

# IML Series



Inductor ▼ Multilayer ▼ Chip



## Features:

- Designed for EMI/RFI suppression, timing, and smoothing in high frequency applications
- Wide inductance range
- Excellent long-term stability and high reliability
- Reliable monolithic structure for a closed magnetic path
- Used in wireless communications products and computer peripherals
- Suitable for high density mounting when PCB real estate is at a premium
- Nickel barrier terminations are flow, IR reflow, and vapor phase solderable

## Summary of Specifications:

- Multilayer Chip Inductor for EMI/RFI suppression
- Nominal inductance range: 0.22 $\mu$ H to 220 $\mu$ H
- Operating temperature range: -20°C to +100°C
- Standard capacitance tolerance:  $\pm$ 10%,  $\pm$ 20%
- EIA case size range: 1206 and 1210

## Part Numbering System

IML	474	M	1206	04	P	13
Series Code	Inductance	Tolerance	Case Size	Thickness	Package	Reel Size
	0.22 $\mu$ H to 220 $\mu$ H  (Expressed in $\mu$ H where the first two digits identify the first and second significant figures of inductance and the third digit identifies the multiplier)	K = $\pm$ 10% M = $\pm$ 20%	See Table	See Table	B = Bulk P = Plastic Tape/Reel	Null = 7" Reel 10 = 10" Reel 13 = 13" Reel

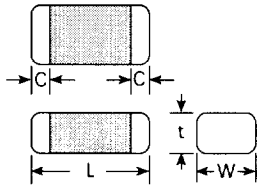
REV 4-2-99

# IML Series

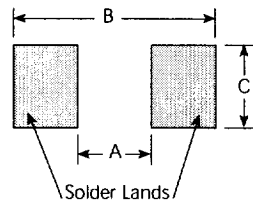
Electrical Characteristics							
Part Number	Inductance (μH)	Inductance Tolerance	Q min	LQ Test Frequency (MHz)	Self Resonant Frequency (MHz) min	DC Resistance (Ω) max	DC Rated Current (mA) max
IML224M120602	0.22	±10% or ±20%	20	25	150.0	0.65	100
IML274M120602	0.27	±10% or ±20%	20	25	136.0	0.65	100
IML334M120602	0.33	±10% or ±20%	20	25	125.0	0.75	100
IML394M120604	0.39	±10% or ±20%	25	25	110.0	0.65	100
IML474M120604	0.47	±10% or ±20%	25	25	105.0	0.75	100
IML564M120604	0.56	±10% or ±20%	25	25	95.0	0.85	100
IML684M120604	0.68	±10% or ±20%	25	25	80.0	0.95	100
IML824M120604	0.82	±10% or ±20%	25	25	75.0	1.05	100
IML105M120604	1.0	±10% or ±20%	25	10	70.0	0.65	100
IML125M120604	1.2	±10% or ±20%	25	10	60.0	0.75	100
IML155M120604	1.5	±10% or ±20%	30	10	55.0	0.65	50
IML185M120604	1.8	±10% or ±20%	30	10	55.0	0.75	50
IML225M120604	2.2	±10% or ±20%	30	10	50.0	0.85	50
IML275M120604	2.7	±10% or ±20%	30	10	45.0	0.95	50
IML335M120604	3.3	±10% or ±20%	30	10	40.0	1.05	50
IML395M120604	3.9	±10% or ±20%	30	10	38.0	1.15	50
IML475M120604	4.7	±10% or ±20%	30	10	36.0	1.35	50
IML565M120604	5.6	±10% or ±20%	30	10	33.0	0.95	25
IML685M120604	6.8	±10% or ±20%	30	4.0	22.0	1.05	25
IML825M120604	8.2	±10% or ±20%	30	4.0	20.0	1.15	25
IML106M120604	10.0	±10% or ±20%	30	4.0	18.0	1.35	25
IML126M120604	12.0	±10% or ±20%	30	2.0	17.0	1.85	15
IML156M120604	15.0	±10% or ±20%	30	2.0	15.0	0.85	5
IML186M120604	18.0	±10% or ±20%	30	1.0	14.0	1.05	5
IML226M120604	22.0	±10% or ±20%	30	1.0	13.0	1.15	5
IML276M120604	27.0	±10% or ±20%	30	1.0	11.0	1.25	5
IML336M120604	33.0	±10% or ±20%	30	0.4	10.0	1.65	5
IML396M121004	39.0	±10% or ±20%	30	0.4	9.0	1.85	5
IML476M121004	47.0	±10% or ±20%	30	0.4	8.0	2.00	5
IML566M121004	56.0	±10% or ±20%	30	0.4	7.0	2.15	5
IML686M121004	68.0	±10% or ±20%	30	2.0	6.5	4.20	10
IML826M121010	82.0	±10% or ±20%	30	2.0	6.0	4.50	10
IML107M121010	100.0	±10% or ±20%	30	1.0	5.5	4.80	10
IML127M121010	120.0	±10% or ±20%	30	0.2	4.5	2.80	5
IML157M121010	150.0	±10% or ±20%	30	0.2	4.5	3.50	5
IML187M121010	180.0	±10% or ±20%	30	0.2	4.0	3.80	5
IML227M121010	220.0	±10% or ±20%	30	0.2	4.0	4.20	5

# IML Series

IML Dimensions



Recommended Solder Land

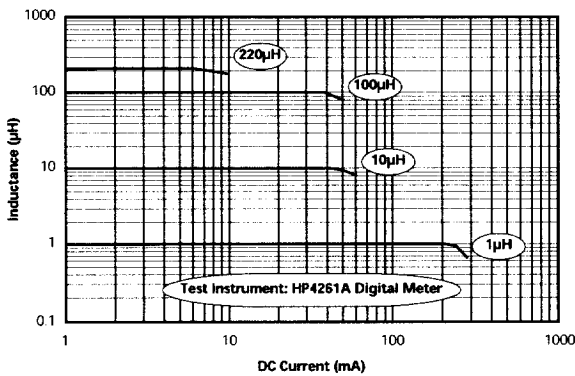


## Mechanical Specifications

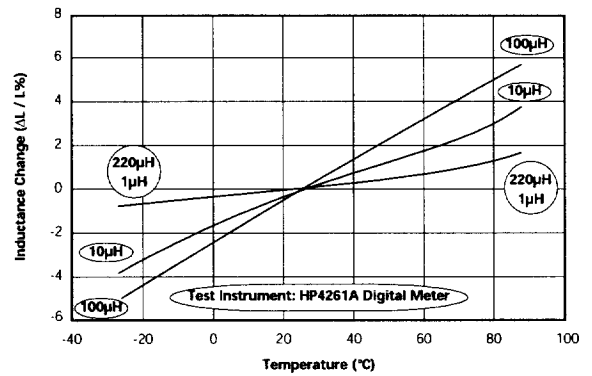
dimensions in mm

Inductor Dimensions					Solder Land Dimensions		
Type	Length (L)	Width (W)	Thickness (t)	Termination (C)	Pad Spacing (A)	Pad Length (B)	Pad Width (C)
IML120602	3.2 ±0.20	1.6 ±0.20	0.6 ±0.20	0.50 ±0.30	2.0	4.2~5.2	1.2
IML120604	3.2 ±0.20	1.6 ±0.30	1.1 ±0.30	0.50 ±0.30	2.0	4.2~5.2	1.2
IML121004	3.2 ±0.20	2.5 ±0.30	1.1 ±0.30	0.50 ±0.30	2.0	5.5~6.5	1.8
IML121010	3.2 ±0.20	2.5 ±0.30	2.5 ±0.30	0.50 ±0.30	2.0	5.5~6.5	1.8

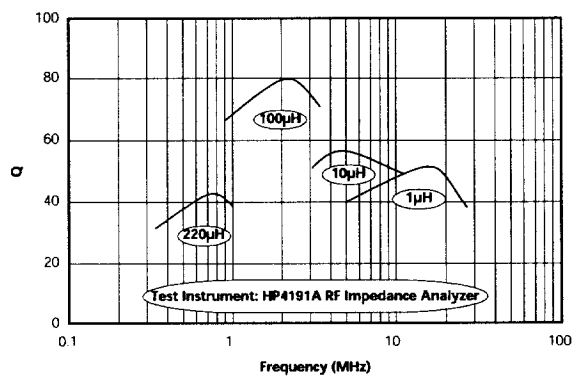
Inductance / DC Current



Inductance / Temperature

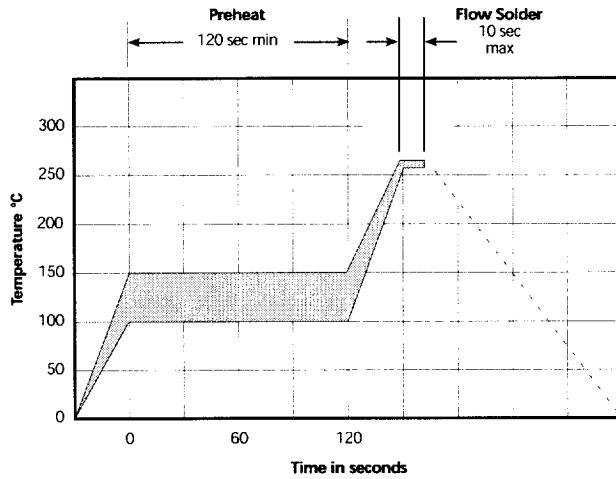


Q / Frequency

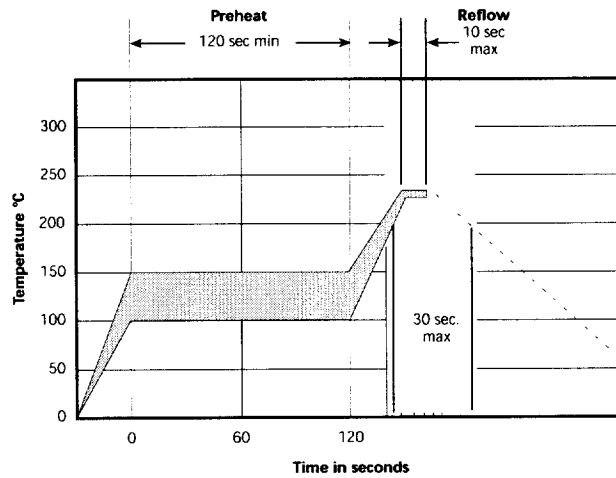


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## Flow Solder Profile



## IR Reflow Solder Profile



## Vapor Phase Solder Profile

