



SMT Mini Wideband Transformer



- 3 dB bandwidth: 0.1 MHz to 3.5 GHz
- 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 83.3 mg

Interwinding isolation 300 V

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 750/7" reel; 3000/13" reel; Plastic tape: 12 mm wide, 0.3 mm thick, 8 mm pocket spacing, 2.9 mm pocket depth

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

Part number ¹	Impedance ratio pri:sec	Bandwidth (MHz)	Insertion loss max (dB)	Pins 1-4		Pins 2-3	
				L min ³ (µH)	DCR max ⁴ (mOhm)	L min ³ (µH)	DCR max ⁴ (mOhm)
JA4220-AL_	1:1	0.1 – 3500	0.2	15	120	15	120

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

JA4220-ALC

Termination: L = RoHS compliant tin-silver-copper over silver-platinum-glass frit.
Special order: S = non-RoHS tin-lead (63/37).

Packaging: C = 7" machine-ready reel. EIA-481 embossed plastic tape (750 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 C instead.

D = 13" machine-ready reel. EIA-481 embossed plastic tape. Factory order only, not stocked (3000 parts per full reel).

2. Inductance measured at 100 kHz, 0.1 V, 0 Adc on an Agilent/HP 4192 or equivalent.

3. DCR measured on a micro-ohmmeter.

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

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



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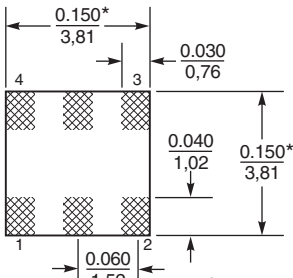
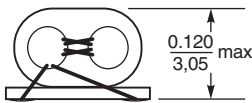
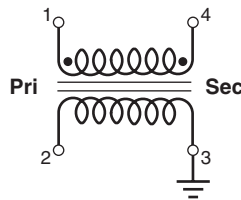
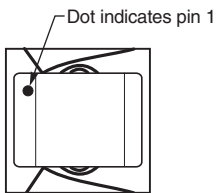
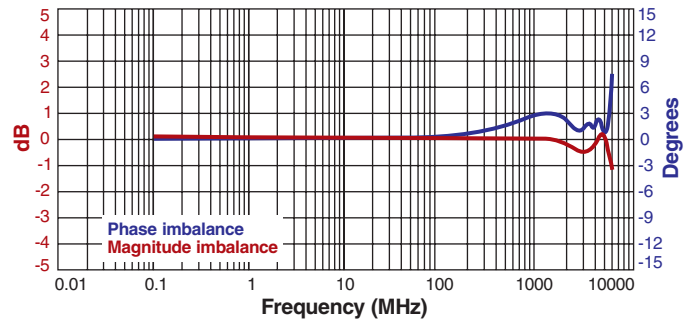
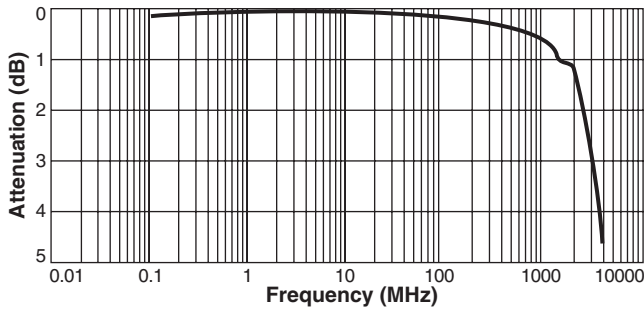
Document 748-1 Revised 05/03/13

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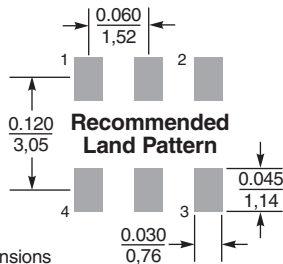


SMT Mini Wideband Transformer – JA4220-AL



*Nominal dimensions of the substrate

Recommended Land Pattern



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



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Document 748-2 Revised 05/03/13

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