

# SMD Multilayer Power Inductors –GMPI-1608DZ PB2 Series

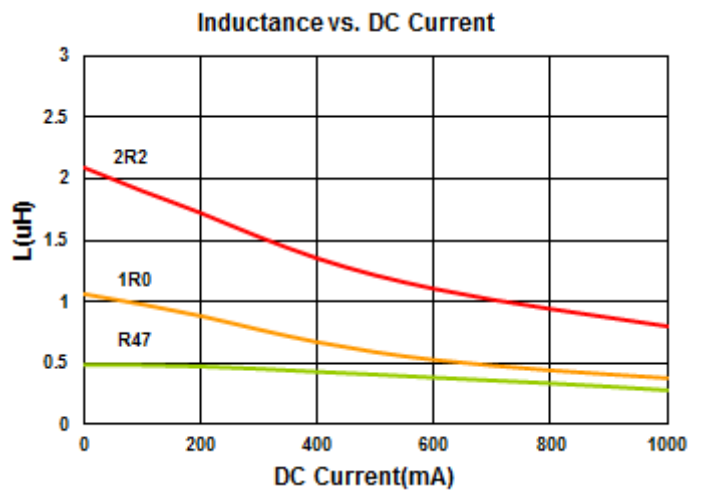
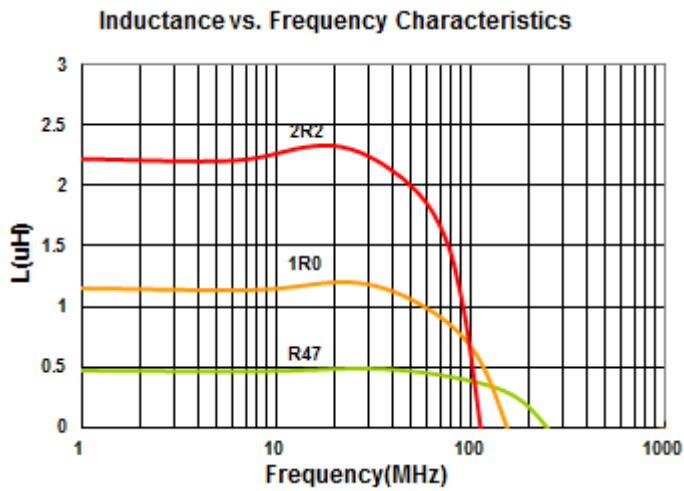
## Electrical Characteristics

Part Number	Inductance (uH)	Tolerance (±%)	Test Frequency (MHz)	RDC (Ω) ±30%	Isat (mA) Max	Irms (mA) Max
GMPI-1608DZ-R47□-PB2	0.47	20, 30	3	0.15	400	1100
GMPI-1608DZ-1R0□-PB2	1.0	20, 30	3	0.20	200	950
GMPI-1608DZ-2R2□-PB2	2.2	20, 30	3	0.30	150	750

**Note:** When ordering, please specify tolerance code. Tolerance: M=±20% , T=±30%

- Operating temperature range - 55°C ~ 125°C(Including self - temperature rise)
- Isat for Inductance drop 30% from its value without current
- I rms for a 40°C temperature rise from 25°C ambient with current
- Measure Equipment :  
 L : Agilent HP4287A+16197A, 3MHz 200mV  
 RDC : HP 4338B, or equivalent

**Test Instruments :** HP4287A Inductance / Material Analyzer



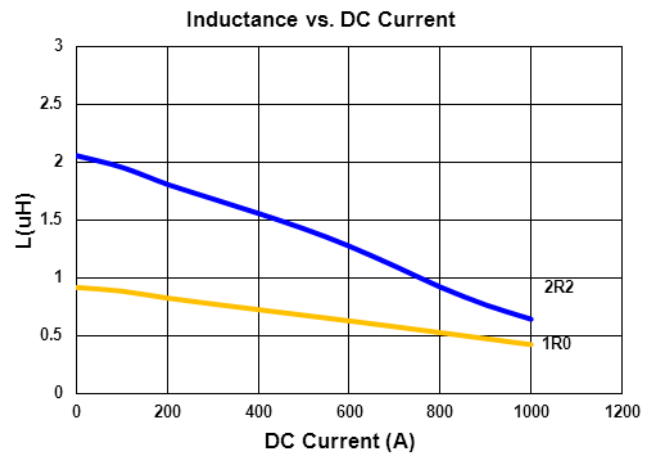
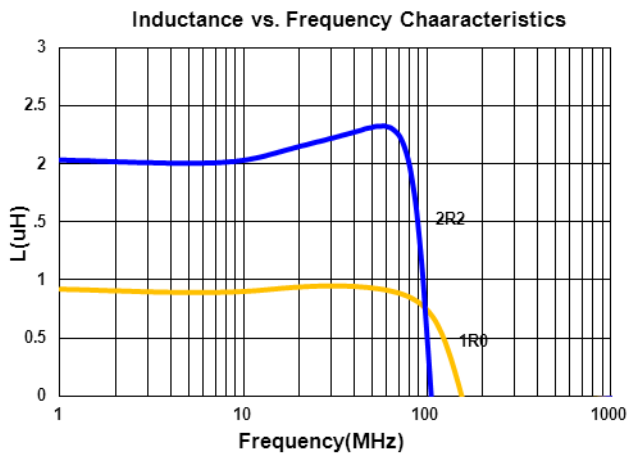
## Electrical Characteristics

Part Number	Inductance (uH)	Tolerance (±%)	Test Frequency (MHz)	RDC (Ω) ±25%	Isat(mA) Max(Typ.)	Irms(mA) Max(Typ.)
GMPI-1608DZ-1R0□-PE6	1.0	20, 30	3	0.13	500(650)	1300(1450)
GMPI-1608DZ-2R2□-PE6	2.2	20, 30	3	0.38	300(350)	700(900)

**Note:** When ordering, please specify tolerance code. Tolerance: M=±20% , T=±30%

- Operating temperature range - 55°C ~ 125°C(Including self - temperature rise)
- Isat for Inductance drop 30% from its value without current
- I rms for a 40°C temperature rise from 25°C ambient with current
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## Multilayer Power Inductors



The GMPI 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.

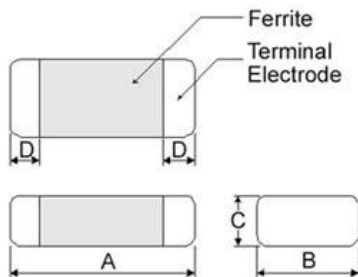
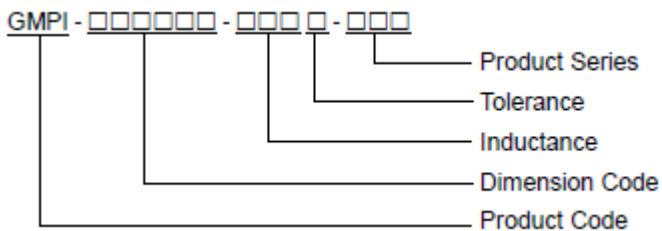
### Features

- RoHS, Halogen Free and REACH Compliance
- Small size
- Low profile
- High current
- Magnetically shielded configuration allowing for high density mounting

### Applications

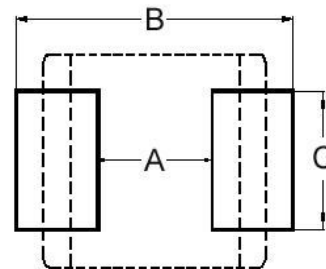
- DC-DC converters
- Power modules
- Cellular phones
- DSC, PND, DVD
- Wireless card and other electronic devices

### Product Identification



Dimensions in mm

TYPE	A	B	C	D
1608GX	1.6±0.15	0.8±0.15	0.5±0.05	0.3±0.2
1608FZ	1.6±0.15	0.8±0.15	0.6±0.15	0.3±0.2
1608DZ	1.6±0.15	0.8±0.15	0.8±0.15	0.3±0.2
2012G5	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

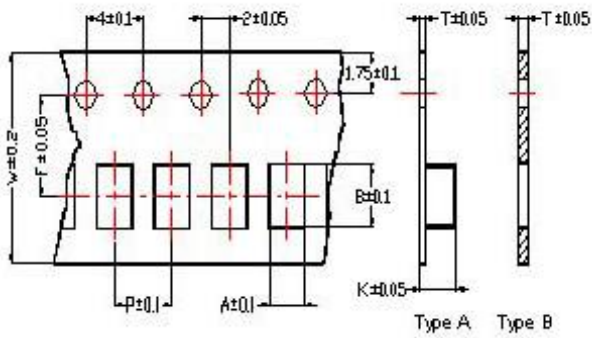


Dimensions in mm

TYPE	A	B	C
1608GX	0.7 ~ 0.8	1.8 ~ 2.0	0.6 ~ 0.8
1608FZ	0.7 ~ 0.8	1.8 ~ 2.0	0.6 ~ 0.8
1608DZ	0.7 ~ 0.8	1.8 ~ 2.0	0.6 ~ 0.8
2012G5	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

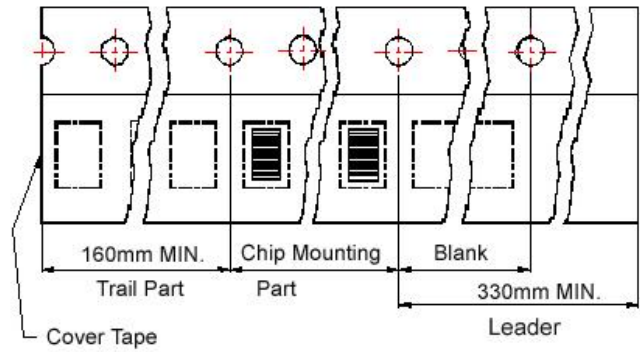
## Packaging Specifications

**Tape Dimensions**

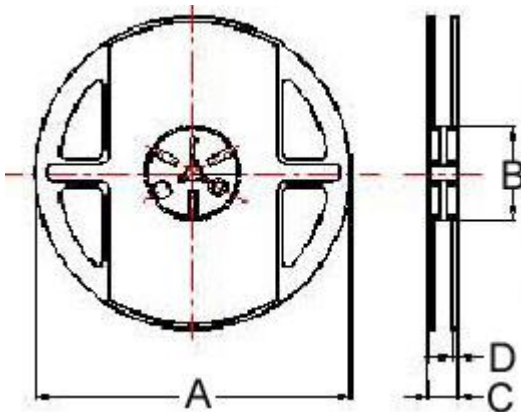


**Tape Material**

Carrier Tape: Polycarbonate (Tape A)  
 Carrier Tape: Paper (Tape B)  
 Cover Tape: Polystyrene



**Reel Dimensions**



**Dimensions in mm**

TYPE	Tape Dimensions								Tape Type	Reel Dimensions				Quantity PCS / REEL
	A	B	T	W	P	F	K	A		B	C	D		
1608GX	1.05	1.85	0.60	8.0	2.0	3.5	-	B	178	60	12	1.5	10000	
1608FZ	1.05	1.85	0.75	8.0	4.0	3.5	-	B	178	60	12	1.5	4000	
1608DZ	1.05	1.85	0.95	8.0	4.0	3.5	-	B	178	60	12	1.5	4000	
2012C5	1.45	2.25	0.22	8.0	4.0	3.5	1.04	A	178	60	12	1.5	4000	
2012G5	1.42	2.25	0.22	8.0	4.0	3.5	0.80	A	178	60	12	1.5	4000	
201210	1.45	2.25	0.22	8.0	4.0	3.5	1.04	A	178	60	12	1.5	4000	
201610	1.80	2.20	0.22	8.0	4.0	3.5	1.15	A	178	60	12	1.5	3000	
252010	2.25	2.8	0.25	8.0	4.0	3.5	1.35	A	178	60	12	1.5	3000	
252012	2.25	2.8	0.25	8.0	4.0	3.5	1.35	A	178	60	12	1.5	3000	