

Ferrite Bead Filters(LEAD) For Signal Line

Conformity to RoHS Directive

ZBF Series

FEATURES

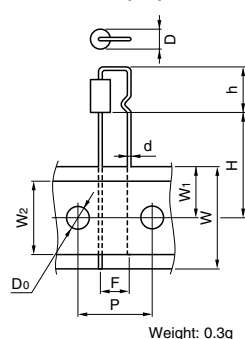
- With an impedance greater than 30Ω across the 30 to 1000MHz frequency range, these ferrite beads absorb noise by resistance at high frequencies.
- Good high frequency characteristics due to low distributed capacitance.
- These are radial lead-type ferrite beads, so can be mounted on PCBs using automatic equipment insertion.

APPLICATIONS

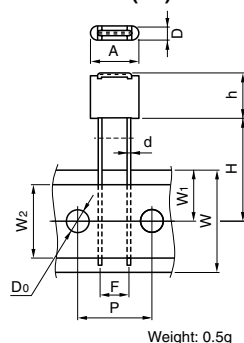
Home electronics (TVs, video equipment, PCs, digital equipment equipped with microcomputers, etc.), office automation equipment (computers, terminals, stand-alone word processors, fax machines, etc.), factory automation equipment (industrial measuring equipment, meters, switching power sources, etc.), radio equipment (car phones, business mobile radios, transceivers, amateur radios, etc.). Used to control undesirable electromagnetic radiation, suppress abnormal oscillations, and avoid abnormal operation. For items used in the USA, particularly effective in meeting the requirements for FCC Part 15, subpart J approval for digital equipment. Particularly effective in countering EMI so as to comply with VCCI (Japan) and FTZ (German) regulations.

SHAPES AND DIMENSIONS

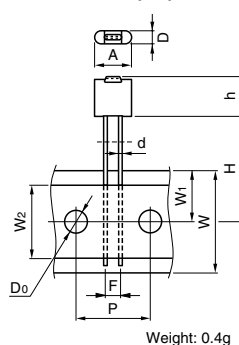
ZBF503S-03(TA)-K-01



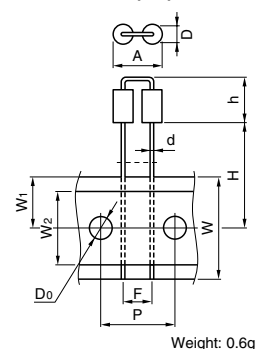
ZBF503D-00(TA)-01 ZBF506D-00(TA)-01



ZBF253D-00(TA)-01

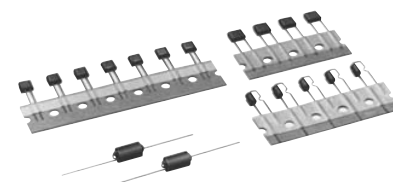
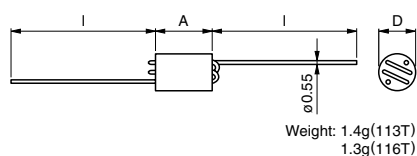


ZBF503M-00(TA)-K-01



ZBF113T-01-01

ZBF116T-01A-01



Dimensions in mm

Part No.	D	A	h	l	d	F	H	D ₀	W	W ₁	W ₂	P
ZBF503S-03(TA ¹)-K-01 ^{*2}	3.5±0.3	—	8max.	—	0.6±0.05	5+0.8,-0.2	18.5±0.5	4±0.2	18+1,-0.5	9±0.5	12±0.3	12.7±0.3
ZBF503D-00(TA)-01	2.5max.	8.0max.	7max.	—	0.57±0.05	5+0.8,-0.2	18.5±0.5	4±0.2	18+1,-0.5	9±0.5	12±0.3	12.7±0.3
ZBF506D-00(TA)-01	2.5max.	8.0max.	7max.	—	0.57±0.05	5+0.8,-0.2	18.5±0.5	4±0.2	18+1,-0.5	9±0.5	12±0.3	12.7±0.3
ZBF253D-00(TA)-01	2.5max.	6.5max.	7max.	—	0.57±0.05	2.5+0.8,-0.2	18.5±0.5	4±0.2	18+1,-0.5	9±0.5	12±0.3	12.7±0.3
ZBF503M-00(TA)-K-01	3.5±0.3	8.6+0.5,-0.3	8max.	—	0.6±0.05	5+0.8,-0.2	18.5±0.5	4±0.2	18+1,-0.5	9±0.5	12±0.3	12.7±0.3
ZBF113T-01-01	6±0.5	10±0.5	—	25.4+5,-0	—	—	—	—	—	—	—	—
ZBF116T-01A-01	6±0.5	10±0.5	—	20+5,-0	—	—	—	—	—	—	—	—

*1 Available for taping specifications. In this case please add "TA" at the end of part number.

*2 The "-01" designation at the end of the product code indicates Lead-free compatible product.

- Conformity to RoHS Directive: This means that, in conformity with EU Directive 2002/95/EC, lead, cadmium, mercury, hexavalent chromium, and specific bromine-based flame retardants, PBB and PBDE, have not been used, except for exempted applications.

- All specifications are subject to change without notice.

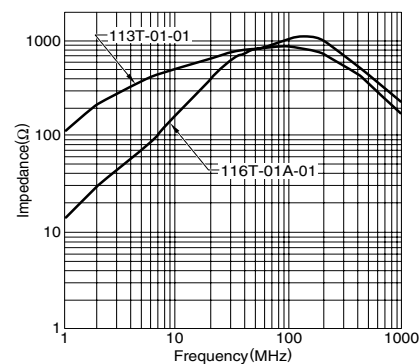
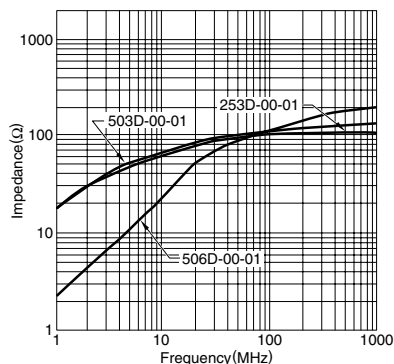
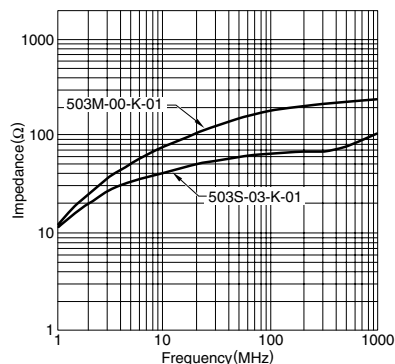
ELECTRICAL CHARACTERISTICS

Part No.	Rated current (A)max.	Impedance vs. frequency(MHz)				DC resistance (Ω)max.
		30Ω min.	50Ω min.	100Ω min.	600Ω min.	
ZBF503S-03(TA)-K-01	6	10 to 300				0.01
ZBF503D-00(TA)-01	6	5 to 15	15 to 300			0.01
ZBF506D-00(TA)-01	6	30 to 1000	70 to 1000			0.01
ZBF253D-00(TA)-01	6	5 to 15	15 to 300			0.01
ZBF503M-00(TA)-K-01	6		10 to 300			0.01
ZBF113T-01-01	3			3 to 300	30 to 70	0.04
ZBF116T-01A-01	3			10 to 300	50 to 100	0.04

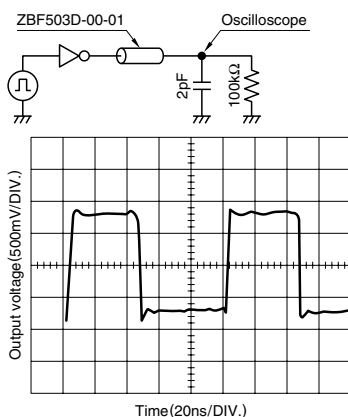
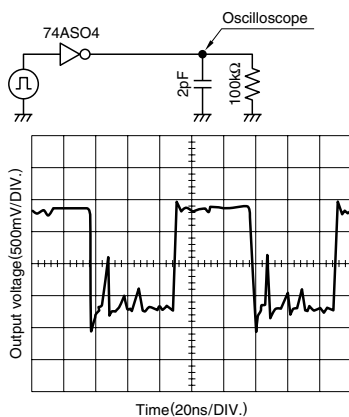
• Operating temperature range: -25 to +85°C

TYPICAL ELECTRICAL CHARACTERISTICS

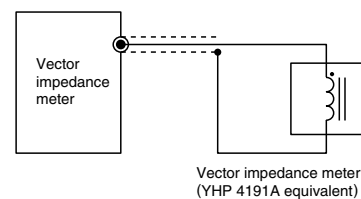
IMPEDANCE vs. FREQUENCY CHARACTERISTICS



TYPICAL EMC SUPPRESSION EFFECTS



MEASURING CIRCUIT



Vector impedance meter (YHP 4191A equivalent)

PACKAGING STYLE AND QUANTITIES

Part No.	Quantity	Number of minimum order box
ZBF503S-03(TA)-K-01	2500pieces/box	4box(10000pieces)
ZBF503D-00(TA)-01	2000pieces/box	4box(8000pieces)
ZBF506D-00(TA)-01	2000pieces/box	4box(8000pieces)
ZBF253D-00(TA)-01	2000pieces/box	4box(8000pieces)
ZBF503M-00(TA)-K-01	1500pieces/box	4box(6000pieces)
ZBF113T-01-01	200pieces/pack	—
ZBF116T-01A-01	200pieces/pack	—

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