

DATA SHEET

Wideband chokes EMI-suppression products

Supersedes data of February 2002

2004 Sep 01

EMI-suppression products

Wideband chokes

WIDEBAND CHOKES FOR EMI-SUPPRESSION

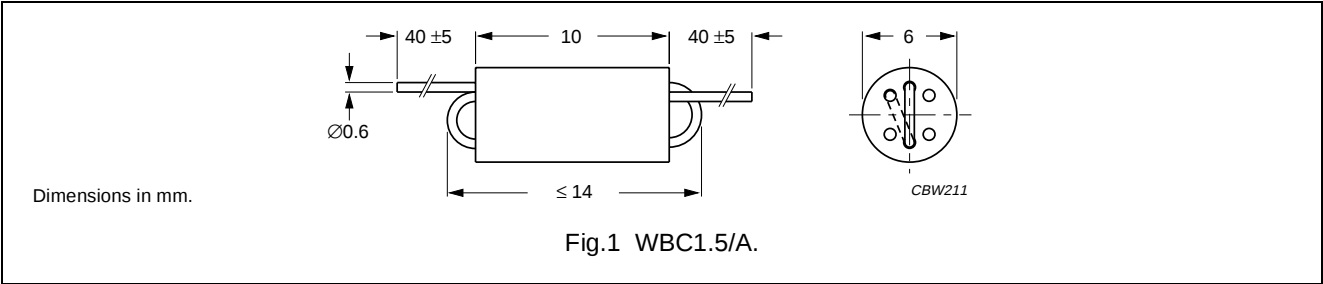
General data WBC1.5/A

ITEM	SPECIFICATION
Wire material	copper (Cu), tin-lead (SnPb) plated, lead-free (Sn) available on request.
Solderability	"IEC 60068-2-20", Part 2, Test Ta, method 1

Grades, parameters and type numbers; see Fig.1

GRADE	No. OF TURNS	Z _{typ} at f		TYPE NUMBER
		(Ω)	(MHz)	
3S4	1.5	≥300	120	WBC1.5/A-3S4
4B1	1.5	≥350	250	WBC1.5/A-4B1
4S2	1.5	213 ⁽¹⁾	10	WBC1.5/A-4S2
		400 ⁽¹⁾	50	
		470 ⁽¹⁾	100	

- Note**
1. Minimum guaranteed impedance is |Z|_{typ} -20%.
2. Also available with insulated



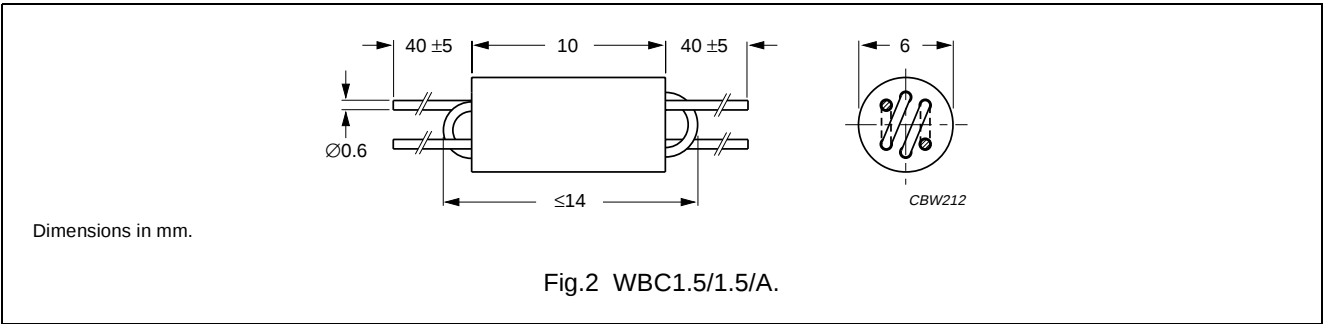
General data WBC1.5/1.5/A

ITEM	SPECIFICATION
Wire material	copper (Cu), tin-lead (SnPb) plated, lead-free (Sn) available on request.
Solderability	"IEC 60068-2-20", Part 2, Test Ta, method 1

Grades, parameters and type numbers; see Fig.2

GRADE	No. OF TURNS	Z _{typ} at f		TYPE NUMBER
		(Ω)	(MHz)	
3S4	2 × 1.5	≥700 ⁽¹⁾	50	WBC1.5/1.5/A-3S4
4B1	2 × 1.5	≥800 ⁽¹⁾	110	WBC1.5/1.5/A-4B1
4S2	2 × 1.5	213 ⁽²⁾	10	WBC1.5/1.5/A-4S2
		400 ⁽²⁾	50	
		470 ⁽²⁾	100	
4A15	2 × 1.5	1000	50	WBC1.5/1.5/A-4A15
		1000	180	

- Notes**
1. |Z| measured with both windings connected in series.
2. Minimum guaranteed impedance is |Z|_{typ} -20%; measured with one winding.



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General data WBC2/R

ITEM	SPECIFICATION
Wire material	copper (Cu), tin-lead (SnPb) plated, lead-free (Sn) available on request.
Solderability	"IEC 60068-2-20", Part 2, Test Ta, method 1

Grades, parameters and type numbers; see Fig.3

GRADE	No. OF TURNS	Z _{typ} ⁽¹⁾ at f		TYPE NUMBER
		(Ω)	(MHz)	
4S2	2	300	10	WBC2/R-4S2
		650	50	
		600	100	
4A15	2	≥730	50	WBC2/R-4A15
		≥750	180	

Note
1. Minimum guaranteed impedance is |Z|_{typ} -20%.

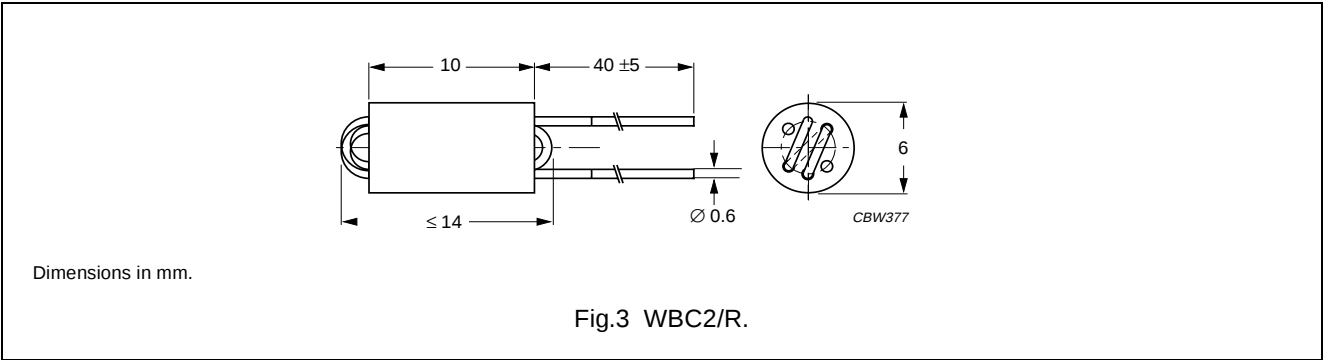


Fig.3 WBC2/R.

General data WBC2.5/A

ITEM	SPECIFICATION
Wire material	copper (Cu), tin-lead (SnPb) plated, lead-free (Sn) available on request.
Solderability	"IEC 60068-2-20", Part 2, Test Ta, method 1

Grades, parameters and type numbers; see Fig.4

GRADE	No. OF TURNS	Z _{typ} at f		TYPE NUMBER
		(Ω)	(MHz)	
3S4	2.5	≥600	50	WBC2.5/A-3S4 ⁽²⁾
4B1	2.5	≥700	180	WBC2.5/A-4B1 ⁽²⁾
4S2	2.5	400 ⁽¹⁾	10	WBC2.5/A-4S2
		850 ⁽¹⁾	50	
		725 ⁽¹⁾	100	
4A15	2.5	800	50	WBC2.5/A-4A15
		820	180	

Note
1. Minimum guaranteed impedance is |Z|_{typ} -20%.
2. Also available with insulated wires, sleeves, encapsulated and taped and reeled.

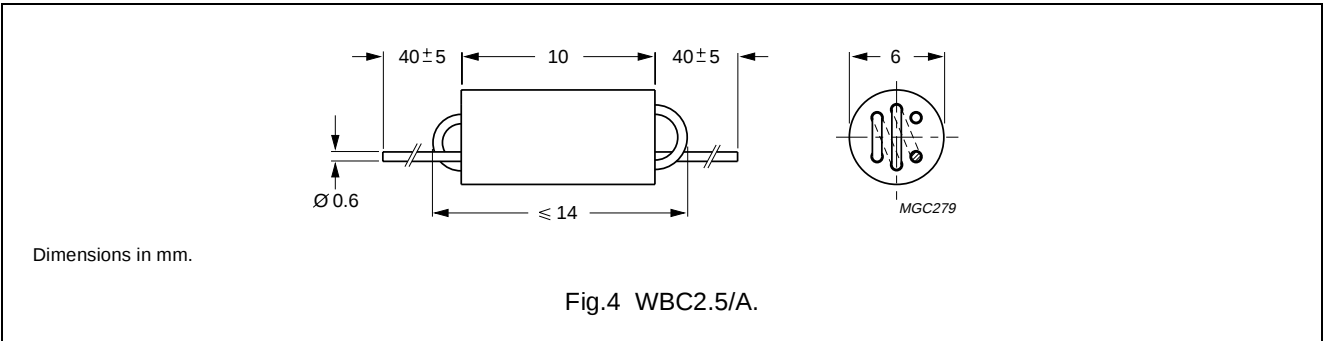


Fig.4 WBC2.5/A.

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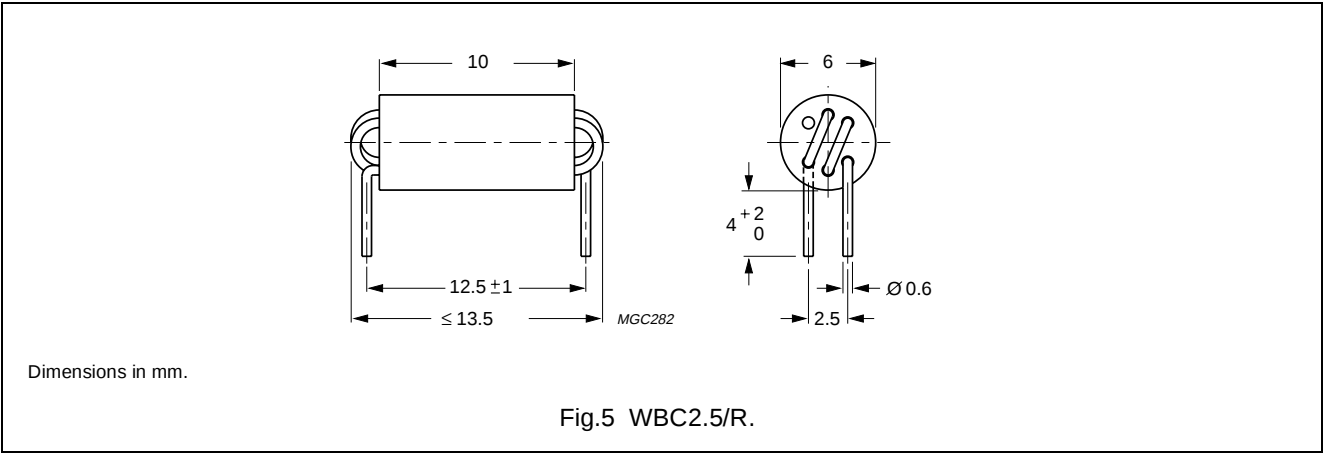
General data WBC2.5/R

ITEM	SPECIFICATION
Wire material	copper (Cu), tin-lead (SnPb) plated, lead-free (Sn) available on request.
Solderability	"IEC 60068-2-20", Part 2, Test Ta, method 1

Grades, parameters and type numbers; see Fig.5

GRADE	No. OF TURNS	Z _{typ} at f		TYPE NUMBER
		(Ω)	(MHz)	
3S4	2.5	≥600	50	WBC2.5/R-3S4 ⁽¹⁾ ^{sup}
4B1	2.5	≥700	75	WBC2.5/R-4B1 ⁽²⁾ ^{sup}
4S2	2.5	400	10	WBC2.5/R-4S2 ^{sup}
		850	50	
		725	100	

- Note**
- 1. Also available with insulated wires, sleeves and moulded.
 - 2. Also available with insulated wires, sleeves.



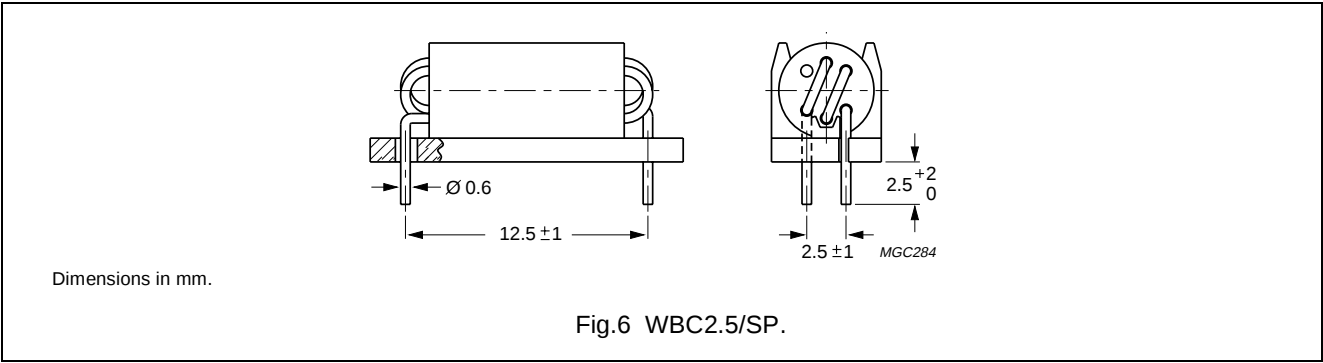
General data WBC2.5/SP

ITEM	SPECIFICATION
Wire material	copper (Cu), tin-lead (SnPb) plated, lead-free (Sn) available on request.
Support	polyamide (PA6.6) plate to allow mounting across circuit tracks; flame retardant in accordance with UL 94V-0
Solderability	"IEC 60068-2-20", Part 2, Test Ta, method 1

Grades, parameters and type numbers; see Fig.6

GRADE note 1	No. OF TURNS	Z _{typ} at f		TYPE NUMBER
		(Ω)	(MHz)	
3S4	2.5	≥600	50	WBC2.5/SP-3S4 ^{sup}
4B1	2.5	≥700	75	WBC2.5/SP-4B1 ^{sup}

- Note**
- 1. Colour code 3S4 = blue, 4B1 = green.



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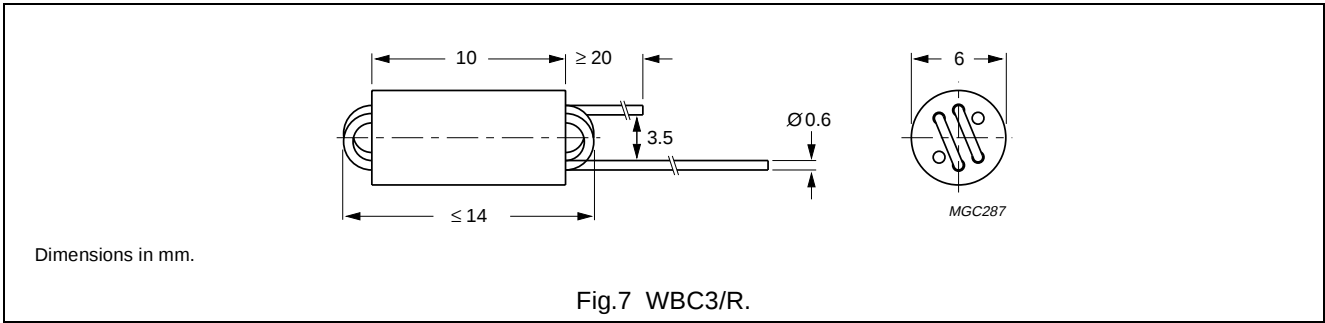
General data WBC3/R

ITEM	SPECIFICATION
Wire material	copper (Cu), tin-lead (SnPb) plated, lead-free (Sn) available on request.
Solderability	"IEC 60068-2-20", Part 2, Test Ta, method 1

Grades, parameters and type numbers; see Fig.7

GRADE	No. OF TURNS	Z _{typ} at f		TYPE NUMBER
		(Ω)	(MHz)	
3S4	3	≥650	63	WBC3/R-3S4 ⁽²⁾
4B1	3	≥800	110	WBC3/R-4B1 ⁽²⁾
4S2	3	500 ⁽¹⁾	10	WBC3/R-4S2
		1000 ⁽¹⁾	50	
		688 ⁽¹⁾	100	
4A15	3	≥1000	50	WBC3/R-4A15
		≥1000	180	

- Note**
- 1. Minimum guaranteed impedance is |Z|_{typ} -20%.
 - 2. Also available with encapsulation and/or taped and reeled.



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DATA SHEET STATUS DEFINITIONS

DATA SHEET STATUS	PRODUCT STATUS	DEFINITIONS
Preliminary specification	Development	This data sheet contains preliminary data. Ferroxcube reserves the right to make changes at any time without notice in order to improve design and supply the best possible product.
Product specification	Production	This data sheet contains final specifications. Ferroxcube reserves the right to make changes at any time without notice in order to improve design and supply the best possible product.

DISCLAIMER

Life support applications — These products are not designed for use in life support appliances, devices, or systems where malfunction of these products can reasonably be expected to result in personal injury. Ferroxcube customers using or selling these products for use in such applications do so at their own risk and agree to fully indemnify Ferroxcube for any damages resulting from such application.

PRODUCT STATUS DEFINITIONS

STATUS	INDICATION	DEFINITION
Prototype		These are products that have been made as development samples for the purposes of technical evaluation only. The data for these types is provisional and is subject to change.
Design-in		These products are recommended for new designs.
Preferred		These products are recommended for use in current designs and are available via our sales channels.
Support		These products are not recommended for new designs and may not be available through all of our sales channels. Customers are advised to check for availability.