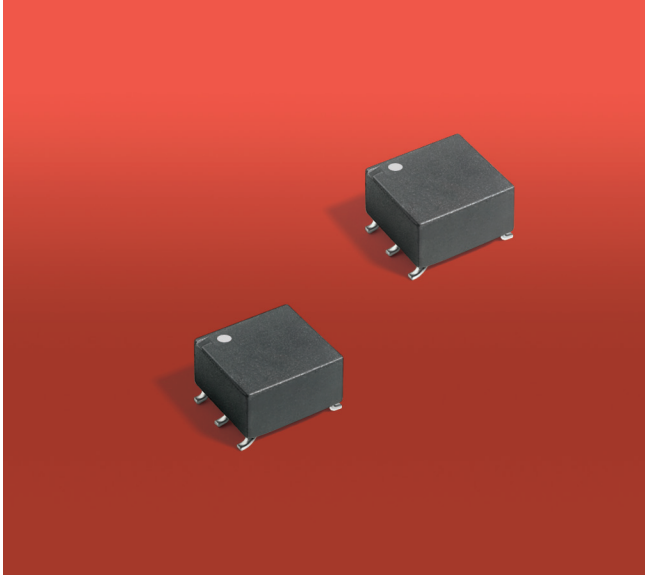


# Outgassing Compliant Wideband Transformers



- Small wideband transformer: 7.2 × 6.43 × 4.45 mm high
- Passes NASA low outgassing specifications
- 300 V interwinding isolation, 1/4 Watt RF input power
- 250 mA max current rating
- Tin-lead terminations for the best possible board adhesion

**Core material** Ferrite

**Terminations** tin-lead over tin over nickel over phos bronze.

**Ambient temperature** -55°C to +125°C

**Storage temperature** Component: -55°C to +125°C.

Tape and reel packaging: -55°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)

**Enhanced crush-resistant packaging** 750/7" reel

Plastic tape: 12 mm wide, 0.3 mm thick, 8 mm pocket spacing, 2.9 mm pocket depth

Part number	Schematic	Impedance ratio <sup>1</sup> pri:sec	Bandwidth (MHz)	Insertion loss max (dB)	Pins 1-3 (primary)		Pins 6-4 (secondary)	
					L min <sup>2</sup> (µH)	DCR max <sup>3</sup> (mOhm)	L min <sup>2</sup> (µH)	DCR max <sup>3</sup> (mOhm)
AE520RFA01A1SZ	A	1 : 1	0.045 – 365	0.25	60	130	60	130
AE520RFA01B1SZ	B	1 : 1	0.045 – 365	0.25	60	130	60	130
AE520RFA02B1SZ	B	1 : 2	0.045 – 495	0.25	60	130	140	180
AE520RFA03B1SZ	B	1 : 3	0.075 – 425	0.35	40	120	140	180
AE520RFA04B1SZ	B	1 : 4	0.120 – 440	0.60	25	90	100	160
AE520RFA08B1SZ	B	1 : 8	0.105 – 300	0.60	25	90	200	180
AE520RFA09B1SZ	B	1 : 9	0.075 – 200	0.30	40	120	500	250
AE520RFA16B1SZ	B	1 : 16	0.105 – 135	0.60	25	90	500	250

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

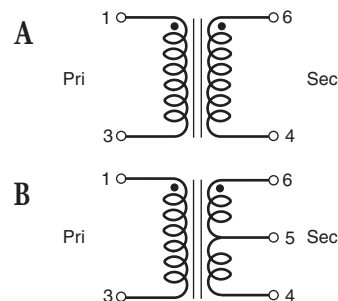
2. Inductance measured at 100 kHz, 0.1 V, 0 Adc on an Voltech AT3600 or equivalent.

3. DCR measured on a Voltech AT3600 or equivalent.

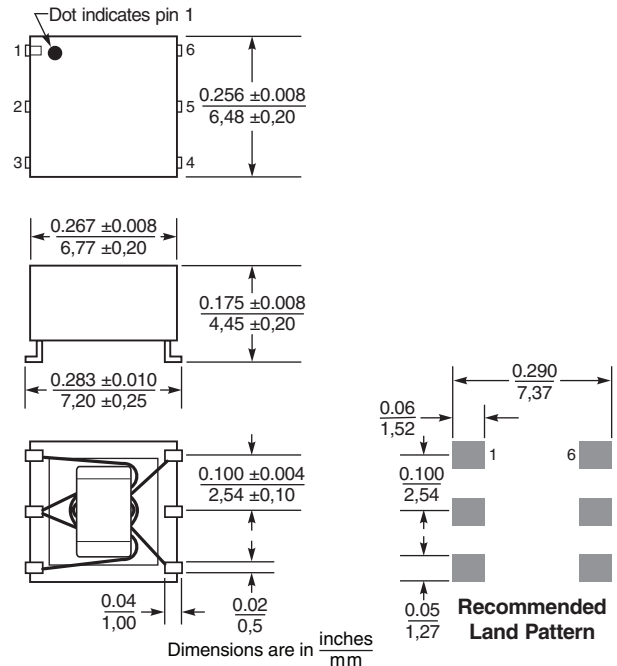
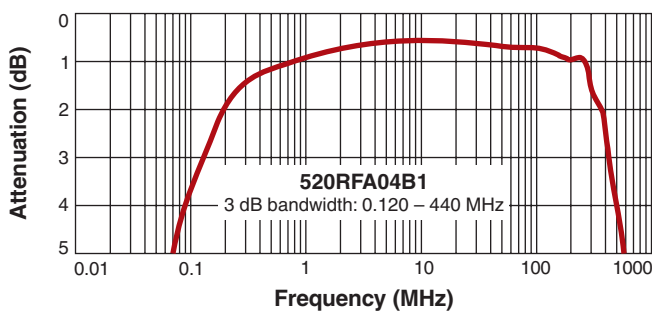
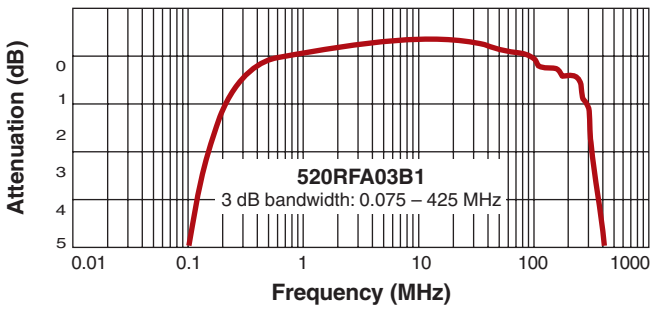
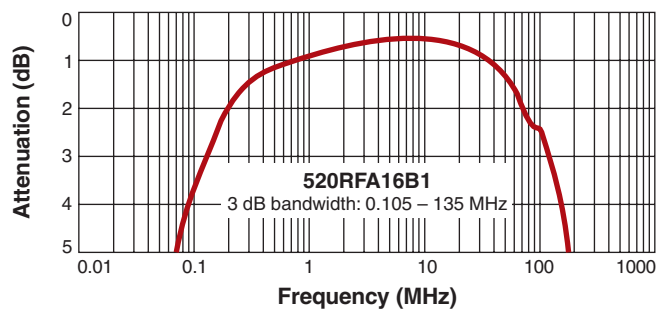
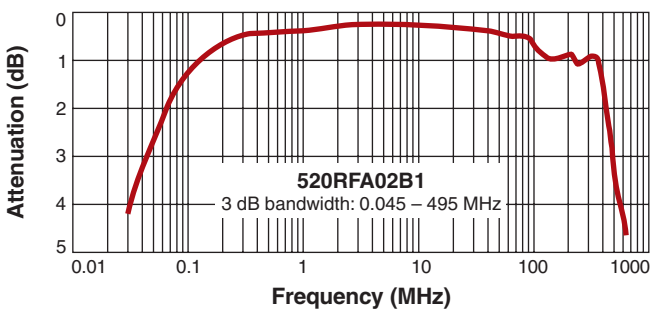
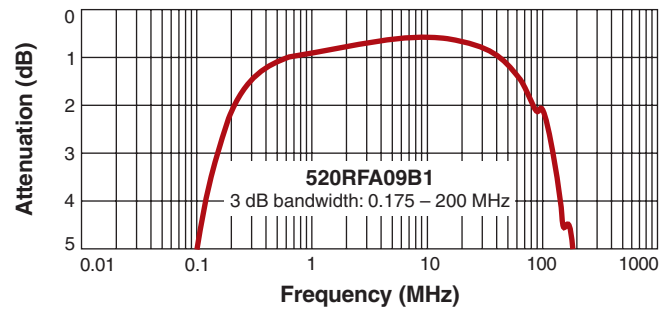
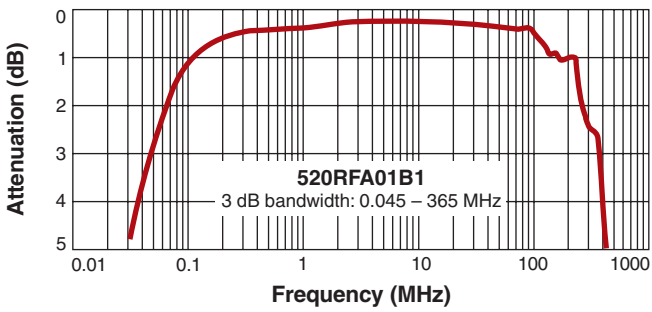
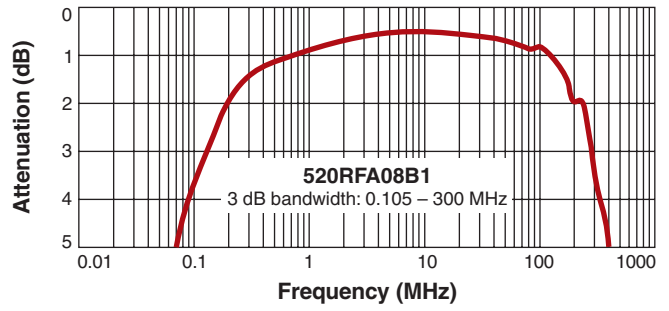
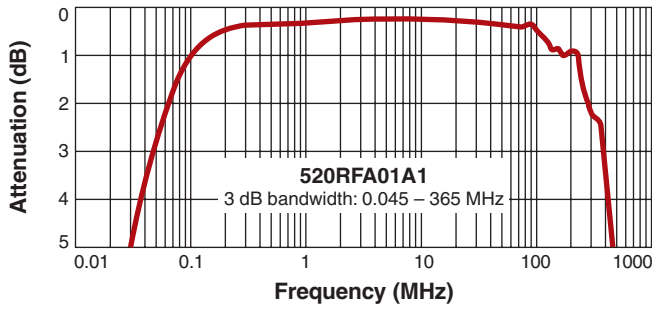
4. Electrical specifications at 25°C.

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

## Schematics



# AE520RFA Series



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Document AE099-2 Revised 09/04/12

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