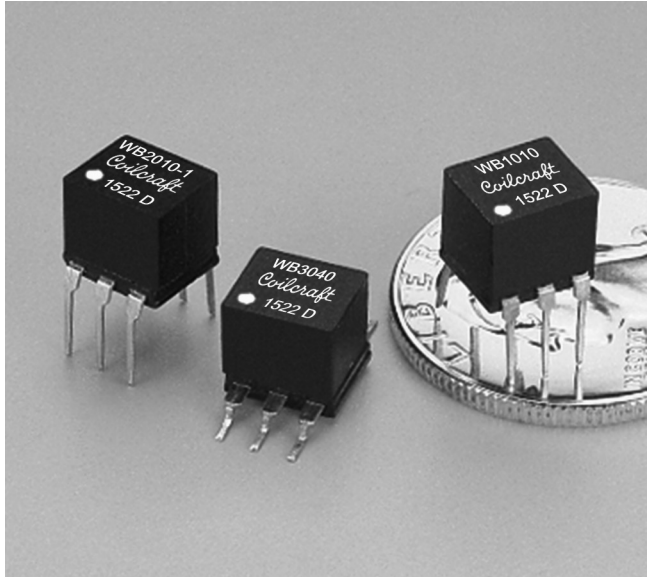




Wideband RF Transformers



- Surface mount and through hole versions
- 500 V interwinding isolation, 1/4 Watt RF input power
- 250 mA max current rating.
- For a smaller package size, see our PWB Series

Core material Ferrite

Terminations RoHS compliant matte tin over nickel over phosphor bronze. Other terminations available at additional cost.

Weight 0.37 – 0.39 g

Ambient temperature –40°C to +85°C

Storage temperature Component: –40°C to +85°C.

Tape and reel packaging: –40°C to +80°C

Resistance to soldering heat Max three 40 second reflows at +260°C, parts cooled to room temperature between cycles

Moisture Sensitivity Level (MSL) 1 (unlimited floor life at <30°C / 85% relative humidity)

Failures in Time (FIT) / Mean Time Between Failures (MTBF)

60 per billion hours / 16,666,667 hours, calculated per Telcordia SR-332

Packaging (SM version): 500 per 13" reel;

Plastic tape: 24 mm wide, 0.42 mm thick, 20 mm pocket spacing, 6.6 mm pocket depth; (TH version): 70 per tube

PCB washing Tested to MIL-STD-202 Method 215 plus an additional aqueous wash. See [Doc787_PCBt_Washing.pdf](#).

| Schematic | Part number | | Impedance ratio ² pri : sec | I _{DC} max (mA) | Frequency (MHz) | Pri (pins 1-3) | | Sec (pins 6-4) | |
|-----------|--------------|----------------------------|---|-----------------------------|--------------------|----------------------------|-------------------|----------------------------|-------------------|
| | Through-hole | Surface mount ¹ | | | | L min ³ (μH) | DCR max (Ohms) | L min ³ (μH) | DCR max (Ohms) |
| | WB1010-PCL | WB1010-SML_ | 1 : 1 | 250 | 0.005–100 | 780 | 0.320 | 780 | 0.320 |
| | WB1010-1-PCL | WB1010-1-SML_ | 1 : 1 | 250 | 0.04–175 | 95 | 0.200 | 95 | 0.200 |
| | WB1015-PCL | WB1015-SML_ | 1.5 : 1 | 250 | 0.1–150 | 80 | 0.145 | 51 | 0.130 |
| | WB1040-PCL | WB1040-SML_ | 4 : 1 | 250 | 0.2–300 | 95 | 0.160 | 25 | 0.115 |
| | WB2010-PCL | WB2010-SML_ | 1 : 1 | 250 | 0.005–100 | 780 | 0.320 | 780 | 0.320 |
| | WB2010-1-PCL | WB2010-1-SML_ | 1 : 1 | 250 | 0.04–175 | 95 | 0.200 | 95 | 0.200 |
| | WB2040-PCL | WB2040-SML_ | 4 : 1 | 250 | 0.2–300 | 95 | 0.160 | 25 | 0.115 |
| | WB3010-PCL | WB3010-SML_ | 1 : 1 | 250 | 0.005–100 | 780 | 0.320 | 780 | 0.320 |
| | WB3010-1-PCL | WB3010-1-SML_ | 1 : 1 | 250 | 0.04–175 | 95 | 0.200 | 95 | 0.200 |
| | WB3015-PCL | WB3015-SML_ | 1.5 : 1 | 250 | 0.1–150 | 80 | 0.145 | 51 | 0.130 |
| | WB3040-PCL | WB3040-SML_ | 4 : 1 | 250 | 0.2–300 | 95 | 0.160 | 25 | 0.115 |

1. When ordering, please specify a **packaging** code:

WB3040-SMLD

Packaging: D = 13" machine ready reel. EIA-481 embossed plastic tape (500 parts per full reel).

B = Less than full reel. In tape, but not machine ready. To have a leader and trailer added (\$25 charge), use code letter D instead.

2. Impedance ratio is for the full primary winding to the full secondary winding.

3. Inductance tested at 100 kHz, 0.1 Vrms, 0 Adc.

4. Electrical specifications at 25°C. Measurements are referenced to 50 Ohms.

Refer to Doc 362 "Soldering Surface Mount Components" before soldering.



www.coilcraft.com

US +1-847-639-6400 sales@coilcraft.com

UK +44-1236-730595 sales@coilcraft-europe.com

Taiwan +886-2-2264 3646 sales@coilcraft.com.tw

China +86-21-6218 8074 sales@coilcraft.com.cn

Singapore + 65-6484 8412 sales@coilcraft.com.sg

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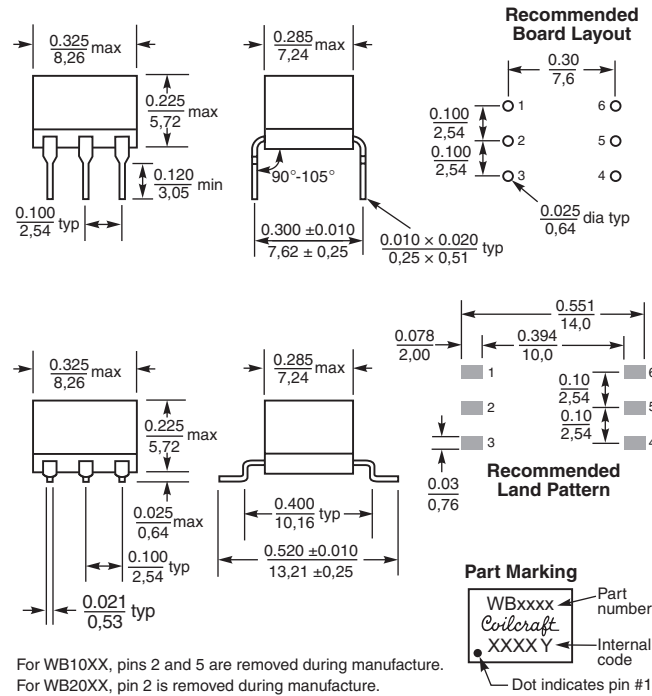
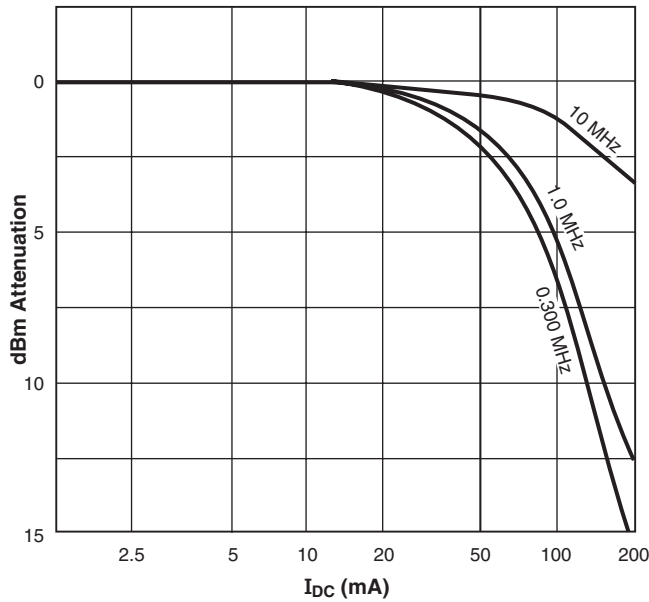
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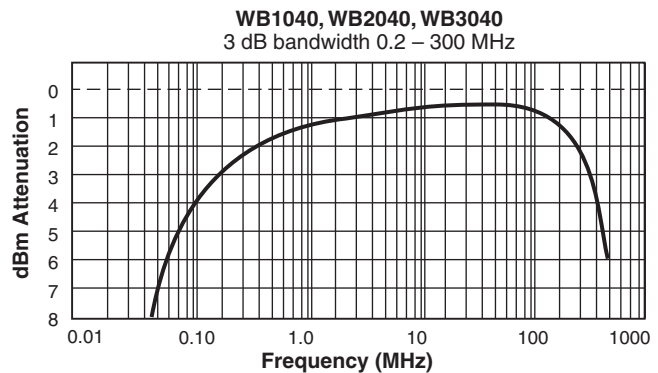
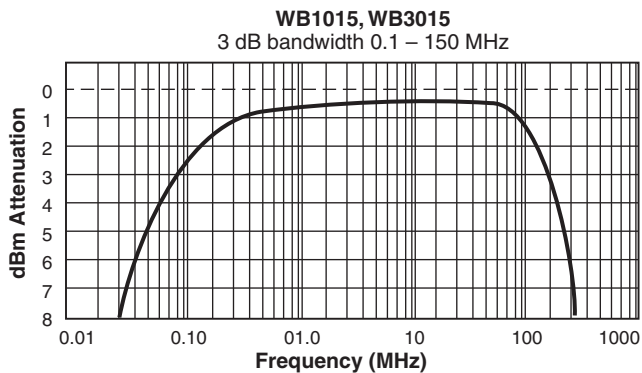
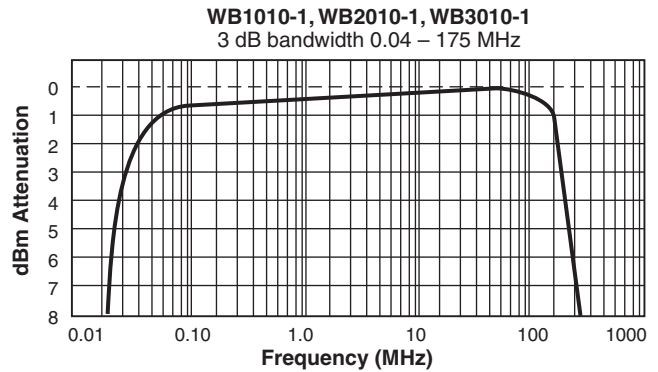
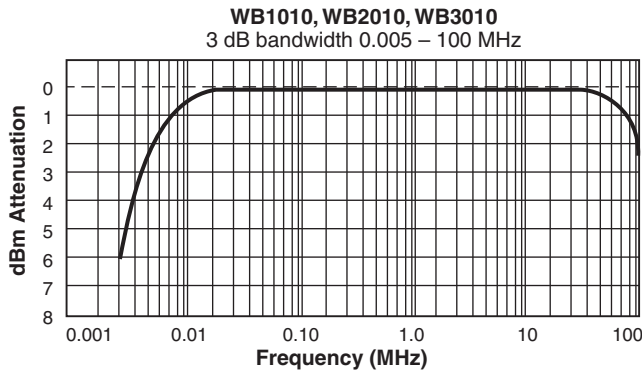
Wideband RF Transformers

Typical Attenuation vs Current



Dimensions are in $\frac{\text{inches}}{\text{mm}}$

Typical Frequency Response



Attenuation measured on a network analyzer (re: 50 Ohms)



US +1-847-639-6400 sales@coilcraft.com
UK +44-1236-730595 sales@coilcraft-europe.com
Taiwan +886-2-2264 3646 sales@coilcraft.com.tw
China +86-21-6218 8074 sales@coilcraft.com.cn
Singapore + 65-6484 8412 sales@coilcraft.com.sg

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