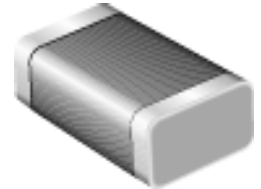


TDK Electronic Component Division		
Ferrite Chip Beads	.pdf	SDI

## ACB SERIES

EMI Suppression  
Chip Bead



The ACB series is a small, high impedance type ferrite chip EMI suppressor. Especially ACB1608 type is microminiaturized (1.6L x 0.8Wmm [.063 x .031 inches]) and yet has a high impedance (300 $\Omega$ , f=100MHz), requiring a smaller space and having greater EMI suppression effects.

### Features:

- The series is microminiaturized (1.6L x 0.8Wmm [.063 x .031 inches]) and yet has a high impedance (600 $\Omega$ , f=100MHz) because of its unique internal structure.
- High density packaging with a pitch of 2.54mm [.100 inches] max. is possible. The series requires less space and yet has greater EMI suppression effects.
- Excellent in physical properties, such as terminal strength, flexure strength, soldering heat resistance, and solderability.
- Applicable to both of reflow and flow solderings.

### Product Identification

**ACB 1608 M - 300 - T**  
 (1) (2) (3) (4) (5)

file:///smoke/%20CURRENT%20PROJECTS/TDK/  
8531%20Web%20Site%20Revisions/htdocs/

*Series Name*    *Dimensions*    *Frequency Range*    *Impedance Value*    *Packaging style*

<b>(2) Dimensions (mm) [inches]</b>				
Type	L	W	T	D
1608	1.6±0.15 [.063±.006]	0.8 +0.3 / -0.1 [.031+.012 / -.004]	0.8 +0.3 / -0.1 [.031+.012 / -.004]	0.3±0.2 [.012±.008]
2012	2.0±0.2 [.079±.008]	1.25±0.2 [.049±.008]	0.9±0.2 [.035±.008]	0.4±0.2 [.016±.008]
3216	3.2±0.2 [.126±.008]	1.6±0.2 [.063±.008]	0.9±0.2 [.035±.008]	0.5±0.2 [.020±.008]

<b>(3) Frequency Range</b>		<b>(5) Packaging Style</b>	
M	Broad Range	T	Taping (ϕ180 mm [7.087 inches] reel)

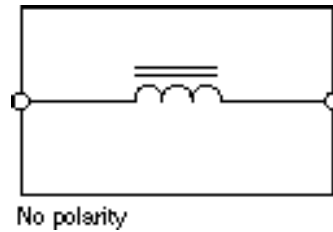
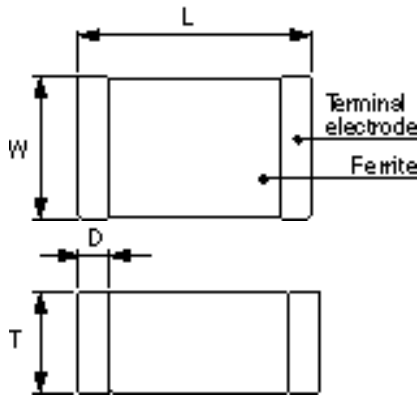
<b>(4) Impedance Value</b>	
040	40Ω
080	80Ω
120	120Ω
300	300Ω
600	600Ω

### Packaging Quantities

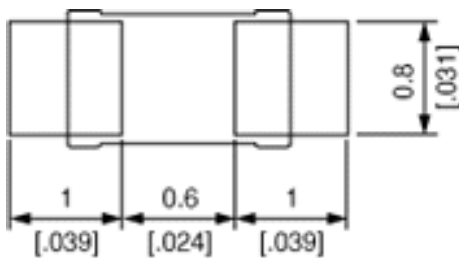
Size	T (φ178 mm [7.008 inches] reel)
0603	4000 pcs./reel
0805	4000 pcs./reel
1206	4000 pcs./reel

### Electrical Characteristics:

$|Z|$ ,  $X_L$ , R vs. Frequency Characteristics

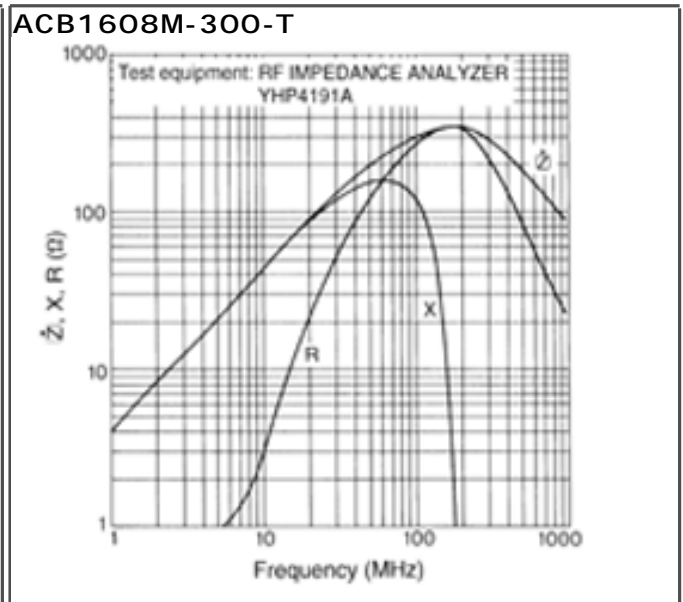
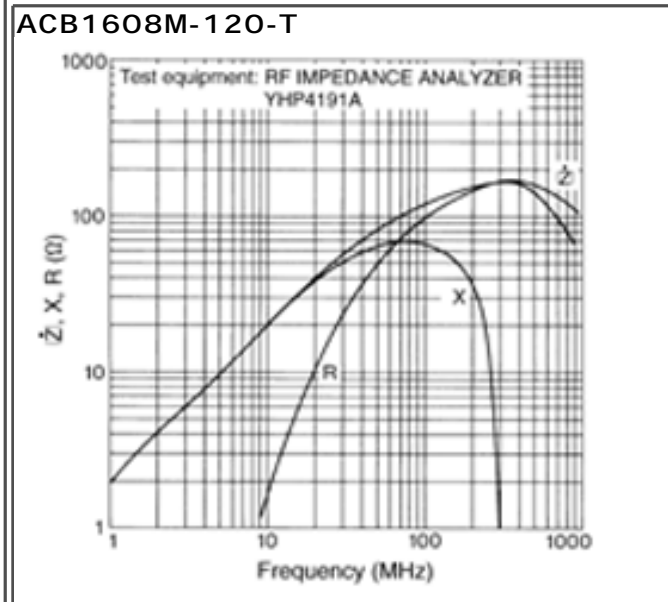
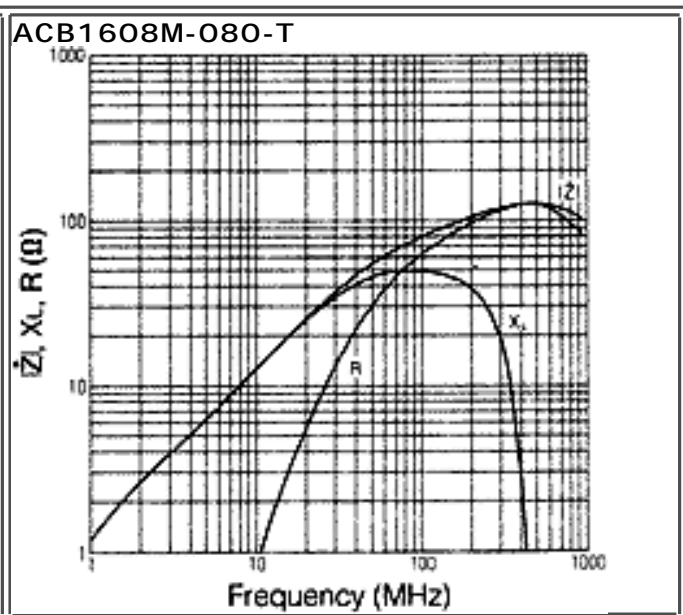
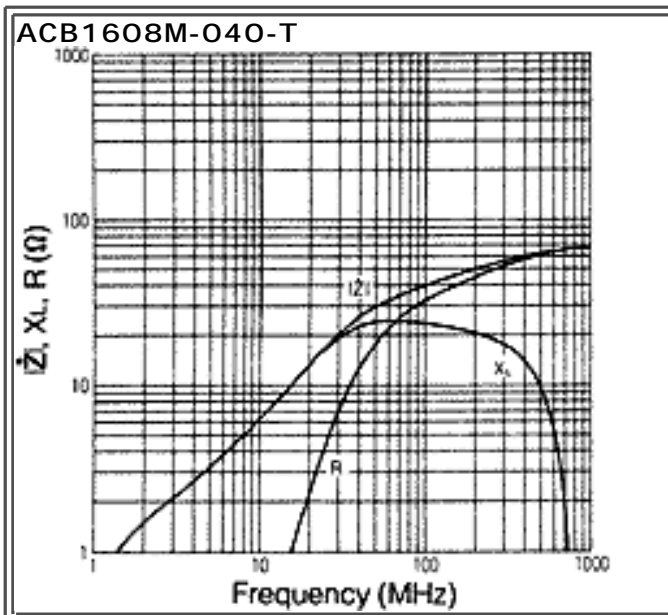


**ACB1608 TYPE** Dimensions (L x W): 1.6 x 0.8mm [0.063 x 0.031 inches]  
 Recommended PC Board Patterns

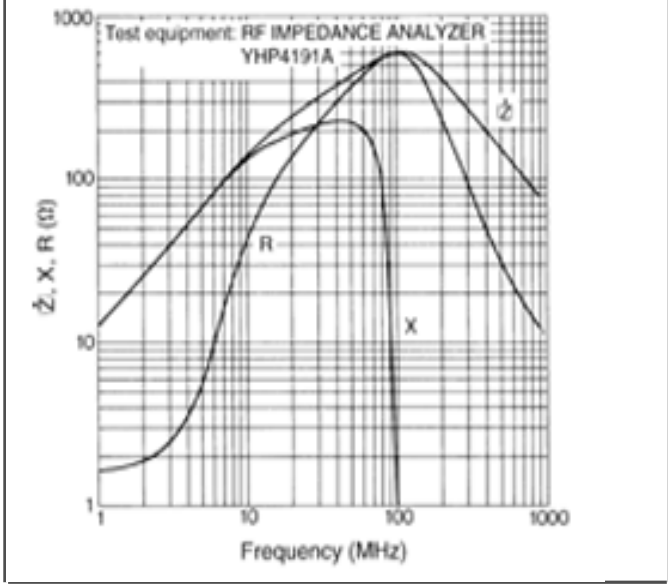


Applicable to flow soldering  
 Dimensions in mm [inches]

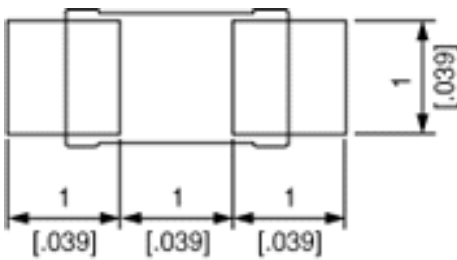
Part Number	Impedance ( $\Omega$ ) [100MHz]	DC resistance ( $\Omega$ ) max.	Rated current (mA) max.
ACB1608M-040-T	40 $\pm$ 25%	0.3	400
ACB1608M-080-T	80 $\pm$ 25%	0.5	300
ACB1608M-120-T	120 $\pm$ 25%	0.7	200
ACB1608M-300-T	300 $\pm$ 25%	1.2	150
ACB1608M-600-T	600 $\pm$ 25%	1.8	100



**ACB1608M-600**



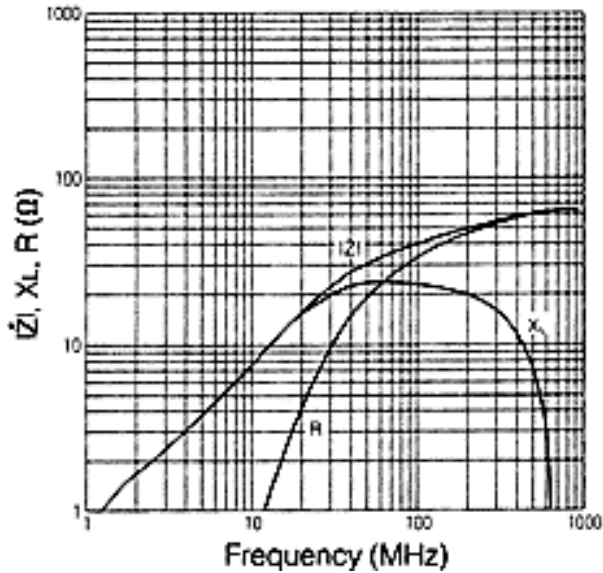
**ACB2012 TYPE Dimensions (L x W): 2.0 x 1.25mm [0.079 x 0.049 inches]**  
Recommended PC Board Patterns



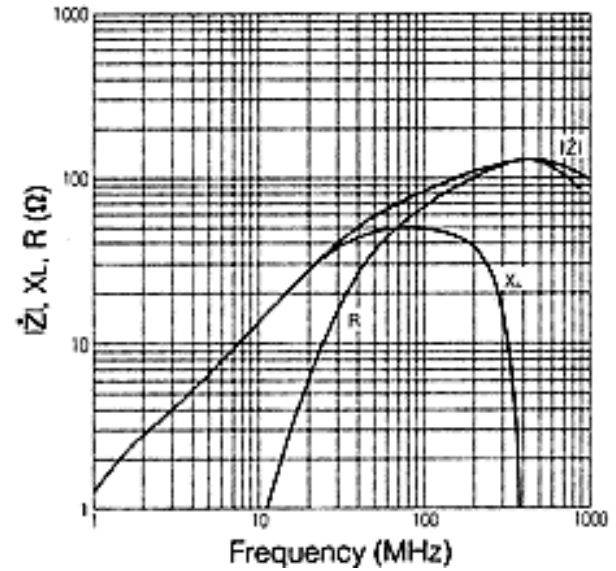
Applicable to flow soldering  
Dimensions in mm [inches]

Part Number	Impedance ( $\Omega$ ) [100MHz]	DC resistance ( $\Omega$ ) max.	Rated current (mA) max.
ACB2012M-040-T	40 $\pm$ 25%	0.3	500
ACB2012M-080-T	80 $\pm$ 25%	0.4	400
ACB2012M-120-T	120 $\pm$ 25%	0.5	300
ACB2012M-150-T	150 $\pm$ 25%	0.5	300
ACB2012M-300-T	300 $\pm$ 25%	0.9	200
ACB2012M-600-T	600 $\pm$ 25%	1.3	100

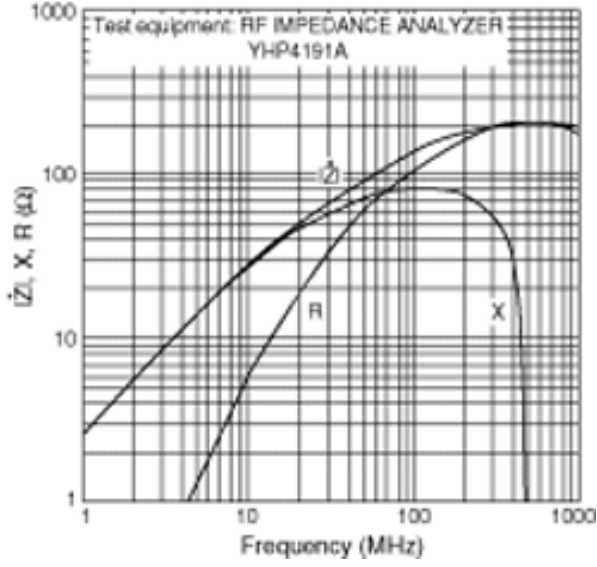
ACB2012M-040-T



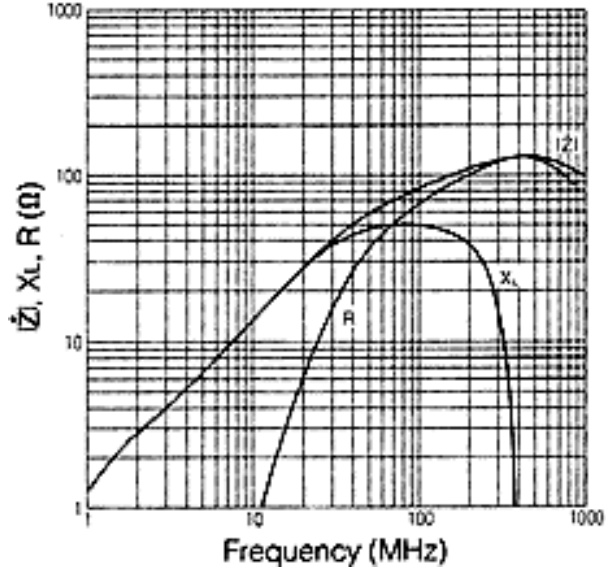
ACB2012M-080-T



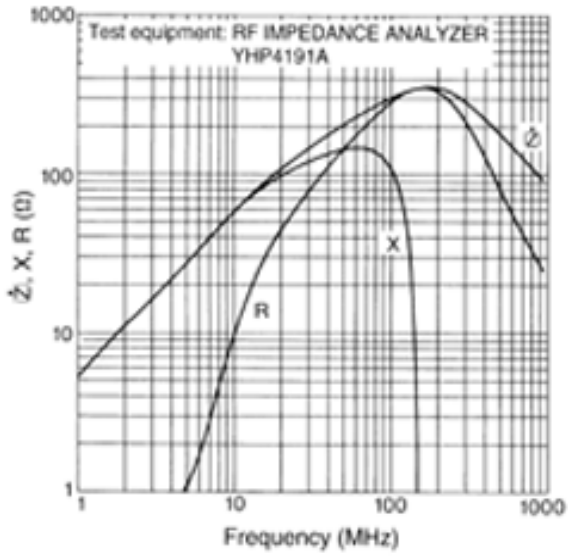
ACB2012M-120-T



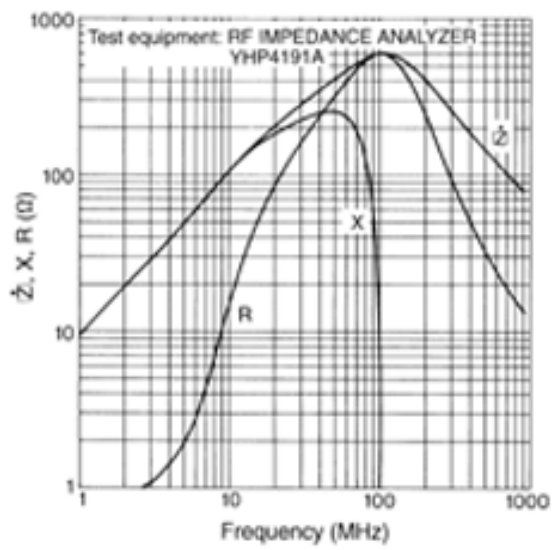
ACB2012M-150-T

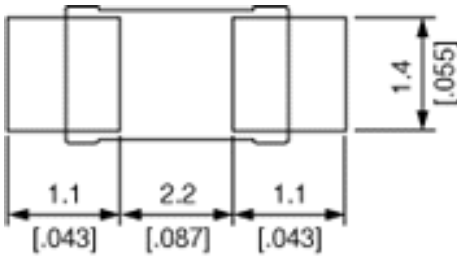


ACB2012M-300-T



ACB2012M-600-T



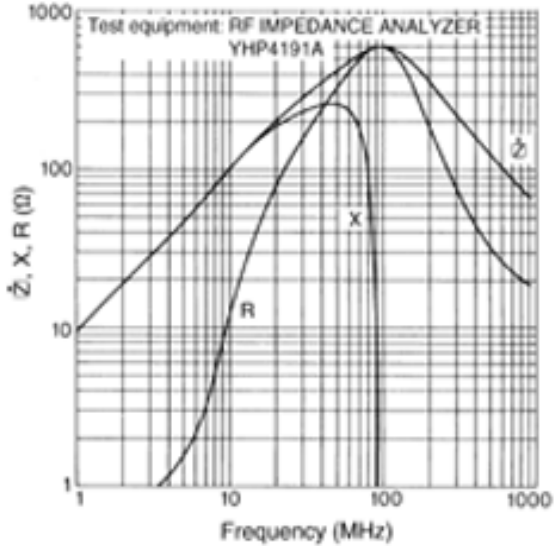


Applicable to flow soldering

Dimensions in mm [inches]

Part Number	Impedance ( $\Omega$ ) [100MHz]	DC resistance ( $\Omega$ ) max.	Rated current (mA) max.
ACB3216M-600-T	600 $\pm$ 25%	0.9	200

ACB3216M-600-T



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