

# EMC Components

## Ferrite Beads SMD Array

## ACA Series ACA3216, 5020 Types

### FEATURES

- A single ACA series chip can be used to suppress noise on 3, 4, or 6 lines, depending on the selected part. This product is thus an excellent choice for EMC suppression at the I/O lines of compact electronic equipment, such as portables, which require high-density circuit configurations.
- Two types are available: the M type for general signals and the H type for high-speed (high-frequency band) signals. This noise countermeasure is therefore applicable to various types of circuits.
- A 3-line type is available specifically for audio applications, such as headphone lines.

- A 4-line type with a 3216 form factor is available as a direct replacement for standard chip resistor arrays. It can be used without any change to the circuit board land pattern.

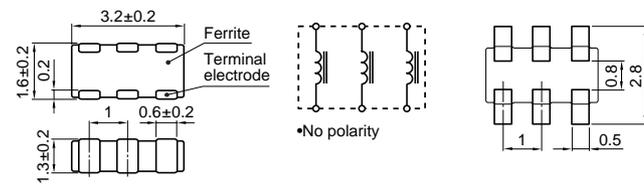
### APPLICATIONS

Noise suppression for audio applications, including headphone lines in CD-ROM, DVD, MD, and other equipment (3-line type). Noise suppression for the I/O lines of notebook PCs, word processors, digital TVs and VTRs, and portable communications equipment.

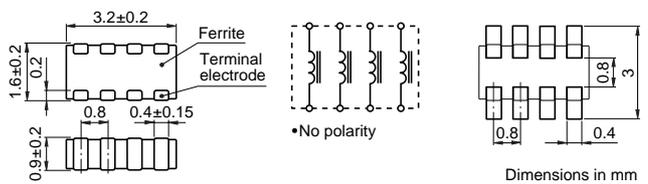
### ACA3216 TYPE (3- and 4-Line)

### SHAPES AND DIMENSIONS/CIRCUIT DIAGRAMS/RECOMMENDED PC BOARD PATTERNS (REFLOW SOLDERING)

#### 3-LINE



#### 4-LINE



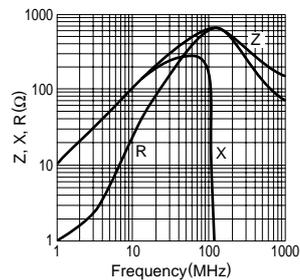
### ELECTRICAL CHARACTERISTICS

Part No.	Impedance (Ω) [100MHz]	DC resistance (Ω)max.	Rated current (mA)max.	Pitch (mm)	Built-in line number	Voltage between lines Edc(V)max.
ACA3216M3-600-X*	600±25%	0.85	100	1	3	5
ACA3216M4-060-X	60±25%	0.4	300	0.8	4	5
ACA3216M4-120-X	120±25%	1	200	0.8	4	5
ACA3216M4-300-X	300±25%	1.7	100	0.8	4	5
ACA3216M4-600-X	600±25%	2.3	60	0.8	4	5
ACA3216H4-060-X	60±25%	0.5	250	0.8	4	5
ACA3216H4-120-X	120±25%	0.8	150	0.8	4	5
ACA3216H4-300-X	300±25%	1.7	100	0.8	4	5

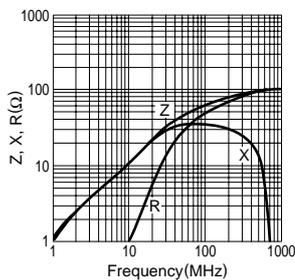
\* X:Packaging style (T: Taping [ø180mm reel], TL: Taping [ø330mm reel], B: Bulk)

### TYPICAL ELECTRICAL CHARACTERISTICS Z, X, R vs. FREQUENCY CHARACTERISTICS

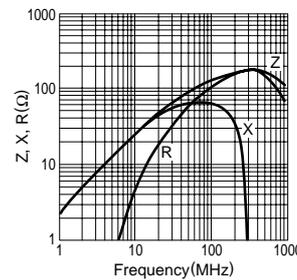
#### ACA3216M3-600



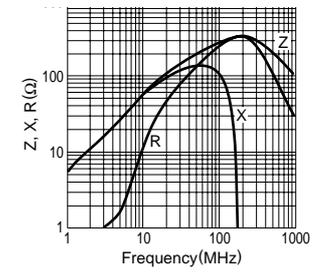
#### ACA3216M4-060



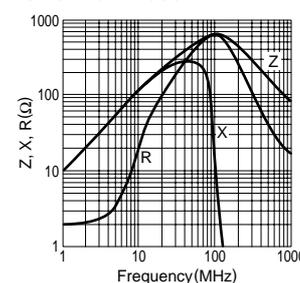
#### ACA3216M4-120



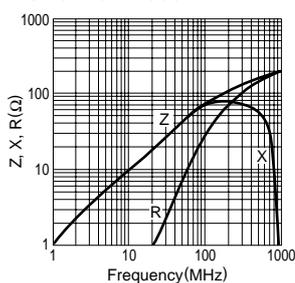
#### ACA3216M4-300



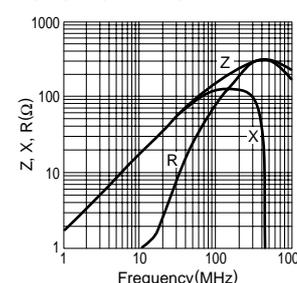
#### ACA3216M4-600



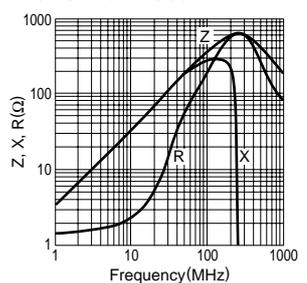
#### ACA3216H4-060



#### ACA3216H4-120



#### ACA3216H4-300



• TEST EQUIPMENT: RF IMPEDANCE ANALYZER YHP4191A

△ Specifications which provide more details for the proper and safe use of the described product are available upon request.  
All specifications are subject to change without notice.

# EMC Components

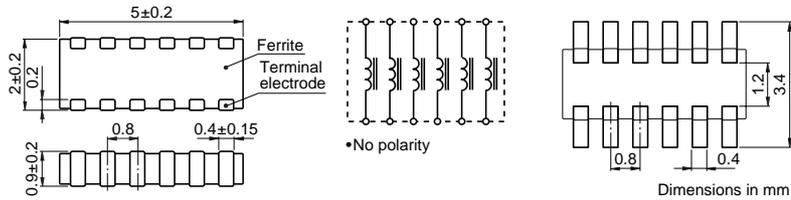
## ACA Series ACA3216, 5020 Types

### Ferrite Beads SMD Array

#### ACA5020 TYPE (6-Line)

#### SHAPES AND DIMENSIONS/CIRCUIT DIAGRAM/RECOMMENDED PC BOARD PATTERN

##### 6-LINE



#### ELECTRICAL CHARACTERISTICS

Part No.	Impedance ( $\Omega$ ) [100MHz]	DC resistance ( $\Omega$ )max.	Rated current (mA)max.	Pitch (mm)	Built-in line number	Voltage between lines Edc(V)max.
ACA5020M6-060-X*	60±25%	0.3	400	0.8	6	5
ACA5020M6-120-X	120±25%	0.5	200	0.8	6	5
ACA5020H6-060-X	60±25%	0.5	250	0.8	6	5
ACA5020H6-120-X	120±25%	0.8	150	0.8	6	5

\* X:Packaging style (T: Taping [ø180mm reel], TL: [ø330mm reel], B: Bulk)

#### TYPICAL ELECTRICAL CHARACTERISTICS

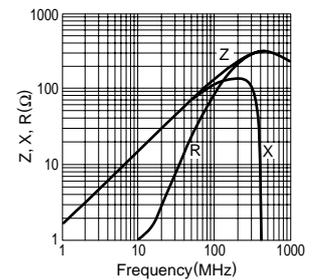
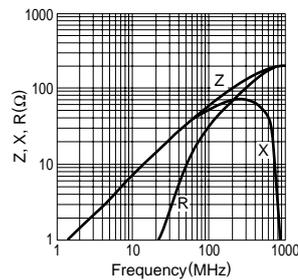
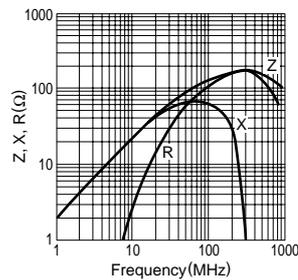
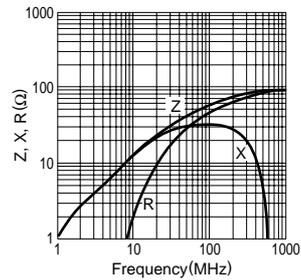
#### Z, X, R vs. FREQUENCY CHARACTERISTICS

##### ACA5020M6-060

##### ACA5020M6-120

##### ACA5020H6-060

##### ACA5020H6-120



• TEST EQUIPMENT: RF IMPEDANCE ANALYZER YHP4191A

