

# EMC Components

## Ferrite Beads

### SMD

## ACB Series

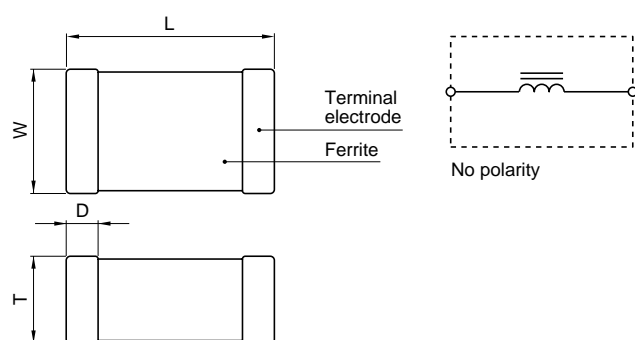
#### FEATURES

- The ACB series provide effective EMC suppression in signal lines through simple in-series implementation. It is thus ideal for circuits in which it is difficult to bypass high-frequency components to ground.
- Reflection components are highly suppressed through the use of a special ferrite material and an advanced internal structure that minimizes stray capacitance. This product is, therefore, an excel-

lent countermeasure for noise radiation in high-speed digital signal lines.

- The ultra-miniature  $1.6 \times 0.8$  mm part exhibits a  $600\Omega$  impedance at 100MHz, which is the larger type 2012.
- Both the 1608 and 2012 types are available in a large number of impedance values. Different characteristics can thus be achieved without changing PC board land patterns.

#### SHAPES AND DIMENSIONS/CIRCUIT DIAGRAM

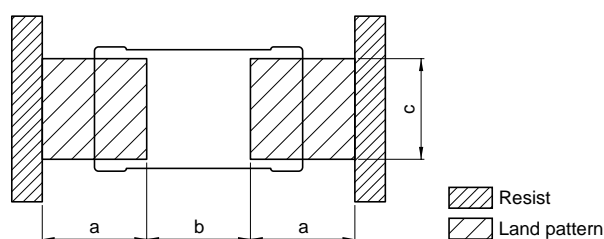


Dimensions in mm

Shape	L	W	T	D
1608	$1.6 \pm 0.15$	$0.8 \pm 0.3, -0.1$	$0.8 \pm 0.3, -0.1$	$0.3 \pm 0.2$
2012	$2 \pm 0.2$	$1.25 \pm 0.2$	$0.9 \pm 0.2$	$0.4 \pm 0.2$

#### RECOMMENDED PC BOARD PATTERNS

##### REFLOW AND FLOW SOLDERING



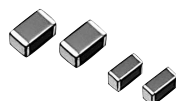
Dimensions in mm

Type	a	b	c
ACB1608	1	0.6	0.8
ACB2012	1	1	1

#### ELECTRICAL CHARACTERISTICS

Part No.	Impedance ( $\Omega$ ) [100MHz]	DC resistance ( $\Omega$ )max.	Rated current (mA)max.
ACB1608L-015-□*	$15 \pm 25\%$	0.1	500
ACB1608L-030-□	$30 \pm 25\%$	0.3	400
ACB1608L-060-□	$60 \pm 25\%$	0.4	300
ACB1608L-120-□	$120 \pm 25\%$	0.5	200
ACB1608L-300-□	$300 \pm 25\%$	1.5	200
ACB1608M-040-□	$40 \pm 25\%$	0.3	400
ACB1608M-080-□	$80 \pm 25\%$	0.5	300
ACB1608M-120-□	$120 \pm 25\%$	0.7	200
ACB1608M-300-□	$300 \pm 25\%$	1.2	150
ACB1608M-600-□	$600 \pm 25\%$	1.8	100
ACB1608H-015-□	$15 \pm 25\%$	0.3	400
ACB1608H-030-□	$30 \pm 25\%$	0.4	300
ACB1608H-060-□	$60 \pm 25\%$	0.7	200
ACB1608H-120-□	$120 \pm 25\%$	1.2	150
ACB1608H-300-□	$300 \pm 25\%$	1.8	100
ACB2012L-015-□	$15 \pm 25\%$	0.1	600
ACB2012L-030-□	$30 \pm 25\%$	0.3	500
ACB2012L-060-□	$60 \pm 25\%$	0.4	400
ACB2012L-120-□	$120 \pm 25\%$	0.5	300
ACB2012L-300-□	$300 \pm 25\%$	1	250
ACB2012L-600-□	$600 \pm 25\%$	2	150
ACB2012M-040-□	$40 \pm 25\%$	0.3	500
ACB2012M-080-□	$80 \pm 25\%$	0.4	400
ACB2012M-120-□	$120 \pm 25\%$	0.5	300
ACB2012M-300-□	$300 \pm 25\%$	0.9	200
ACB2012M-600-□	$600 \pm 25\%$	1.3	100
ACB2012H-015-□	$15 \pm 25\%$	0.3	400
ACB2012H-030-□	$30 \pm 25\%$	0.4	300
ACB2012H-060-□	$60 \pm 25\%$	0.5	300
ACB2012H-120-□	$120 \pm 25\%$	0.9	200
ACB2012H-300-□	$300 \pm 25\%$	1.3	100

\* □: Packaging style (T: Taping [ $\phi$ 180mm reel], TL: Taping [ $\phi$ 330mm reel], B: Bulk)



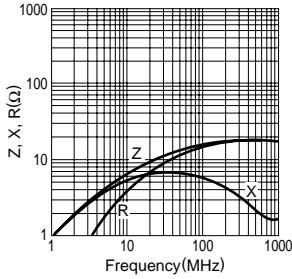
# EMC Components

# ACB Series

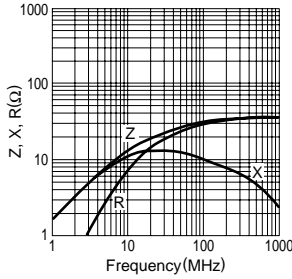
## Ferrite Beads SMD

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

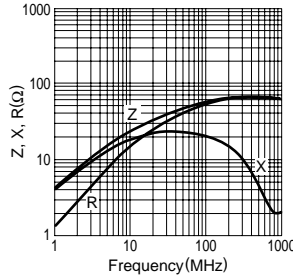
**ACB1608L-015**



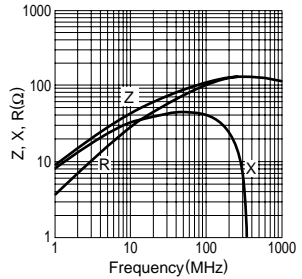
**ACB1608L-030**



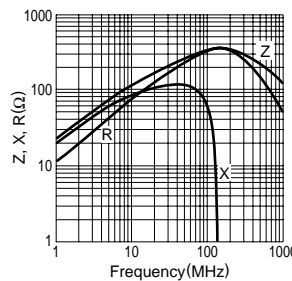
**ACB1608L-060**



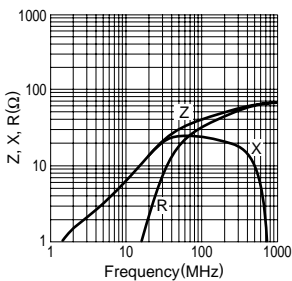
**ACB1608L-120**



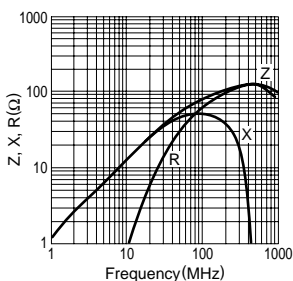
**ACB1608L-300**



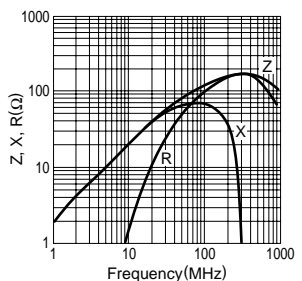
**ACB1608M-040**



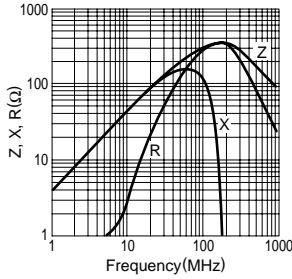
**ACB1608M-080**



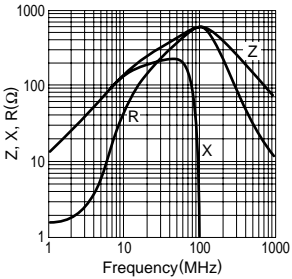
**ACB1608M-120**



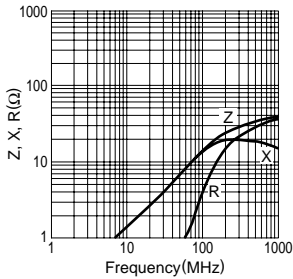
**ACB1608M-300**



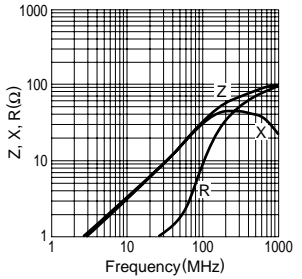
**ACB1608M-600**



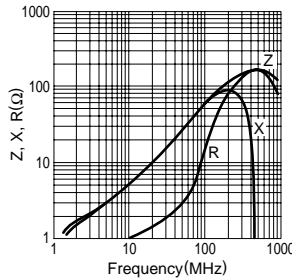
**ACB1608H-015**



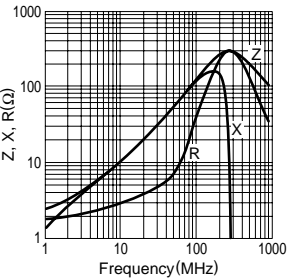
**ACB1608H-030**



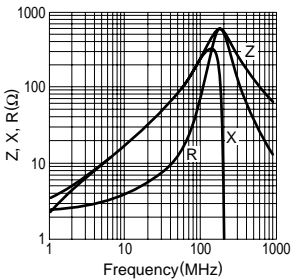
**ACB1608H-060**



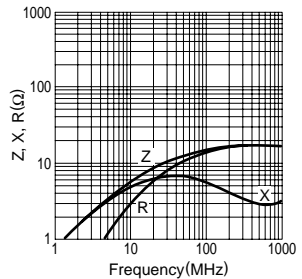
**ACB1608H-120**



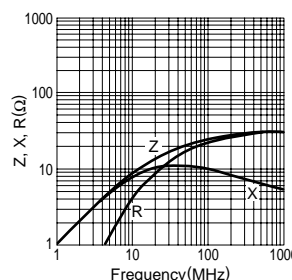
**ACB1608H-300**



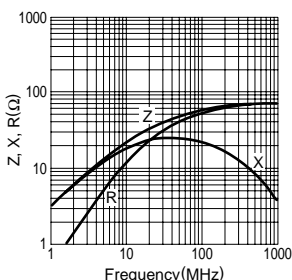
**ACB2012L-015**



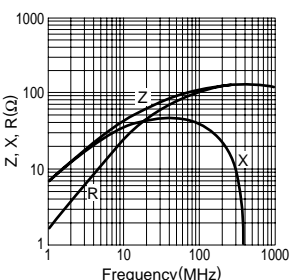
**ACB2012L-030**



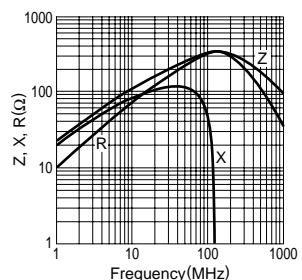
**ACB2012L-060**



**ACB2012L-120**



**ACB2012L-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

## Ferrite Beads

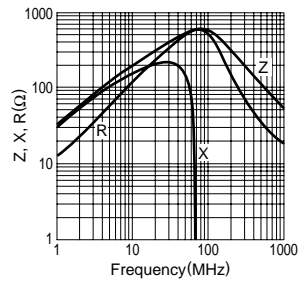
### SMD

## ACB Series

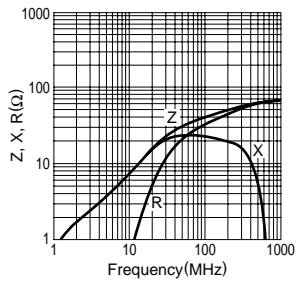
### TYPICAL ELECTRICAL CHARACTERISTICS

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

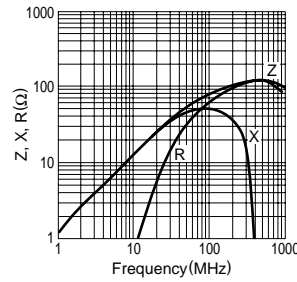
**ACB2012L-600**



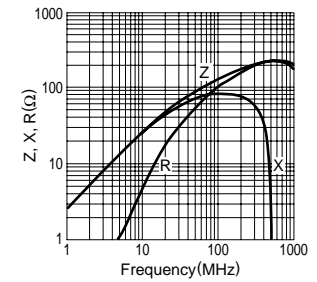
**ACB2012M-040**



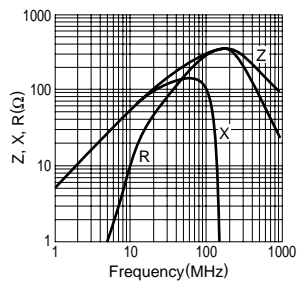
**ACB2012M-080**



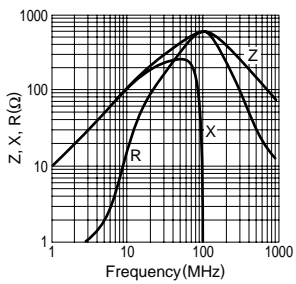
**ACB2012M-150**



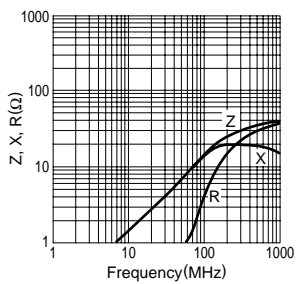
**ACB2012M-300**



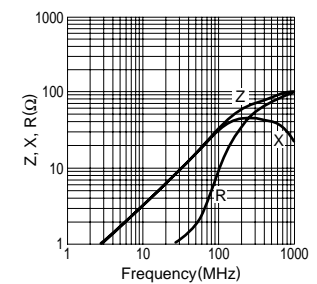
**ACB2012M-600**



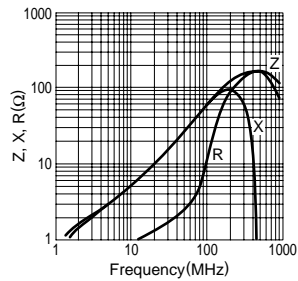
**ACB2012H-015**



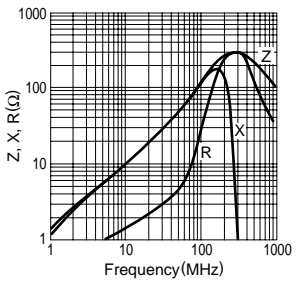
**ACB2012H-030**



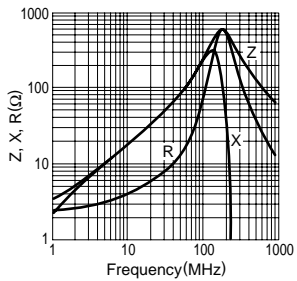
**ACB2012H-060**



**ACB2012H-120**



**ACB2012H-300**



• TEST EQUIPMENT: RF IMPEDANCE ANALYZER YHP4191A