	ø1.50+0.10/-0	1.20 max.
YNA21	1.50 typ.	2.30 typ.	8.00±0.30	3.50±0.05	1.75±0.10	4.00±0.10	2.00±0.05	4.00±0.10	ø1.50+0.10/-0	1.20 max.