imall

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

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December 2016

Noise Absorber

Controlled ESR Type

YNA series



YNA18

1608 [0603 inch]*

* Dimensions code JIS[EIA]

Before using these products, be sure to request the delivery specifications.

SAFETY REMINDERS

Please pay sufficient attention to the warnings for safe designing when using these products.

▲ REMINDERS O not use or store in locations where there are conditions such as gas corrosion (salt, acid, alkali, etc.). Before soldering, be sure to preheat components. The preheating temperature should be set so that the temperature difference between the solder temperature and product temperature does not exceed 150°C. Osldering corrections after mounting should be within the range of the conditions determined in the specifications. If overheated, a short circuit, performance deterioration, or lifespan shortening may occur. ○ Self heating (temperature increase) occurs when the power is turned ON, so the tolerance should be sufficient for the set thermal design. O Do not use for a purpose outside of the contents regulated in the delivery specifications. O The products listed on this catalog are intended for use in general electronic equipment (AV equipment, telecommunications) equipment, home appliances, amusement equipment, computer equipment, personal equipment, office equipment, measurement equipment, industrial robots) under a normal operation and use condition. The products are not designed or warranted to meet the requirements of the applications listed below, whose performance and/or quality require a more stringent level of safety or reliability, or whose failure, malfunction or trouble could cause serious damage to society, person or property. If you intend to use the products in the applications listed below or if you have special requirements exceeding the range or conditions set forth in the each catalog, please contact us. (1) Aerospace/Aviation equipment (8) Public information-processing equipment (2) Transportation equipment (cars, electric trains, ships, etc.) (9) Military equipment (3) Medical equipment (10) Electric heating apparatus, burning equipment

- (4) Power-generation control equipment
- (5) Atomic energy-related equipment
- (6) Seabed equipment
- (7) Transportation control equipment

- (11) Disaster prevention/crime prevention equipment
- (12) Safety equipment
- (13) Other applications that are not considered general-purpose applications

When designing your equipment even for general-purpose applications, you are kindly requested to take into consideration securing protection circuit/device or providing backup circuits in your equipment.

公TDK

Noise Absorber Controlled ESR Type

Overview of YNA18 type

FEATURES

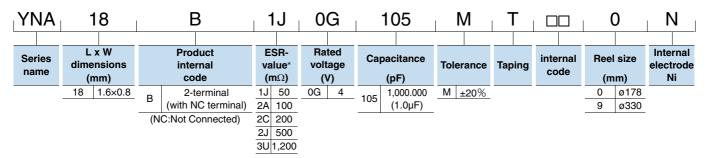
The special laminated interior structure means ESR values can be controlled.
An impedance waveform with no pole means anti-resonance is controlled.

OWithout decreasing power efficiency, EMI measures can be taken.

APPLICATION

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 CONSTRUCTION



 * An ESR value is shown in two characters with a m Ω unit.

OPERATING TEMPERATURE RANGE

	Temperature(°C)				
Туре	Operating temperature range	Storage temperature range (After mount)			
YNA18	–55 to +85	–55 to +85			

PACKAGING STYLE AND SPECIFICATIONS

Туре	Package quant	Individual weight		
	ø178	ø330	(g)	
YNA18	4,000	10,000	0.0051	

OROHS Directive Compliant Product: See the following for more details.https://product.tdk.com/info/en/environment/rohs/index.html

Please be sure to request delivery specifications that provide further details on the features and specifications of the products for proper and safe use. Please note that the contents may change without any prior notice due to reasons such as upgrading.

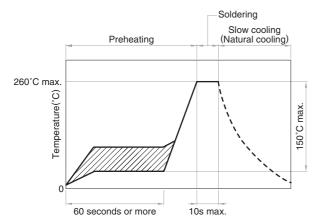
⊗TDK

(3/5)

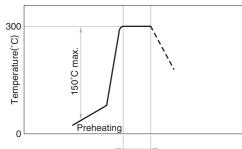
YNA18 type

RECOMMENDED SOLDERING CONDITION

REFLOW SOLDERING



HAND SOLDERING



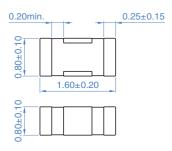
Make as short as possilble (within three seconds)

REMINDERS FOR HANDLING THESE PRODUCTS

- \bigcirc Before soldering, be sure to preheat components. The Δ T preheating temperature must be 150°C max. with attention paid to thermal shock.
- \bigcirc Natural 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 (Δ T) is 100°C.
- 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.

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SHAPE & DIMENSIONS



RECOMMENDED LAND PATTERN



Dimensions in mm

The lateral terminals are not connected.

ELECTRICAL CHARACTERISTICS

CHARACTERISTICS SPECIFICATION TABLE

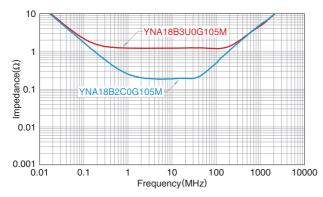
Part No.*	Capacitance (μF)	Tolerance (%)	Rated voltage Edc (V)	ESR** (mΩ)
YNA18B1J0G105MT00 N	1	20	4	50 (±30%)
YNA18B2A0G105MT00 N	1	20	4	100 (±30%)
YNA18B2C0G105MT00□N	1	20	4	200 (±30%)
YNA18B2J0G105MT00⊡N	1	20	4	500 (±30%)
YNA18B3U0G105MT00□N	1	20	4	1200 (±30%)

*
: Please specify reel size code, 0 (ø178) or 9 (ø330)

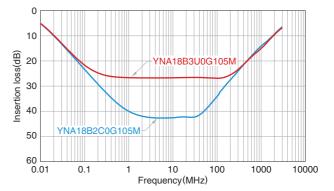
** Any ESR value can be set if it is the same as or smaller than the maximum ESR value. Contact us if you need an ESR value other than ones shown in the table.

ELECTRICAL CHARACTERISTICS GRAPH (EXAMPLE)

IMPEDANCE vs. FREQUENCY CHARACTERISTICS



ATTENUATION vs. FREQUENCY CHARACTERISTICS



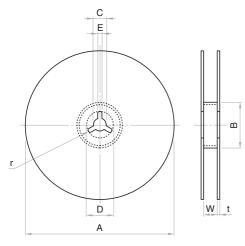
A Please be sure to request delivery specifications that provide further details on the features and specifications of the products for proper and safe use. Please note that the contents may change without any prior notice due to reasons such as upgrading.

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YNA18 type

PACKAGING STYLES

REEL DIMENSIONS



								Unit: 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

Round sprocket holes J Square punch hole for component mounting ш \bigcirc \oplus Æ \oplus Ω C B t F Α Н G

										Unit: mm
Туре	А	В	С	D	E	F	G	Н	J	t
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.

A Please be sure to request delivery specifications that provide further details on the features and specifications of the products for proper and safe use. Please note that the contents may change without any prior notice due to reasons such as upgrading.