



Multilayer Power Inductors



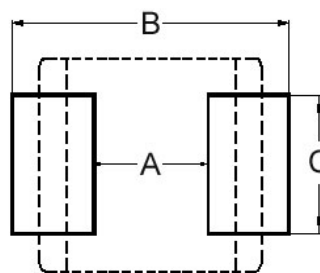
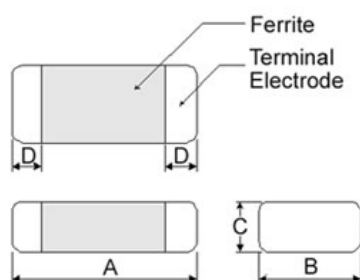
The MPL Series is a miniature type of multilayer power inductor constructed using low-loss ferrite material to support high-speed switching frequencies. The compact size and high efficiency is ideal for DC-DC converter applications in space-limited boards.

Features

- RoHS compliant
- Small size
- Low profile
- High current
- Magnetically shielded configuration allowing for high density mounting

Applications

- DC-DC converters
- Power modules
- Cellular phones
- DSC, PND, DVD
- Wireless card and other electronic devices



Dimensions in mm

TYPE	A	B	C	D
160808	1.6±0.15	0.8±0.15	0.8±0.15	0.3±0.2
201205	2.0±0.20	1.25±0.20	0.55 Max	0.5±0.3
201210	2.0±0.20	1.25±0.20	1.0 Max	0.5±0.3
201610	2.0±0.20	1.6±0.20	1.0 Max	0.5±0.3
252010	2.5±0.20	2.0±0.20	1.0 Max	0.6±0.2
252012	2.5±0.20	2.0±0.20	1.2 Max	0.6±0.2

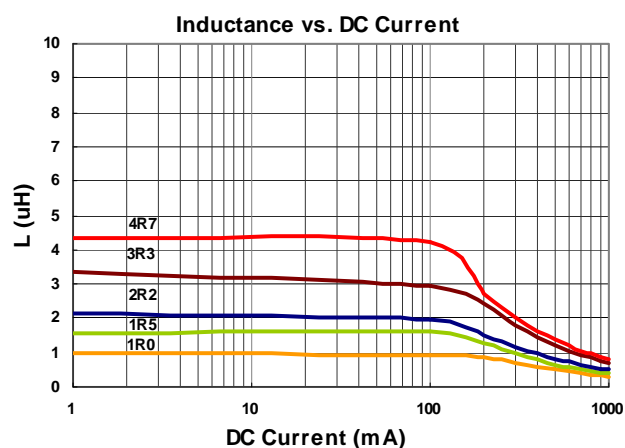
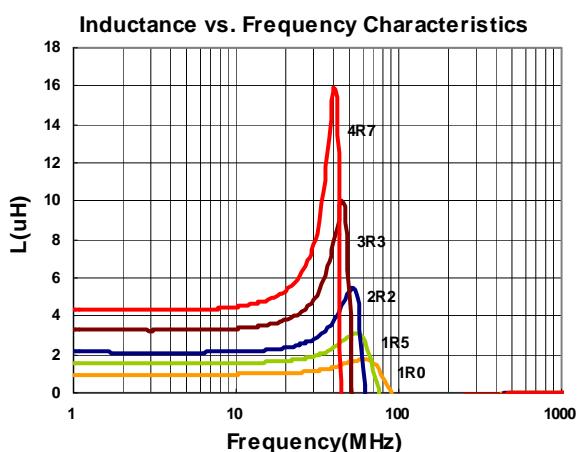
Dimensions in mm

TYPE	A	B	C
160808	0.7 ~ 0.8	1.8 ~ 2.0	0.6 ~ 0.8
201205	0.8 ~ 1.2	2.3 ~ 2.9	1.0 ~ 1.4
201210	0.8 ~ 1.2	2.3 ~ 2.9	1.0 ~ 1.4
201610	0.8 ~ 1.2	2.1 ~ 2.7	1.6 ~ 2.0
252010	1.3 ~ 1.9	2.7 ~ 3.5	2.0 ~ 2.6
252012	1.3 ~ 1.9	2.7 ~ 3.5	2.0 ~ 2.6

Part Number	Inductance (uH)	Test Frequency (MHz)	Tolerance (±%)	RDC (Ω) ±30%	Rated current (mA) Max
MPL252010-1R0□	1.0	1	20, 30	0.11	1200
MPL252010-1R5□	1.5	1	20, 30	0.13	1100
MPL252010-2R2□	2.2	1	20, 30	0.15	1000
MPL252010-3R3□	3.3	1	20, 30	0.18	1000
MPL252010-4R7□	4.7	1	20, 30	0.25	900

- Tolerance : M = ±20% ,N = ±30%
- Packaging: Clear tape and reel {standard}.
- L : Agilent/HP4287A+16197A, 1MHz 200mV
- RDC : HP 4118B, or equivalent
- Rated Current : Applied the current to coils, the temperature rise shall not be more than 40°C
- Operating temperature range from -55°C to 125°C . (Including self - temperature rise)

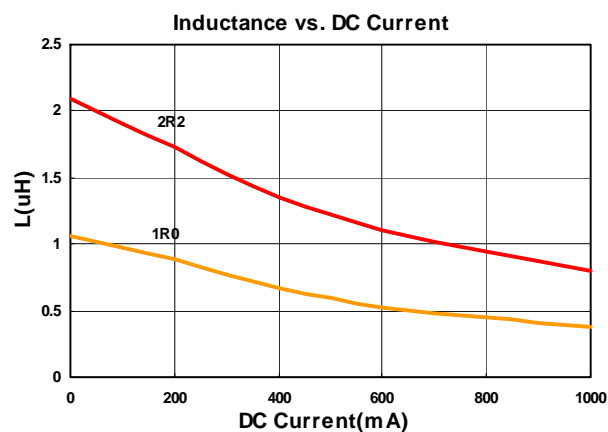
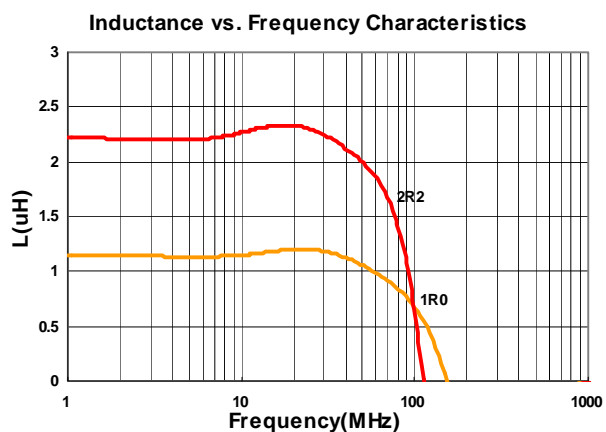
Test Instruments : HP4287A Inductance / Material Analyzer



Part Number	Inductance (uH)	Test Frequency (MHz)	Tolerance (±%)	RDC (Ω) ±30%	Rated current (mA) Max
MPL160808-R47□	0.47	3	20, 30	0.15	1100
MPL160808-1R0□	1.0	3	20, 30	0.20	950
MPL160808-2R2□	2.2	3	20, 30	0.30	750
MPL160808-4R7□	4.7	3	20, 30	0.50	400

- Tolerance : M = ±20% ,N = ±30%
- Packaging: Clear tape and reel {standard}.
- L : Agilent/HP4287A+16197A, 3MHz 200mV
- RDC : HP 4338B, or equivalent
- Rated Current : Applied the current to coils, the temperature rise shall not be more than 40°C
- Operating temperature range from -55°C to 125°C. (Including self - temperature rise)

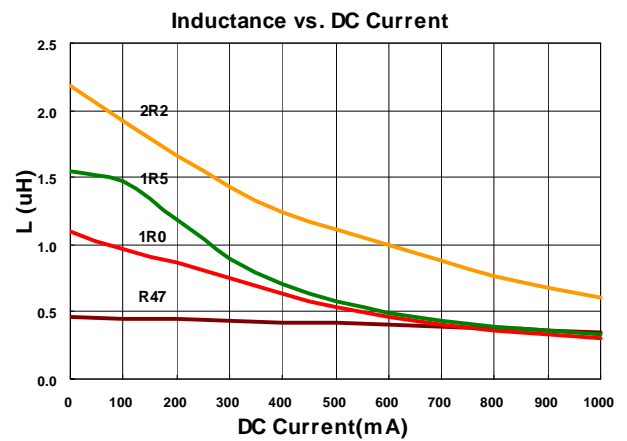
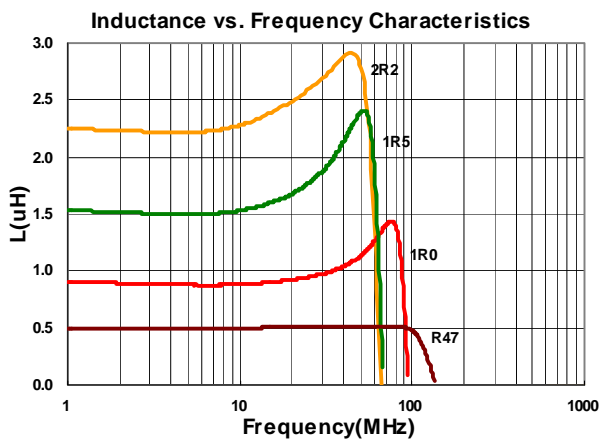
Test Instruments : HP4287A Inductance / Material Analyzer



Part Number	Inductance (uH)	Test Frequency (MHz)	Tolerance (±%)	RDC (Ω) ±30%	Rated current (mA) Max
MPL201205-R47□	0.47	3	20, 30	0.11	1200
MPL201205-1R0□	1.0	3	20, 30	0.16	900
MPL201205-1R5□	1.5	3	20, 30	0.18	800
MPL201206-2R2□	2.2	3	20, 30	0.29	600

- Tolerance : M = ±20% ,N = ±30%
- Packaging: Clear tape and reel {standard}
- L : Agilent/HP4287A+16197A, 3MHz 200mV
- RDC : HP 4338B, or equivalent
- Rated Current : Applied the current to coils, the temperature rise shall not be more than 40°C
- Operating temperature range from -55°C to 125°C . (Including self - temperature rise)

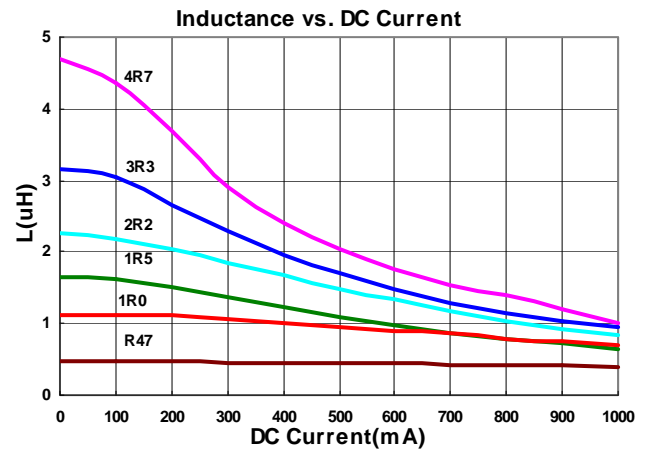
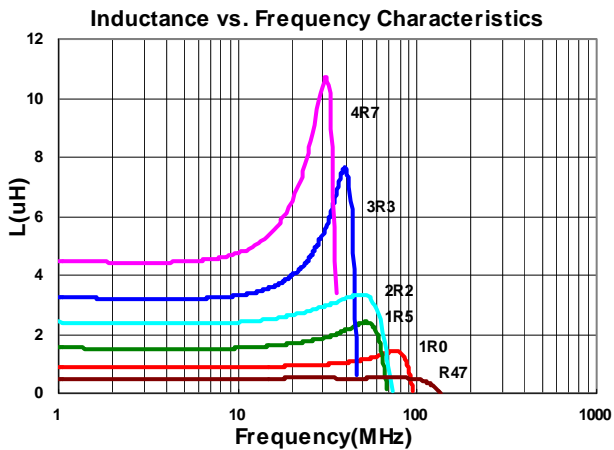
Test Instruments : HP4287A Inductance / Material Analyzer



Part Number	Inductance (uH)	Test Frequency (MHz)	Tolerance (±%)	RDC (Ω) ±30%	Rated current (mA) Max
MPL201210-R47□	0.47	3	20, 30	0.09	1300
MPL201210-1R0□	1.0	3	20, 30	0.12	1200
MPL201210-1R5□	1.5	3	20, 30	0.15	1100
MPL201210-2R2□	2.2	3	20, 30	0.19	1100
MPL201210-3R3□	3.3	3	20, 30	0.24	800
MPL201210-4R7□	4.7	3	20, 30	0.26	700

- Tolerance : M = ±20% ,N= ±30%
- Packaging: Clear tape and reel {standard}.
- L : Agilent/HP4287A+16197A, 3MHz 200mV
- RDC : HP 4338B, or equivalent
- Rated Current : Applied the current to coils, the temperature rise shall not be more than 40°C
- Operating temperature range from -55°C to 125°C . (Including self - temperature rise)

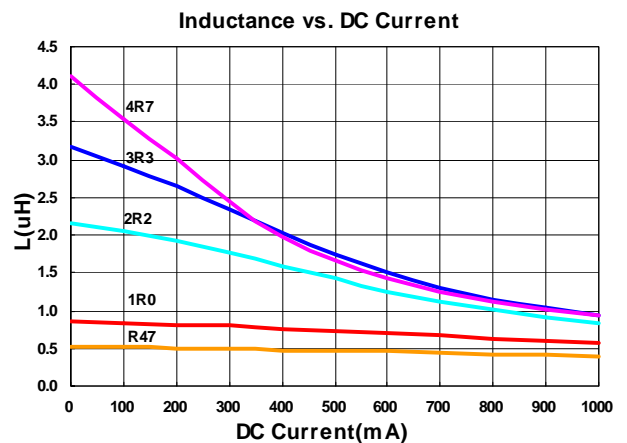
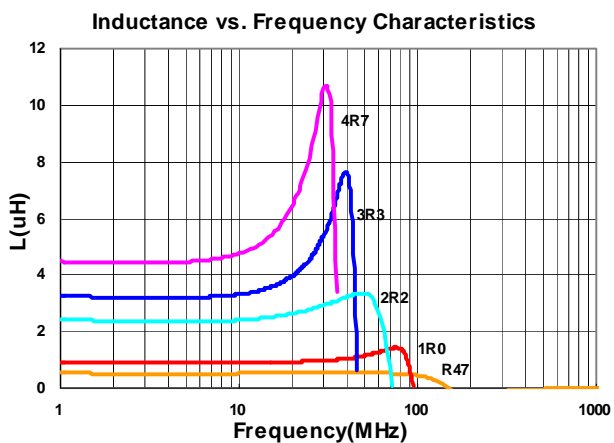
Test Instruments : HP4287A Inductance / Material Analyzer



Part Number	Inductance (uH)	Test Frequency (MHz)	Tolerance (±%)	RDC (Ω) ±30%	Rated current (mA) Max
MPL201610-R47□	0.47	3	20, 30	0.06	1600
MPL201610-1R0□	1.0	3	20, 30	0.09	1300
MPL201610-2R2□	2.2	3	20, 30	0.13	1000
MPL201610-3R3□	3.3	3	20, 30	0.17	850
MPL201610-4R7□	4.7	3	20, 30	0.21	800

- Tolerance : M = ±20% ,N = ±30%
- Packaging: Clear tape and reel {standard}.
- L : Agilent/HP4287A+16197A, 3MHz 200mV
- RDC : HP 4338B, or equivalent
- Rated Current : Applied the current to coils, the temperature rise shall not be more than 40°C
- Operating temperature range from -55°C to 125°C. (Including self - temperature rise)

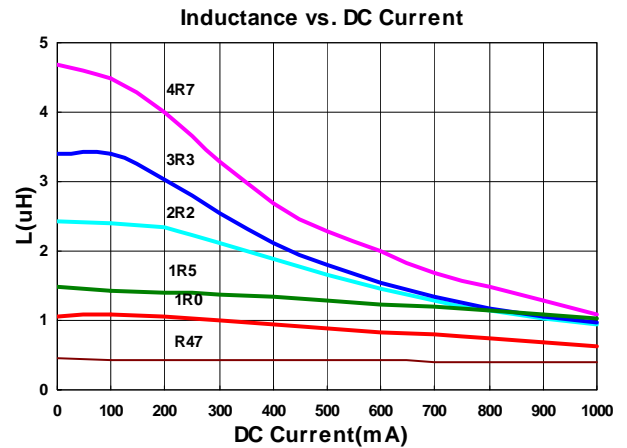
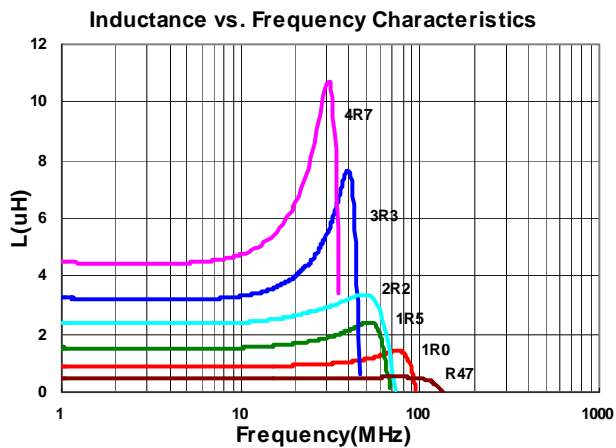
Test Instruments : HP4287A Inductance / Material Analyzer



Part Number	Inductance (uH)	Test Frequency (MHz)	Tolerance (±%)	RDC (Ω) ±30%	Rated current (mA) Max
MPL252010-R47□	0.47	3	20, 30	0.04	1800
MPL252010-1R0□	1.0	3	20, 30	0.06	1500
MPL252010-1R5□	1.5	3	20, 30	0.07	1400
MPL252010-2R2□	2.2	3	20, 30	0.10	1200
MPL252010-3R3□	3.3	3	20, 30	0.12	1100
MPL252010-4R7□	4.7	3	20, 30	0.14	1000

- Tolerance : M = ±20% ,N = ±30%
- Packaging: Clear tape and reel {standard}.
- L : Agilent/HP4287A+16197A, 3MHz 200mV
- RDC : HP 4338B, or equivalent
- Rated Current : Applied the current to coils, the temperature rise shall not be more than 40°C
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Test Instruments : HP4287A Inductance / Material Analyzer



Part Number	Inductance (uH)	Test Frequency (MHz)	Tolerance (±%)	RDC (Ω) ±30%	Rated current (mA) Max
MPL252012-R47□	0.47	3	20, 30	0.04	1800
MPL252012-1R0□	1.0	3	20, 30	0.05	1600
MPL252012-1R5□	1.5	3	20, 30	0.07	1400
MPL252012-2R2□	2.2	3	20, 30	0.10	1200
MPL252012-3R3□	3.3	3	20, 30	0.12	1100
MPL252012-4R7□	4.7	3	20, 30	0.14	1000
MPL252012-6R8□	6.8	3	20, 30	0.16	900

- Tolerance : M = ±20% ,N = ±30%
- Packaging: Clear tape and reel {standard}.
- L : Agilent/HP4287A+16197A, 3MHz 200mV
- RDC : HP 4338B, or equivalent
- Rated Current : Applied the current to coils, the temperature rise shall not be more than 40°C
- Operating temperature range from -55°C to 125°C. (Including self - temperature rise)

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