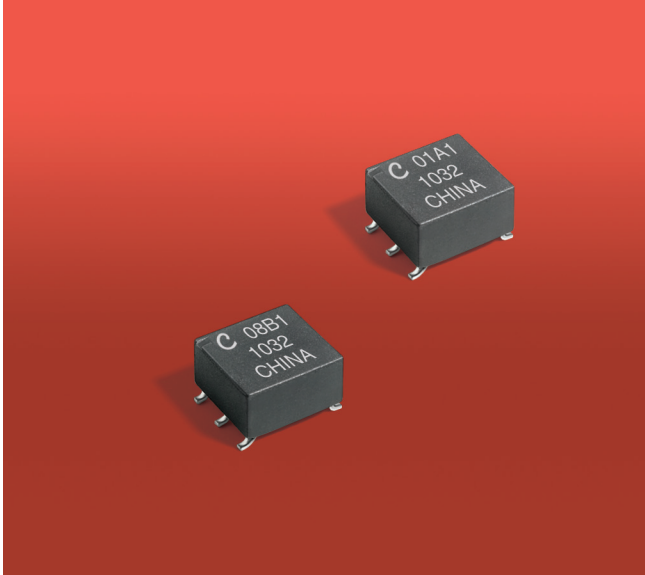


High Reliability Wideband Transformers



- Small wideband transformer: 7.2 × 6.43 × 4.45 mm high
- 300 V interwinding isolation, 1/4 Watt RF input power
- 250 mA max current rating.

Core material Ferrite

Terminations tin-silver-copper 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

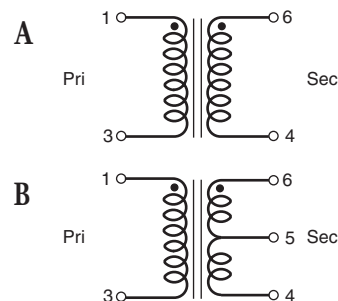
Moisture Sensitivity Level (MSL) 1 (unlimited floor life at <30°C / 85% relative humidity)

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

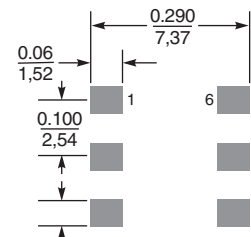
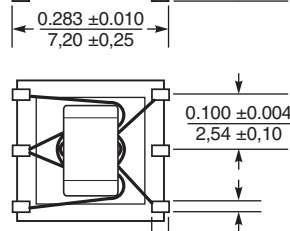
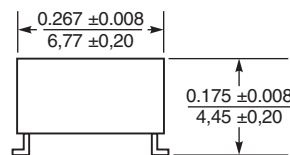
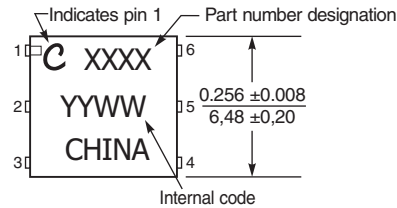
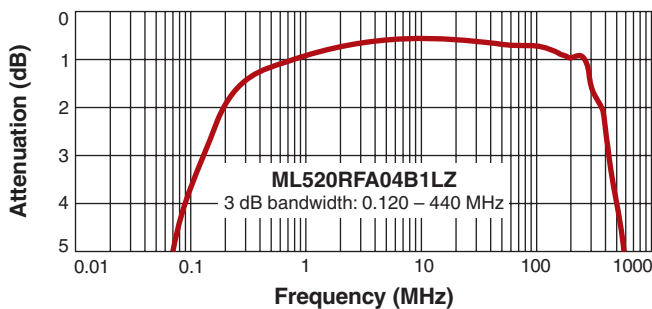
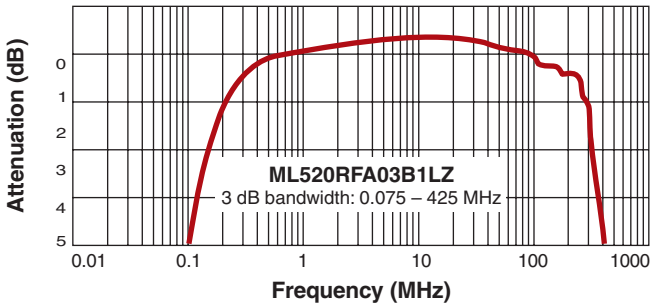
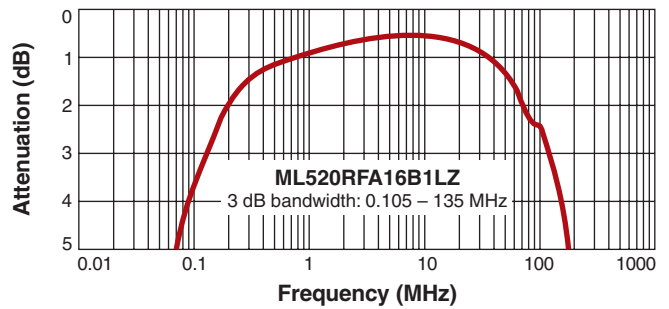
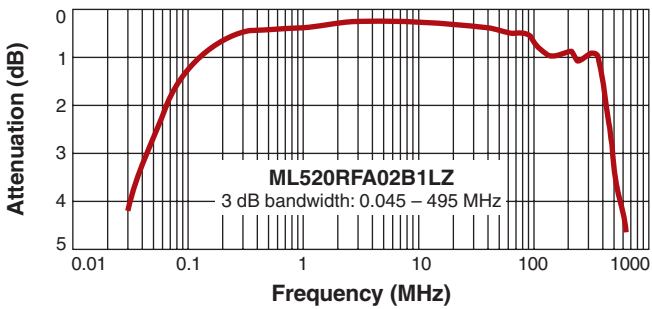
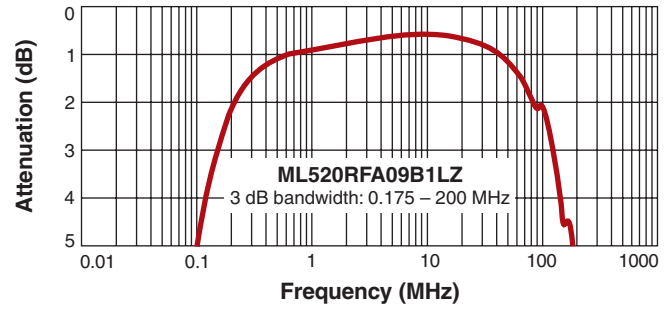
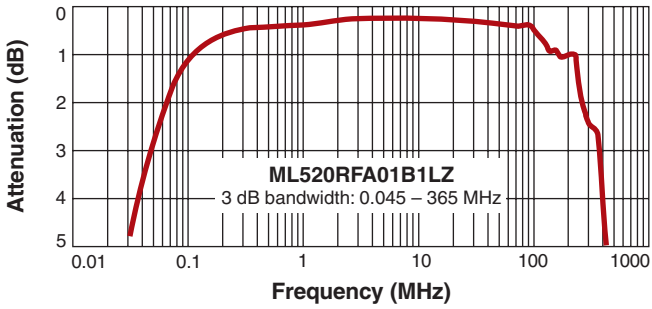
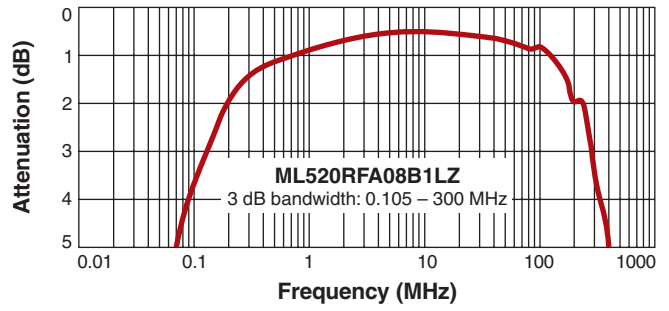
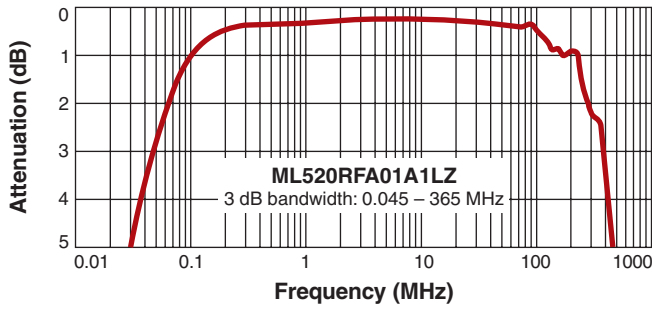
| Part number | Schematic | Impedance ratio ¹ pri:sec | Bandwidth (MHz) | Insertion loss max (dB) | Pins 1-3 (primary) | | Pins 6-4 (secondary) | |
|----------------|-----------|---|-----------------|-------------------------|-------------------------|-----------------------------|-------------------------|-----------------------------|
| | | | | | L min ² (µH) | DCR max ³ (mOhm) | L min ² (µH) | DCR max ³ (mOhm) |
| ML520RFA01A1LZ | A | 1 : 1 | 0.045 – 365 | 0.25 | 60 | 130 | 60 | 130 |
| ML520RFA01B1LZ | B | 1 : 1 | 0.045 – 365 | 0.25 | 60 | 130 | 60 | 130 |
| ML520RFA02B1LZ | B | 1 : 2 | 0.045 – 495 | 0.25 | 60 | 130 | 140 | 180 |
| ML520RFA03B1LZ | B | 1 : 3 | 0.075 – 425 | 0.35 | 40 | 120 | 140 | 180 |
| ML520RFA04B1LZ | B | 1 : 4 | 0.120 – 440 | 0.60 | 25 | 90 | 100 | 160 |
| ML520RFA08B1LZ | B | 1 : 8 | 0.105 – 300 | 0.60 | 25 | 90 | 200 | 180 |
| ML520RFA09B1LZ | B | 1 : 9 | 0.075 – 200 | 0.30 | 40 | 120 | 500 | 250 |
| ML520RFA16B1LZ | 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



ML520RFA Series



Dimensions are in inches/mm