

RoHS Compliant

## Features

- Distributed constant type LC filter. Prevents ringing caused by circuit impedance.
- Stable noise attenuation over wide frequency range.
- Small and low profile.
- KNA16xxxUA Series realize sharp attenuation characteristics over the frequency range from 470MHz for terrestrial digital TV to 2GHz for mobile phones.

## Applications

- Data Lines for Mobile Phones (LCD Lines, Video Lines, Bus Lines)
- Bus Lines for Digital Equipment
- Terrestrial Digital TV Broadcasting

## How to Order

New P/N KNA 16 300 C16 MA 5T  
 ① ② ③ ④ ⑤ ⑥

① Series

② Size

<b>16</b>	1608
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③ Cut off Frequency

<b>100</b>	100MHz	<b>300</b>	300MHz
<b>150</b>	150MHz	<b>350</b>	350MHz
<b>170</b>	170MHz	<b>390</b>	390MHz
<b>200</b>	200MHz		

④ Capacitance

<b>C00</b>	0pF	<b>C25</b>	25pF
<b>C11</b>	11pF	<b>C33</b>	33pF
<b>C16</b>	16pF	<b>C35</b>	35pF
<b>C18</b>	18pF	<b>C45</b>	45pF

⑤ Application

<b>MA</b>	Standard cellular phone
<b>UA</b>	Wide band (1 seg., DVB-H)

⑥ Packaging

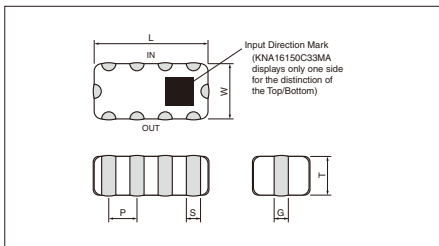
<b>5T</b>	T&R: 5000 pcs. (KNA16: Std.)
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## Specifications

Part Number	Cut off Frequency	Capacitance (+25/-20%)	Attenuation (Typical)	Rated Current	Rated Voltage
New: <b>KNA16150C33MA</b> Old: KNA16150	150MHz	33pF	800 to 1000MHz (@25dB) 1000 to 2500MHz (@20dB)	35mA	25VDC
New: <b>KNA16200C25MA</b> Old: KNA16200	200MHz	25pF	800 to 1000MHz (@25dB) 1000 to 2500MHz (@20dB)	35mA	25VDC
New: <b>KNA16300C16MA</b> Old: KNA16300	300MHz	16pF	800 to 1000MHz (@25dB) 1000 to 2500MHz (@20dB)	35mA	25VDC
New: <b>KNA16390C11MA</b> Old: KNA16500	390MHz	11pF	800 to 1000MHz (@20dB) 1000 to 2500MHz (@15dB)	35mA	25VDC
<b>KNA16350C00MA</b>	350MHz	0pF	800 to 1000MHz (@15dB) 1000 to 2500MHz (@ 6dB)	35mA	25VDC
New: <b>KNA16100C45UA</b> Old: KNA16153	100MHz	45pF	470 to 1000MHz (@30dB) 1000 to 2500MHz (@25dB)	25mA	25VDC
New: <b>KNA16150C35UA</b> Old: KNA16203	150MHz	35pF	470 to 1000MHz (@25dB) 1000 to 2500MHz (@20dB)	25mA	25VDC
New: <b>KNA16170C25UA</b> Old: KNA16253	170MHz	25pF	470 to 1000MHz (@20dB) 1000 to 2500MHz (@20dB)	25mA	25VDC
New: <b>KNA16200C18UA</b> Old: KNA16303	200MHz	18pF	470 to 1000MHz (@20dB) 1000 to 2500MHz (@20dB)	25mA	25VDC

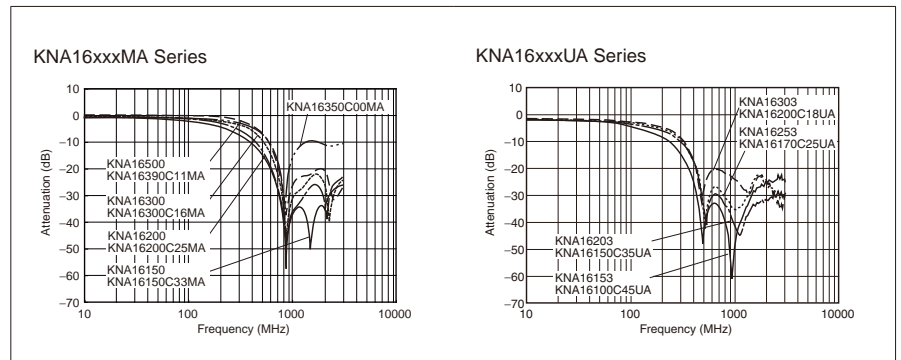
## Dimensions

(Unit: mm)



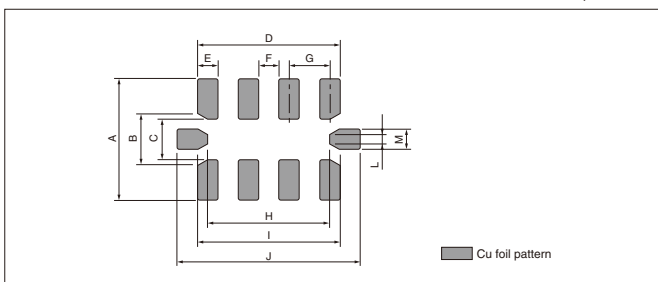
CODE	L	W	T
Dimensions	1.60±0.10	0.8±0.10	0.50±0.10
CODE	P	S	G
Dimensions	0.40	0.20±0.075	0.20±0.075

## Attenuation Characteristics



## Recommended Land Pattern

(Unit: mm)

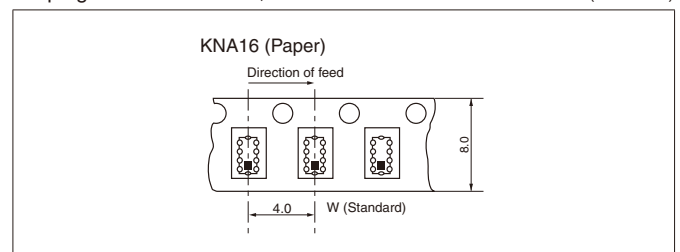


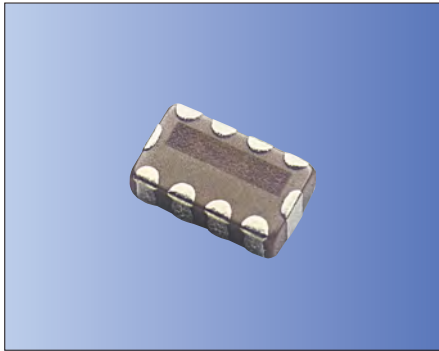
CODE	A	B	C	D	E	F	G	H	I	J	L	M
Dimensions	1.20	0.50	0.40	1.43	0.23	0.17	0.40	1.20	1.40	1.80	0.10	0.20

## Packaging Specification

• Taping KNA16 : 5,000/ reel: STD.

(Unit: mm)





RoHS Compliant

### Features

- Distributed constant type LC filter. Prevents ringing caused by circuit impedance.
- Stable noise attenuation over wide frequency range.
- Small and low profile.
- KNA21xxxUA Series realize sharp attenuation characteristics over the frequency range from 470MHz for terrestrial digital TV to 2GHz for mobile phones.

### Applications

- Data Lines for Mobile Phones (LCD Lines, Video Lines, Bus Lines)
- Bus Lines for Digital Equipment
- Terrestrial Digital TV Broadcasting

### How to Order

New P/N KNA 21 400 C18 MA 3T  
 ① ② ③ ④ ⑤ ⑥

① Series

② Size

<b>21</b>	2012
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③ Cut off Frequency

<b>150</b>	150MHz	<b>250</b>	250MHz
<b>200</b>	200MHz	<b>300</b>	300MHz
<b>220</b>	220MHz	<b>400</b>	400MHz

④ Capacitance

<b>C15</b>	15pF	<b>C35</b>	35pF
<b>C18</b>	18pF	<b>C45</b>	45pF
<b>C25</b>	25pF		

⑤ Application

<b>MA</b>	Standard cellular phone
<b>UA</b>	Wide band (1 seg., DVB-H)

⑥ Packaging

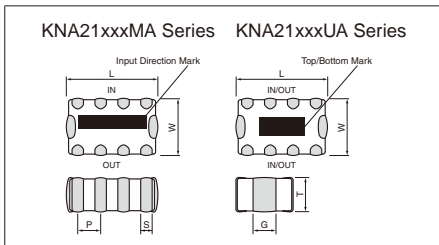
<b>3T</b>	T&R: 3000 pcs. (KNA21: Std.)
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### Specifications

Part Number	Cut off Frequency	Capacitance (+25/-20%)	Attenuation (Typical)	Rated Current	Rated Voltage
New: <b>KNA21300C15MA</b> Old: KNA21301	300MHz	15pF	800 to 2000MHz (@20dB)	35mA	25VDC
New: <b>KNA21400C18MA</b> Old: KNA21400	400MHz	18pF	800 to 1000MHz (@20dB)	50mA	25VDC
New: <b>KNA21150C45UA</b> Old: KNA21153	150MHz	45pF	470 to 1000MHz (@35dB) 1000 to 2500MHz (@25dB)	25mA	25VDC
New: <b>KNA21200C35UA</b> Old: KNA21203	200MHz	35pF	470 to 1000MHz (@30dB) 1000 to 2500MHz (@20dB)	25mA	25VDC
New: <b>KNA21220C25UA</b> Old: KNA21253	220MHz	25pF	470 to 1000MHz (@25dB) 1000 to 2500MHz (@20dB)	25mA	25VDC
New: <b>KNA21250C18UA</b> Old: KNA21303	250MHz	18pF	470 to 1000MHz (@25dB) 1000 to 2500MHz (@20dB)	25mA	25VDC

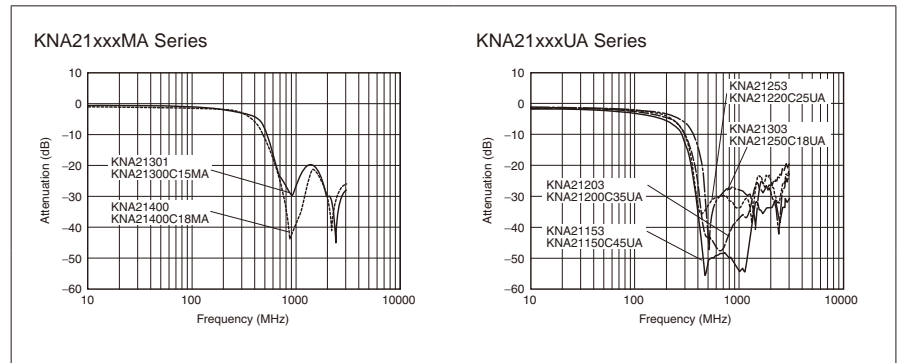
### Dimensions

(Unit: mm)



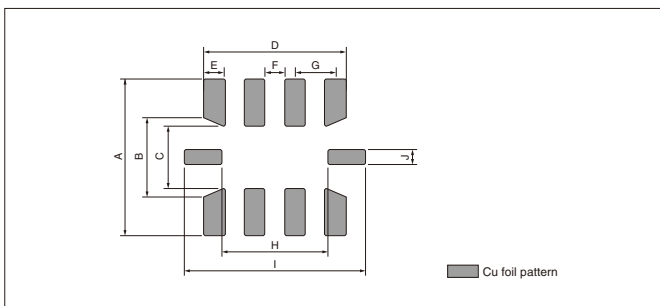
CODE	L	W	T
Dimensions	2.0±0.2	1.25±0.2	0.7±0.15
CODE	P	S	G
Dimensions	0.50	0.25±0.1	0.40±0.15

### Attenuation Characteristics



### Recommended Land Pattern

(Unit: mm)

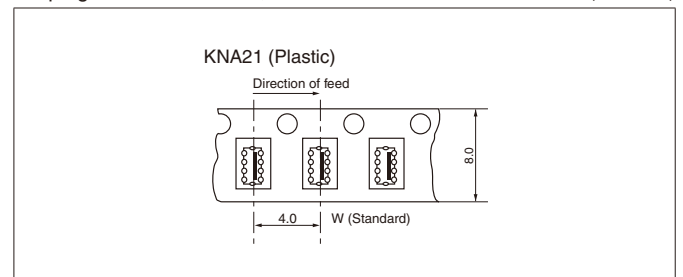


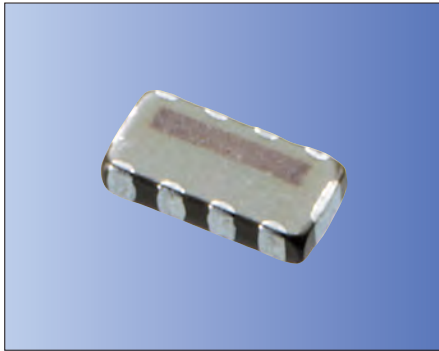
CODE	A	B	C	D	E	F	G	H	I	J
Dimensions	2.00	0.95	0.75	1.75	0.25	0.25	0.50	1.35	2.45	0.20

### Packaging Specification

• Taping KNA21 : 3,000/ reel: STD.

(Unit: mm)





**RoHS Compliant**

**Features**

- Distributed constant type LC filter. Prevents ringing caused by circuit impedance.
- Stable noise attenuation over wide frequency range.
- Low profile (T=0.85mm max.) suitable for miniature electronic equipments.
- First class auto-placement

**Applications**

- PCs, Laser Printers, Cellular Phone, Clock Data Lines for LCD Display
- High Speed Video Signal Circuits and Interface Circuits
- High Speed Digital Circuits

**How to Order**

New P/N KNA 32 200 C35 DA 3T  
 ① ② ③ ④ ⑤ ⑥

① Series

② Size

<b>32</b>	3216
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③ Cut off Frequency

<b>050</b>	50MHz	<b>150</b>	150MHz
<b>075</b>	75MHz	<b>200</b>	200MHz
<b>100</b>	100MHz		

④ Capacitance

<b>C35</b>	35pF	<b>C82</b>	82pF
<b>C45</b>	45pF	<b>C115</b>	115pF
<b>C65</b>	65pF		

⑤ Application

<b>DA</b>	Digital Circuit in General
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⑥ Packaging

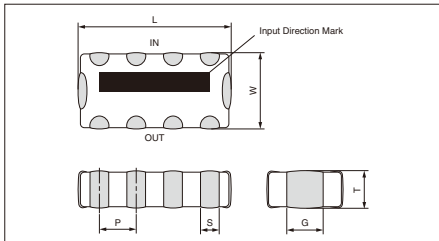
<b>3T</b>	T&R: 3000 pcs. (Std.)
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**Specifications**

Part Number	Cut off Frequency	Capacitance (+25/ -20%)	Attenuation (Typical)	Rated Current	Rated Voltage
New: <b>KNA32050C115DA</b> Old: KNA32050	50MHz	115pF	350 to 850MHz(@20dB)	100mA	25VDC
New: <b>KNA32075C82DA</b> Old: KNA32075	75MHz	82pF	400 to 900MHz(@20dB)	100mA	25VDC
New: <b>KNA32100C65DA</b> Old: KNA32100	100MHz	65pF	450 to 950MHz(@20dB)	100mA	25VDC
New: <b>KNA32150C45DA</b> Old: KNA32150	150MHz	45pF	600 to 1100MHz(@20dB)	100mA	25VDC
New: <b>KNA32200C35DA</b> Old: KNA32200	200MHz	35pF	700 to 1200MHz(@20dB)	100mA	25VDC

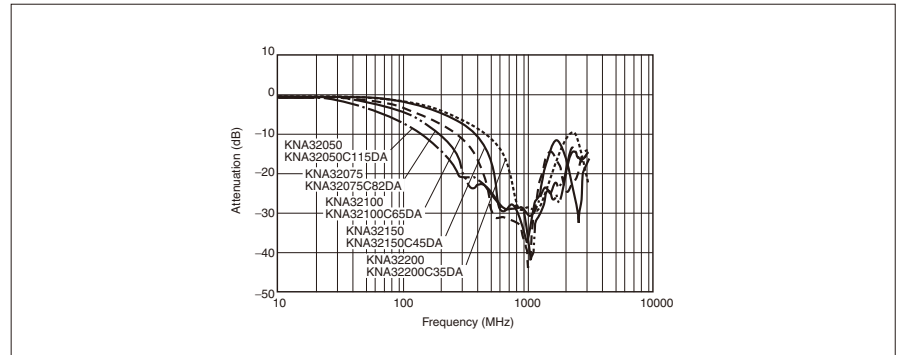
**Dimensions**

(Unit: mm)



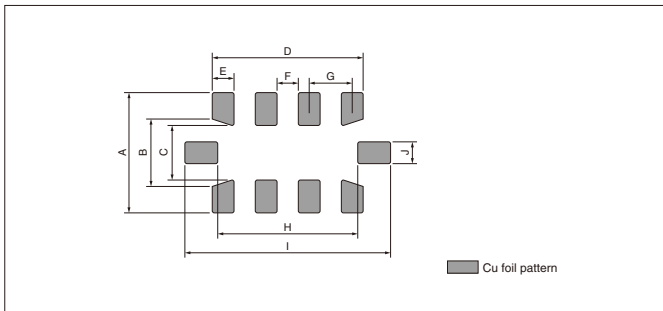
CODE	L	W	T
Dimensions	3.2±0.2	1.6±0.2	0.75±0.1
CODE	P	S	G
Dimensions	0.8	0.35±0.15	0.80±0.20

**Attenuation Characteristics**



**Recommended Land Pattern**

(Unit: mm)



CODE	A	B	C	D	E	F	G	H	I	J
Dimensions	2.20	1.30	1.00	2.80	0.40	0.40	0.80	2.60	3.80	0.4

**Packaging Specification**

- Taping (3,000/ reel)

(Unit: mm)

