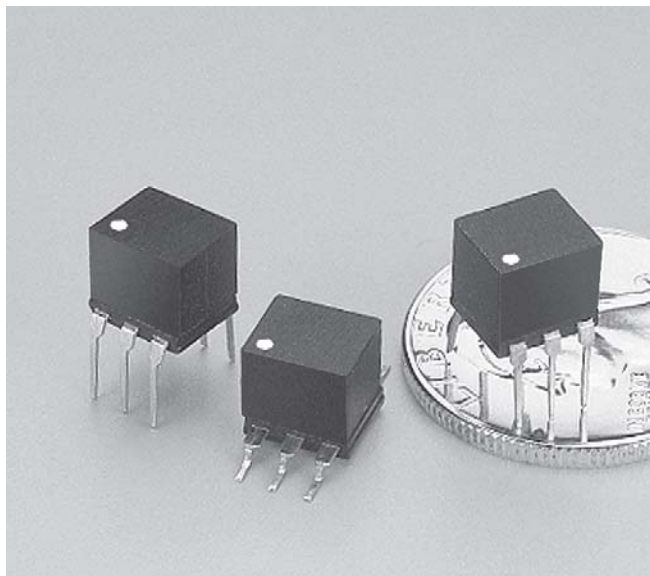




# Wideband RF Transformers



These wideband transformers feature 500 V isolation and a 1/4 Watt RF power rating. They are offered tapped or untapped and are packaged in a low-profile DIP-style plastic case. All parts are available in either a surface mount version or a through-hole version that's compatible with standard DIP sockets. (For a smaller package size and more values, see our TTWB Series.)

Applications include impedance matching, voltage or current transformation, DC isolation, balanced/unbalanced mixing, matching, power splitting, coupling and signal inversion.

Custom wideband transformers with special combinations of impedance ratio, insertion loss, frequency response and current handling are also available.

Schematic	Part number (Through-hole)	Part number <sup>1</sup> (Surface mount)	Impedance ratio pri:sec	I <sub>DC</sub> max (mA)	Frequency (MHz)	Pins 1–3		Pins 6–4	
						L min <sup>2</sup> ( $\mu$ H)	DCR max (Ohms)	L min <sup>2</sup> ( $\mu$ H)	DCR max (Ohms)
	WB1010-PC	WB1010-SM	1:1	250	0.005 – 100	780	0.320	780	0.320
	WB1010-1-PC	WB1010-1-SM	1:1	250	0.04 – 175	95	0.200	95	0.200
	WB1015-PC	WB1015-SM	1.5:1	250	0.1 – 150	80	0.145	51	0.130
	WB1040-PC	WB1040-SM	4:1	250	0.2 – 300	95	0.160	25	0.115
	WB2010-PC	WB2010-SM	1:1	250	0.005 – 100	780	0.320	780	0.320
	WB2010-1-PC	WB2010-1-SM	1:1	250	0.04 – 175	95	0.200	95	0.200
	WB2040-PC	WB2040-SM	4:1	250	0.2 – 300	95	0.160	25	0.115
	WB3010-PC	WB3010-SM	1:1	250	0.005 – 100	780	0.320	780	0.320
	WB3010-1-PC	WB3010-1-SM	1:1	250	0.04 – 175	95	0.200	95	0.200
	WB3015-PC	WB3015-SM	1.5:1	250	0.1 – 150	80	0.145	51	0.130
	WB3040-PC	WB3040-SM	4:1	250	0.2 – 300	95	0.160	25	0.115

1. For a smaller package size and more values, see the TTWB Series.
2. Inductance tested at 100 kHz, 0.1 V<sub>rms</sub>, 0 Adc.
3. 500 V<sub>rms</sub> isolation, primary to secondary
4. 1/4 Watt RF power rating
5. Operating temperature range –40°C to +85°C.
6. Electrical specifications at 25°C.

**Coilcraft**<sup>®</sup>

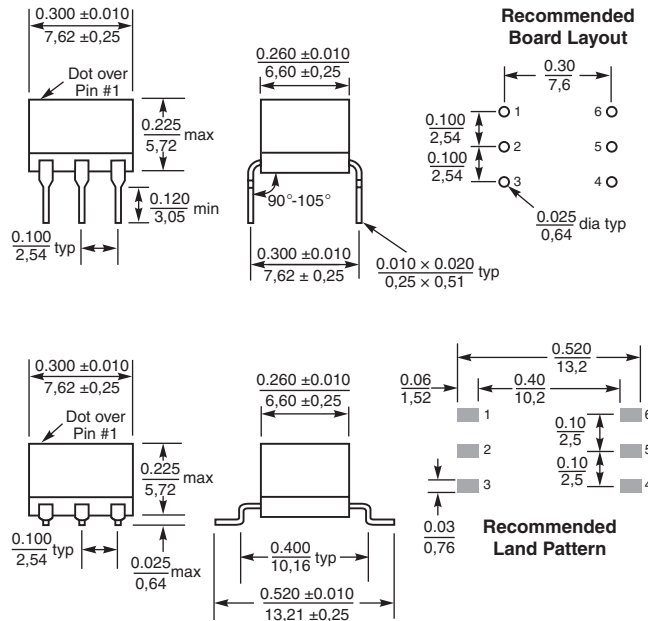
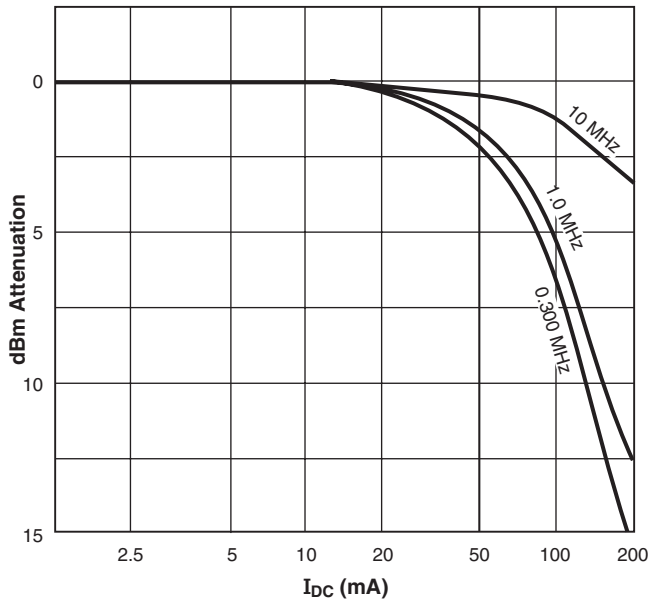
Specifications subject to change without notice.  
Please check our website for latest information. Document 116-1 Revised 11/20/02

1102 Silver Lake Road Cary, Illinois 60013 Phone 847/639-6400 Fax 847/639-1469  
E-mail [info@coilcraft.com](mailto:info@coilcraft.com) Web <http://www.coilcraft.com>



# Wideband RF Transformers

## Typical Attenuation vs Current

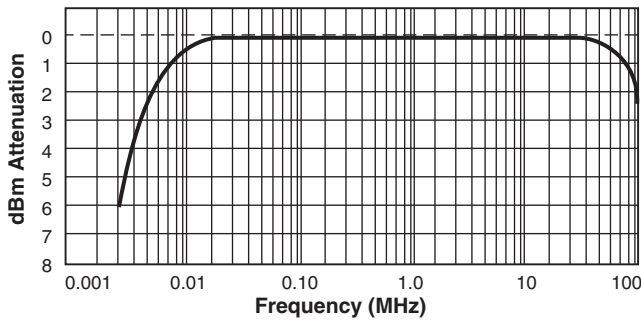


For WB10XX, pins 2 and 5 are removed during manufacture.  
For WB20XX, pin 2 is removed during manufacture.

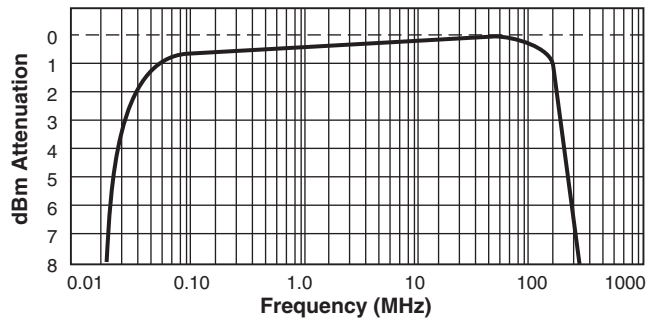
**Tape and reel for surface mount parts:** 500/13" reel 24 mm tape width  
For packaging data see Tape and Reel Specifications section.

## Typical Frequency Response

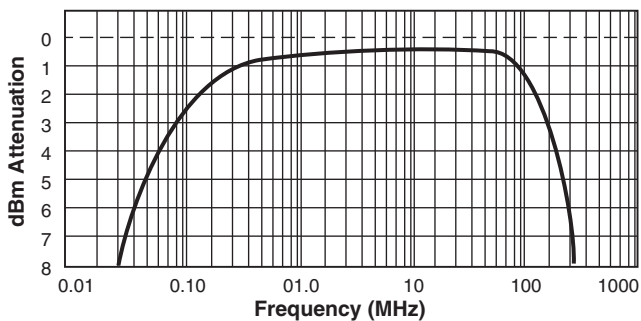
**WB1010, WB2010, WB3010**  
3 dB bandwidth 0.005 – 100 MHz



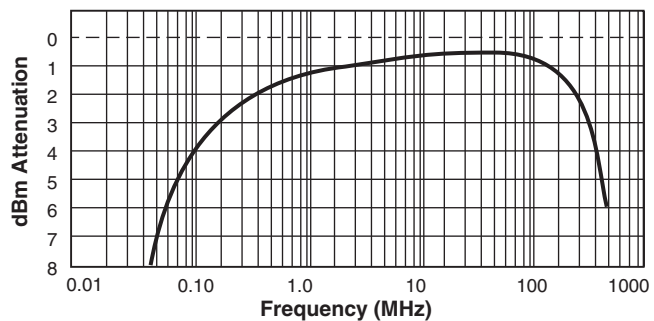
**WB1010-1, WB2010-1, WB3010-1**  
3 dB bandwidth 0.04 – 175 MHz



**WB1015, WB3015**  
3 dB bandwidth 0.1 – 150 MHz



**WB1040, WB2040, WB3040**  
3 dB bandwidth 0.2 – 300 MHz



Specifications subject to change without notice.  
Please check our website for latest information. Document 116-2 Revised 11/17/04

1102 Silver Lake Road Cary, Illinois 60013 Phone 847/639-6400 Fax 847/639-1469  
E-mail info@coilcraft.com Web http://www.coilcraft.com