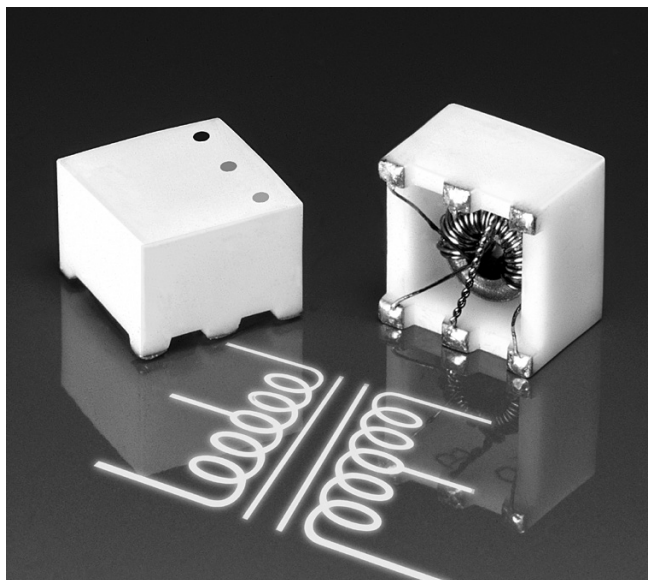




Surface Mount Wideband RF



- Tapped and untapped versions
- 400 V interwinding isolation, 1/4 Watt RF input power
- 250 mA max current rating.

Core material Ferrite

Terminations RoHS compliant tin-silver-copper over silver-platinum-glass frit. Other terminations available at additional cost.

Weight 0.37 – 0.43 g

Ambient temperature –40°C to +85°C

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

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)

Mean Time Between Failures (MTBF) 16,666,667 hours

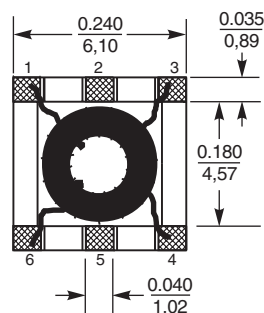
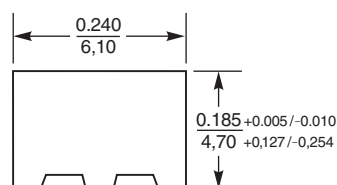
Packaging 1000 per 13" reel; Plastic tape: 16 mm wide, 0.34 mm thick, 12 mm pocket spacing, 4.83 mm pocket depth

PCB washing Tested to MIL-STD-202 Method 215 plus an additional aqueous wash. See [Doc787_PCB_Washing.pdf](#).

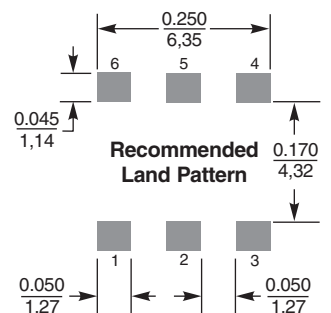
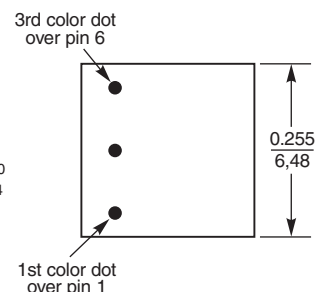
Typical Frequency Response

Part number	3 dB (MHz)	2 dB (MHz)	1 dB (MHz)
TTWB-1-AL_	0.08 - 450	0.13 - 325	0.30 - 190
TTWB-1.5-AL_	0.03 - 300	0.035 - 250	0.06 - 150
TTWB-2-AL_	0.05 - 200	0.06 - 160	0.10 - 100
TTWB-4-AL_	0.15 - 500	0.24 - 300	0.60 - 140
TTWB-16-AL_	0.05 - 80	0.06 - 75	0.11 - 30
TTWB1010L_	0.0035 - 125	0.0045 - 100	0.007 - 80
TTWB1010-1L_	0.03 - 250	0.04 - 225	0.06 - 200
TTWB1015L_	0.07 - 225	0.10 - 200	0.20 - 125
TTWB1040L_	0.15 - 400	0.25 - 350	0.80 - 250
TTWB-1-BL_	0.13 - 425	0.18 - 325	0.32 - 190
TTWB-1.5-BL_	0.50 - 250	0.80 - 175	1.50 - 120
TTWB-2-BL_	0.20 - 400	0.225 - 275	0.50 - 150
TTWB-4-BL_	0.14 - 700	0.20 - 400	0.40 - 150
TTWB-16-BL_	0.075 - 90	0.11 - 75	0.20 - 65
TTWB2010L_	0.0035 - 125	0.0045 - 100	0.007 - 80
TTWB2010-1L_	0.03 - 250	0.04 - 225	0.06 - 200
TTWB2040L_	0.15 - 400	0.25 - 350	0.80 - 250
TTWB-1-CL_	0.10 - 300	0.13 - 200	0.20 - 150
TTWB-1.5-CL_	0.15 - 200	0.225 - 150	0.35 - 100
TTWB-2-CL_	0.13 - 285	0.20 - 175	0.325 - 125
TTWB-4-CL_	0.14 - 500	0.20 - 230	0.40 - 110
TTWB3010L_	0.0035 - 125	0.0045 - 100	0.007 - 80
TTWB3010-1L_	0.03 - 250	0.04 - 225	0.06 - 200
TTWB3015L_	0.07 - 225	0.10 - 200	0.20 - 125
TTWB3040L_	0.15 - 400	0.25 - 350	0.80 - 250

Dimensions



Unless otherwise noted, tolerance for all dimensions $\pm 0.005/0.127$.



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



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

Document 194 Revised 05/15/17

© Coilcraft Inc. 2017

This product may not be used in medical or high risk applications without prior Coilcraft approval. Specification subject to change without notice. Please check web site for latest information.



Surface Mount Wideband RF Transformers

Type	Part number ¹	Impedance ratio ² pri:sec	Bandwidth (MHz)	Idc (mA)	Insertion loss max (dB)	L min ³ (μH)	Pins 1-3 DCR max (Ohms)	L min ³ (μH)	Pins 6-4 DCR max (Ohms)	Color code
 Type A	TTWB-1-AL_	1:1	0.08 - 450	250	0.60	40	0.070	40	0.070	Black Black Green
	TTWB-1.5-AL_	1:1.5	0.03 - 300	250	0.35	110	0.080	160	0.110	Black Brown Green
	TTWB-2-AL_	1:2	0.05 - 200	250	0.25	75	0.088	150	0.120	Black Red Green
	TTWB-4-AL_	1:4	0.15 - 500	250	0.50	25	0.075	98	0.135	Black Yellow Green
	TTWB-16-AL_	1:16	0.05 - 80	250	0.35	75	0.260	1250	0.910	Black Orange Green
	TTWB1010L_	1:1	0.0035 - 125	250	0.20	780	0.320	780	0.320	Black Black Black
	TTWB1010-1L_	1:1	0.03 - 250	250	0.20	95	0.200	95	0.200	Black Black Violet
	TTWB1015L_	1:1.5	0.07 - 225	250	0.40	51	0.130	80	0.145	Black Black Brown
	TTWB1040L_	1:4	0.15 - 400	250	0.40	25	0.115	95	0.160	Black Black Yellow
 Type B	TTWB-1-BL_	1:1	0.13 - 425	250	0.40	22	0.070	22	0.070	Brown Black Green
	TTWB-1.5-BL_	1:1.5	0.50 - 250	250	0.40	140	0.100	200	0.120	Brown Brown Green
	TTWB-2-BL_	1:2	0.20 - 400	250	0.35	75	0.088	150	0.130	Brown Red Green
	TTWB-4-BL_	1:4	0.14 - 700	250	0.50	25	0.075	98	0.135	Brown Yellow Green
	TTWB-16-BL_	1:16	0.075 - 90	250	0.30	75	0.260	1250	0.910	Brown Orange Green
	TTWB2010L_	1:1	0.0035 - 125	250	0.20	780	0.320	780	0.320	Brown Black Black
	TTWB2010-1L_	1:1	0.03 - 250	250	0.20	95	0.200	95	0.200	Brown Black Violet
	TTWB2040L_	1:4	0.15 - 400	250	0.40	25	0.115	95	0.160	Brown Black Yellow
 Type C	TTWB-1-CL_	1:1	0.10 - 300	250	0.60	22	0.070	22	0.070	Red Black Green
	TTWB-1.5-CL_	1:1.5	0.15 - 200	250	0.30	140	0.110	200	0.120	Red Brown Green
	TTWB-2-CL_	1:2	0.13 - 285	250	0.30	75	0.105	150	0.130	Red Red Green
	TTWB-4-CL_	1:4	0.14 - 500	250	0.50	25	0.075	98	0.135	Red Yellow Green
	TTWB3010L_	1:1	0.0035 - 125	250	0.20	780	0.320	780	0.320	Red Black Black
	TTWB3010-1L_	1:1	0.03 - 250	250	0.20	95	0.200	95	0.200	Red Black Violet
	TTWB3015L_	1:1.5	0.07 - 225	250	0.40	51	0.130	80	0.145	Red Black Brown
	TTWB3040L_	1:4	0.15 - 400	250	0.40	25	0.115	95	0.160	Red Black Yellow

1. When ordering, please specify **termination** and **packaging** codes:

TTWB-1-ALD

Termination: L = RoHS compliant tin-silver-copper over silver-platinum-glass frit.

Special order: S = non-RoHS tin-lead (63/37).

Packaging: D = 13" machine ready reel. EIA-481 embossed plastic tape, 1000 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 130 kHz, 0.1 Vrms, 0 Adc.

4. Electrical specifications at 25°C.

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

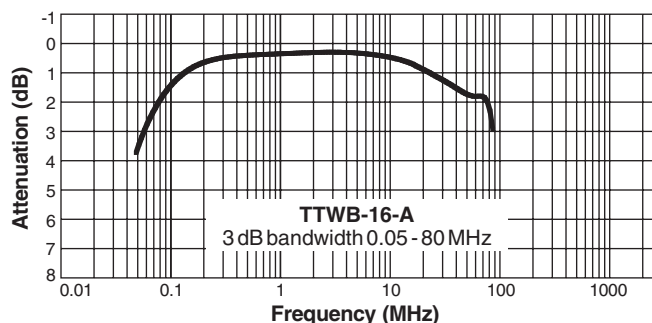
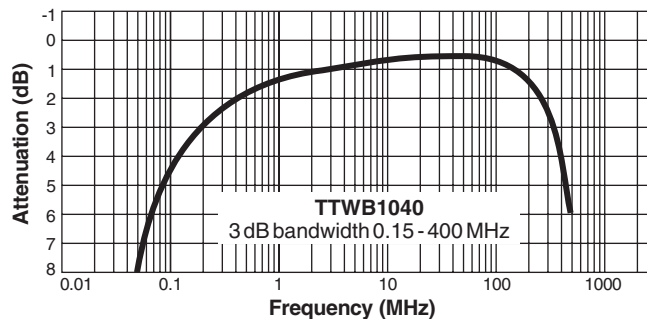
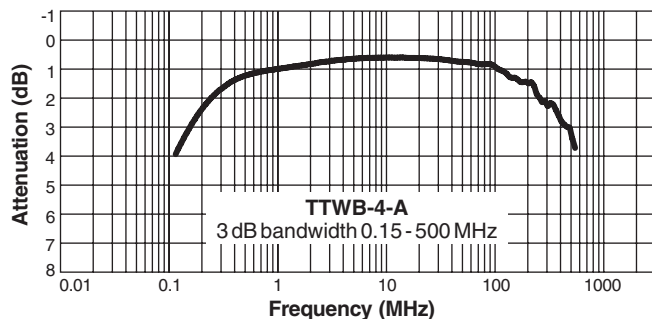
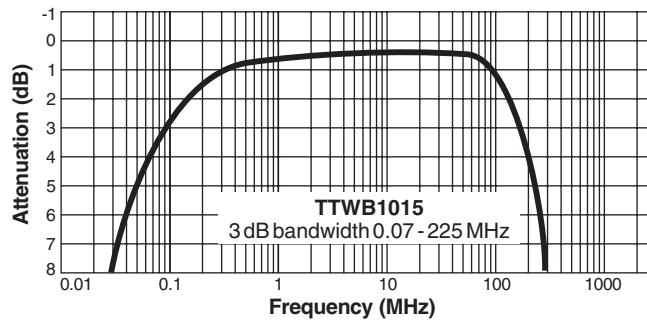
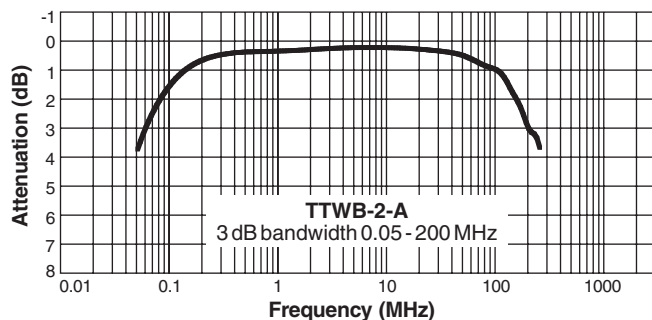
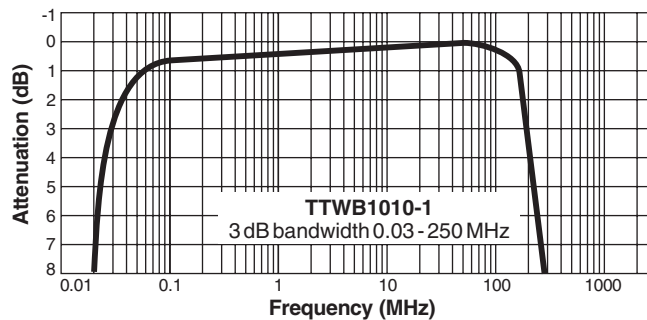
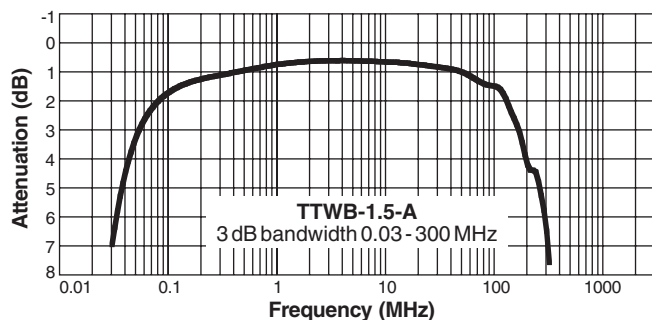
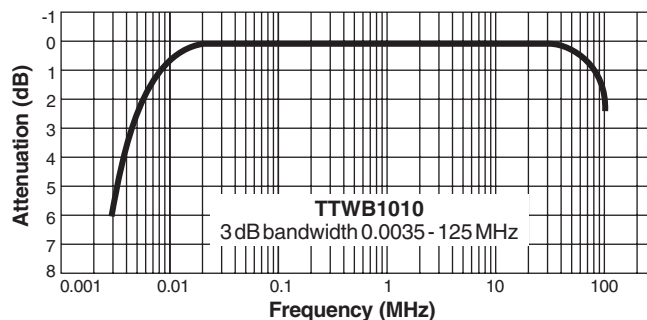
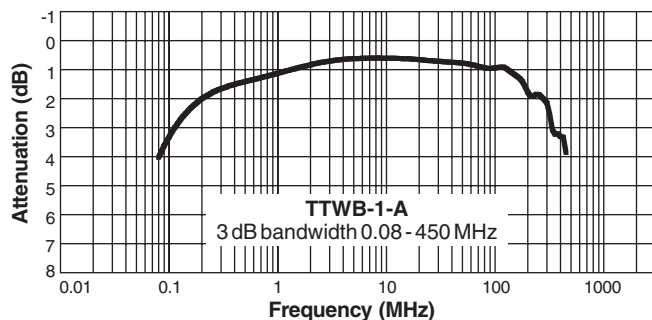
Document 194-2 Revised 05/15/17

© Coilcraft Inc. 2017

This product may not be used in medical or high risk applications without prior Coilcraft approval. Specification subject to change without notice. Please check web site for latest information.



Type A Transformers



Measured on a network analyzer (re: 50 Ohms)



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

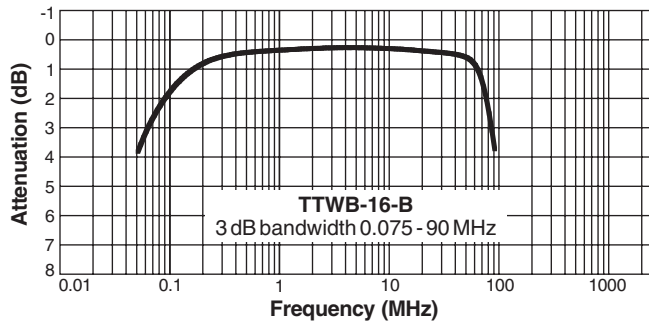
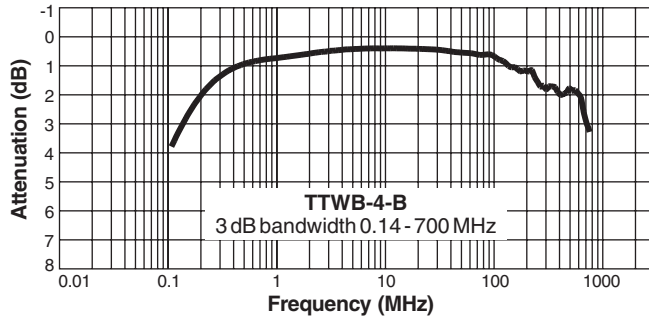
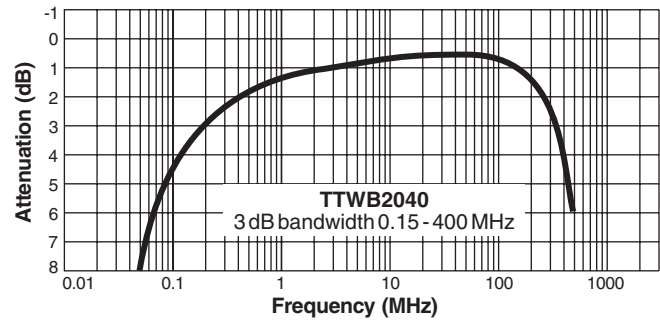
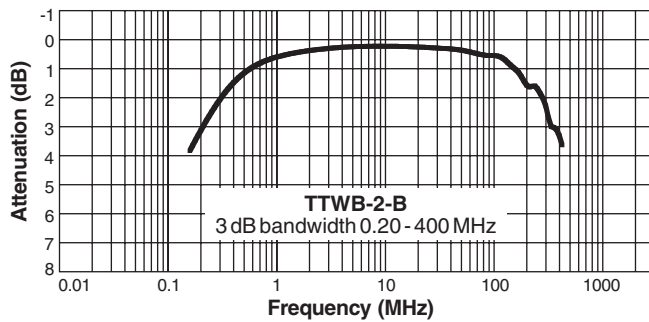
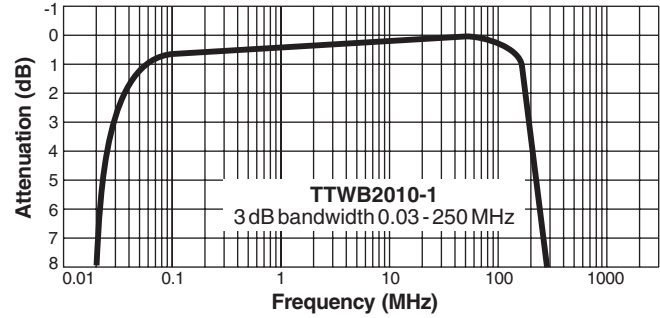
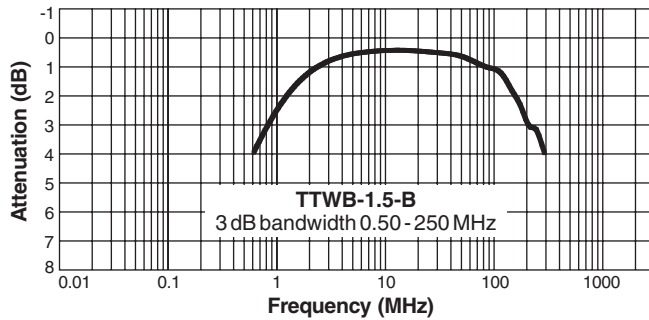
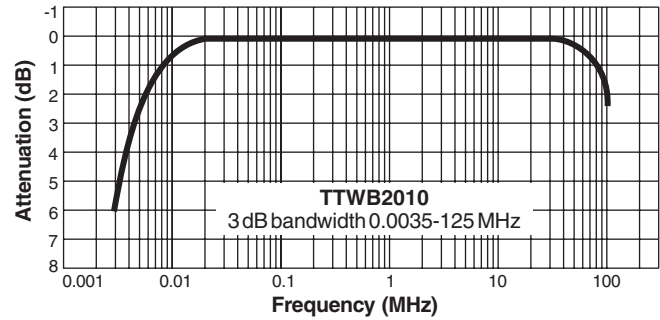
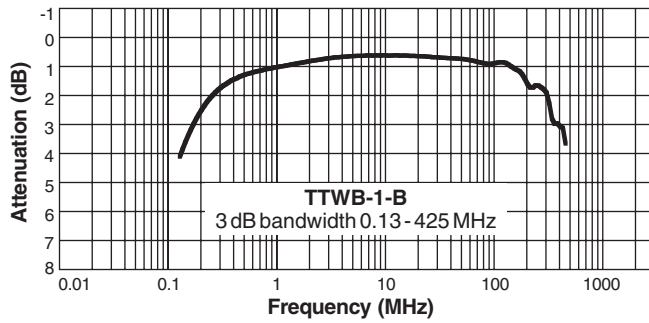
Document 194-3 Revised 05/15/17

© Coilcraft Inc. 2017

This product may not be used in medical or high risk applications without prior Coilcraft approval. Specification subject to change without notice. Please check web site for latest information.



Type B Transformers



Measured on a network analyzer (re: 50 Ohms)



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

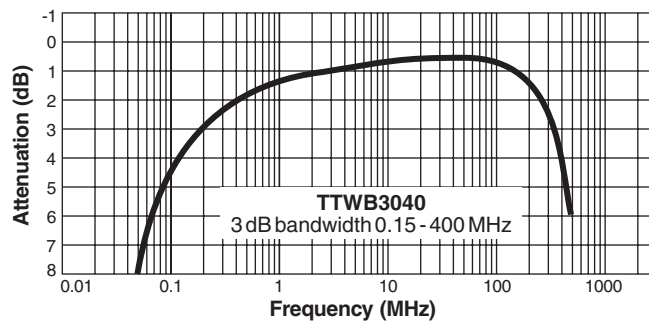
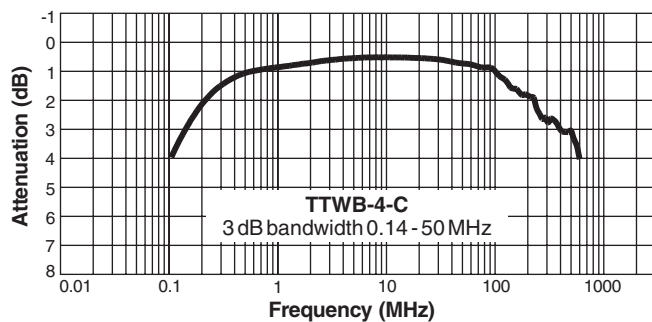
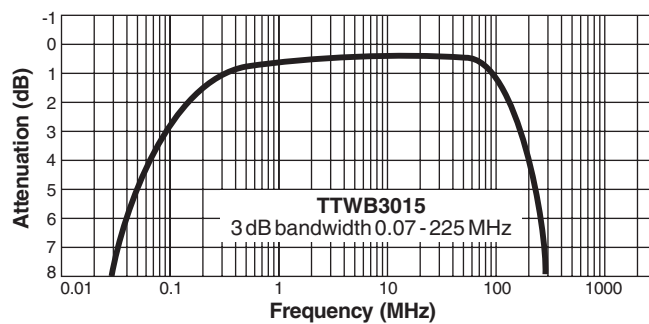
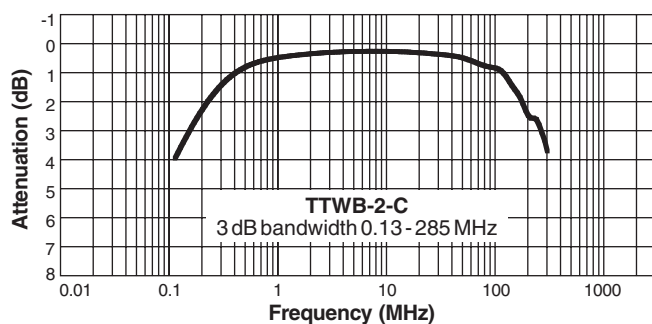
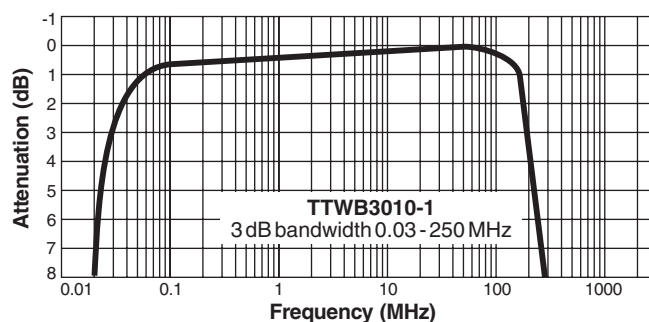
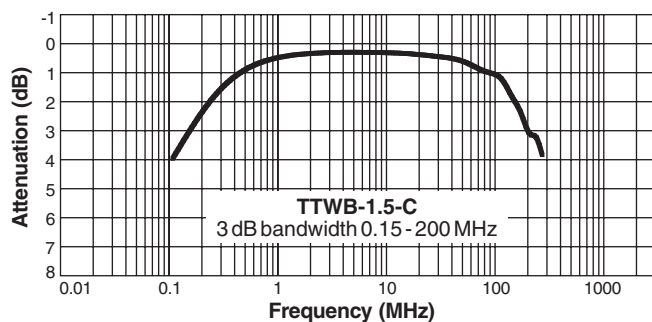
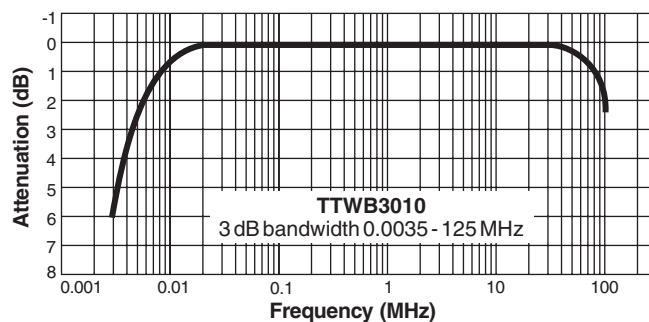
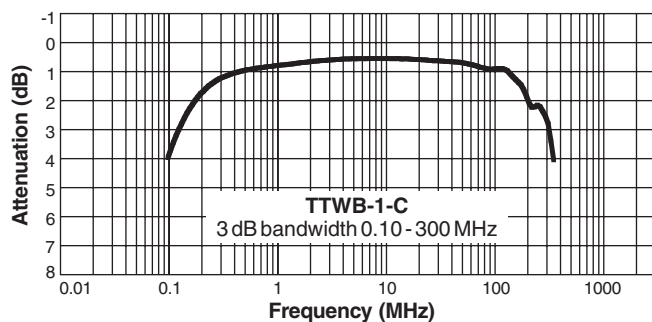
Document 194-4 Revised 05/15/17

© Coilcraft Inc. 2017

This product may not be used in medical or high risk applications without prior Coilcraft approval. Specification subject to change without notice. Please check web site for latest information.



Type C Transformers



Measured on a network analyzer (re: 50 Ohms)



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

Document 194-5 Revised 05/15/17

© Coilcraft Inc. 2017

This product may not be used in medical or high risk applications without prior Coilcraft approval. Specification subject to change without notice. Please check web site for latest information.

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[Coilcraft:](#)

[TTWB-1-CLB](#)