

SMD Multilayer Ferrite Chip Inductors – GMLI-321611 Series

Electrical Characteristics

Part Number	Inductance (μ H)	Tolerance (\pm %)	Q Min	Test Frequency (MHz)	SRF (MHz) Min	RDC (Ω) Max	IDC (mA) Max
GMLI-321611-47N□-CL	0.047	20	20	50	320	0.15	300
GMLI-321611-56N□-CL	0.056	20	20	50	280	0.25	300
GMLI-321611-68N□-CL	0.068	20	20	50	280	0.25	300
GMLI-321611-82N□-CL	0.082	20	20	50	250	0.25	300
GMLI-321611-R10□-CL	0.10	20 / 15 / 10	25	25	235	0.25	250
GMLI-321611-R12□-CL	0.12	20 / 15 / 10	25	25	220	0.30	250
GMLI-321611-R15□-CL	0.15	20 / 15 / 10	25	25	200	0.30	250
GMLI-321611-R18□-CL	0.18	20 / 15 / 10	25	25	185	0.40	250
GMLI-321611-R22□-CL	0.22	20 / 15 / 10	25	25	170	0.40	250
GMLI-321611-R27□-CL	0.27	20 / 15 / 10	25	25	150	0.50	250
GMLI-321611-R33□-CL	0.33	20 / 15 / 10	25	25	145	0.60	250
GMLI-321611-R39□-CL	0.39	20 / 15 / 10	25	25	135	0.50	200
GMLI-321611-R47□-CL	0.47	20 / 15 / 10	25	25	125	0.60	200
GMLI-321611-R56□-CL	0.56	20 / 15 / 10	25	25	115	0.70	150
GMLI-321611-R68□-CL	0.68	20 / 15 / 10	25	25	105	0.80	150
GMLI-321611-R82□-CL	0.82	20 / 15 / 10	25	25	100	0.90	150
GMLI-321611-1R0□-CL	1.0	20 / 15 / 10	45	10	75	0.40	100
GMLI-321611-1R2□-CL	1.2	20 / 15 / 10	45	10	65	0.50	100
GMLI-321611-1R5□-CL	1.5	20 / 15 / 10	45	10	60	0.50	80
GMLI-321611-1R8□-CL	1.8	20 / 15 / 10	45	10	55	0.50	70
GMLI-321611-2R2□-CL	2.2	20 / 15 / 10	45	10	50	0.60	60
GMLI-321611-2R7□-CL	2.7	20 / 15 / 10	45	10	45	0.60	60
GMLI-321611-3R3□-CL	3.3	20 / 15 / 10	45	10	41	0.70	60
GMLI-321611-3R9□-CL	3.9	20 / 15 / 10	45	10	38	0.80	50
GMLI-321611-4R7□-CL	4.7	20 / 15 / 10	45	10	35	0.90	50
GMLI-321611-5R6□-CL	5.6	20 / 15 / 10	45	4	32	0.70	25
GMLI-321611-6R8□-CL	6.8	20 / 15 / 10	45	4	29	0.80	25
GMLI-321611-8R2□-CL	8.2	20 / 15 / 10	45	4	26	0.90	25
GMLI-321611-100□-CL	10	20 / 15 / 10	45	2	24	1.00	25
GMLI-321611-120□-CL	12	20 / 15 / 10	45	2	22	1.00	15
GMLI-321611-150□-CL	15	20 / 15 / 10	35	1	19	0.70	5
GMLI-321611-180□-CL	18	20 / 15 / 10	35	1	18	0.75	5
GMLI-321611-220□-CL	22	20 / 15 / 10	35	1	16	0.90	5
GMLI-321611-270□-CL	27	20 / 15 / 10	35	1	14	0.90	5

Note: When ordering, please specify tolerance code. Tolerance : K= \pm 10% , L= \pm 15% , M= \pm 20%

- Operating temperature range - 40°C ~ 125°C(Including self - temperature rise)
- IDC : Applied the current to coils, the inductance shall be less than 10% initial value
- Measure Equipment :
 - L & Q : HP4291A
 - SRF : Agilent HP8753D/Agilent E4991A
 - RDC : HP4338B or CHEN HWA 502

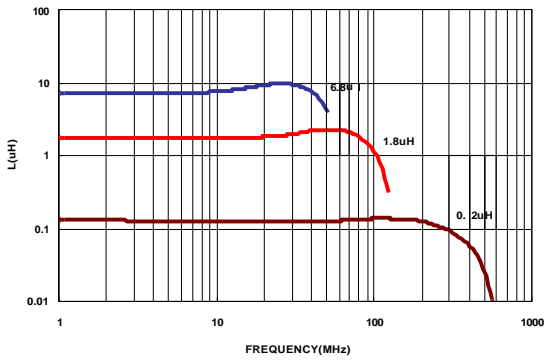


SMD Multilayer Ferrite Chip Inductors – GMLI Series

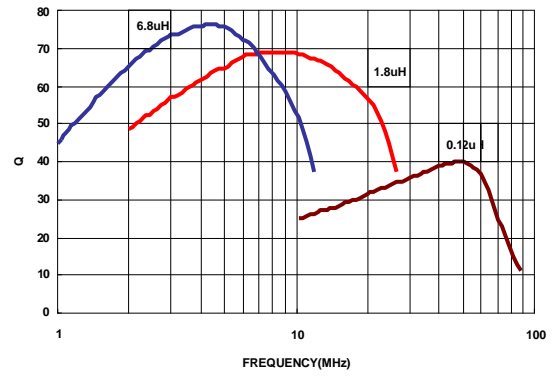
Test Instruments : Agilent E4991A Impedance / Material Analyzer

GMLI-160808

INDUCTANCE v s. FREQUENCY CHARACTERISTICS

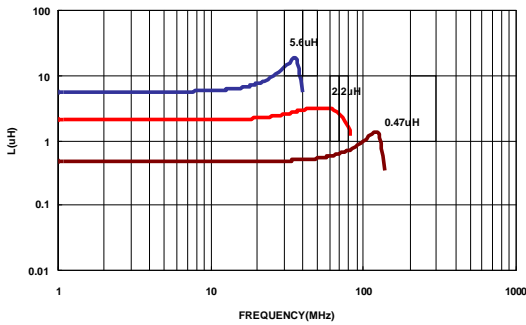


Q vs. FREQUENCY CHARACTERISTICS

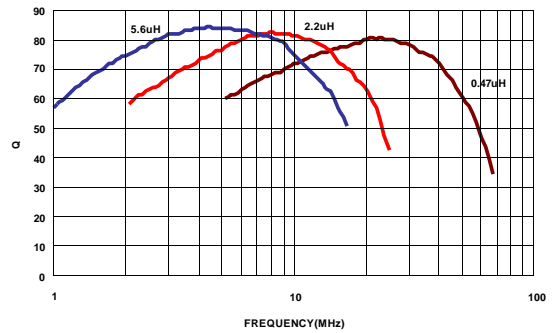


GMLI-201209/201212

INDUCTANCE v s. FREQUENCY CHARACTERISTICS

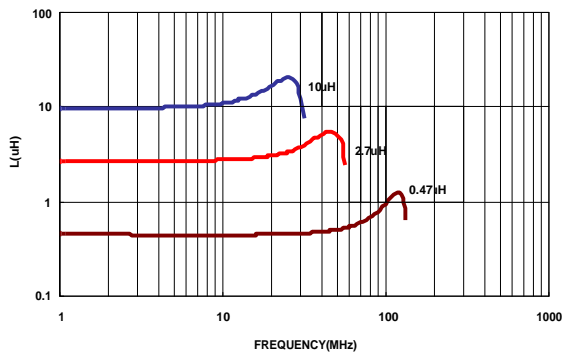


Q vs. FREQUENCY CHARACTERISTICS

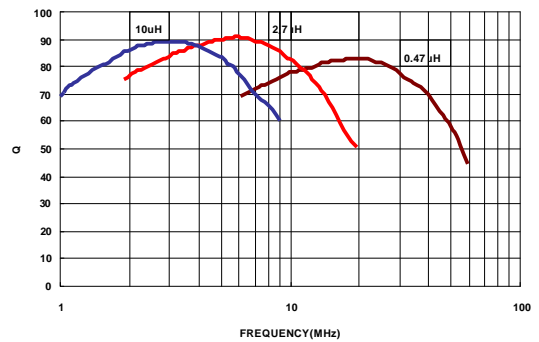


GMLI-321611

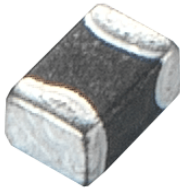
INDUCTANCE v s. FREQUENCY CHARACTERISTICS



Q vs. FREQUENCY CHARACTERISTICS



GMLI Series



The SMD multi-layered ferrite chip inductors provide a cost-effective solution for densely packed PC board designs. GMLI series comes in 4 sizes and is suitable for low frequency applications.

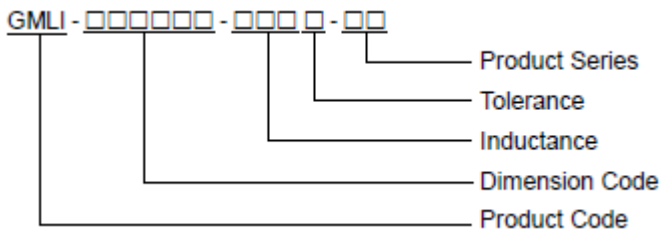
Features

- RoHS compliant
- High mounting density of compact circuit due to crosstalk elimination that results from a closed magnetic flux in a ferrite material
- Suitable for flow and re-flow soldering
- Available in 4 sizes

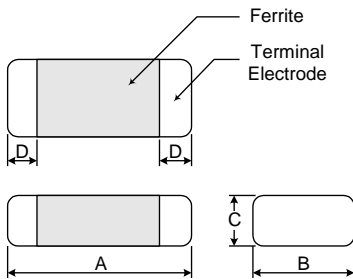
Applications

- Personal computers, HDDs, other various electronic devices
- Any portable device where compact size and high mounting densities are required

Product Identification



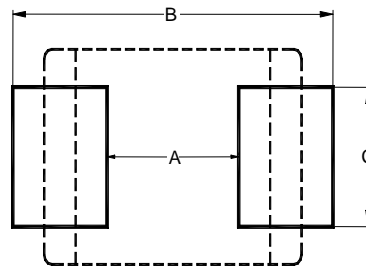
Shape and Dimensions



Dimensions in mm

TYPE	A	B	C	D
160808	1.6±0.20	0.80±0.20	0.80±0.20	0.3±0.20
201209	2.0±0.20	1.25±0.20	0.90±0.20	0.5±0.30
201212	2.0±0.20	1.25±0.20	1.25±0.20	0.5±0.30
321611	3.2±0.20	1.60±0.20	1.10±0.20	0.5±0.30

Recommended Pattern



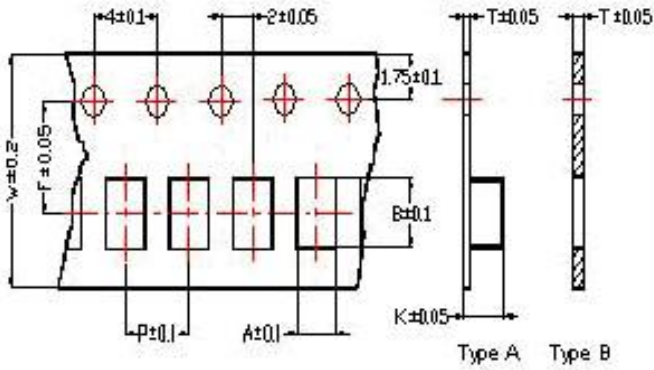
Dimensions in mm

TYPE	A	B	C
160808	0.7 ~ 0.8	1.8 ~ 2.0	0.6 ~ 0.8
201209	1.0 ~ 1.2	2.6 ~ 4.0	1.0 ~ 1.2
201212	1.0 ~ 1.2	2.6 ~ 4.0	1.0 ~ 1.2
321611	2.0	4.2 ~ 5.2	1.2

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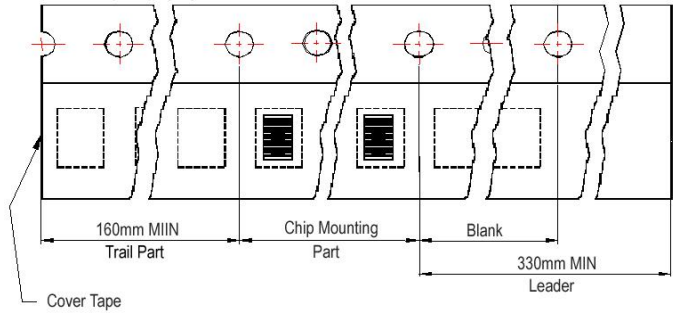
Packaging Specifications

Tape Dimensions

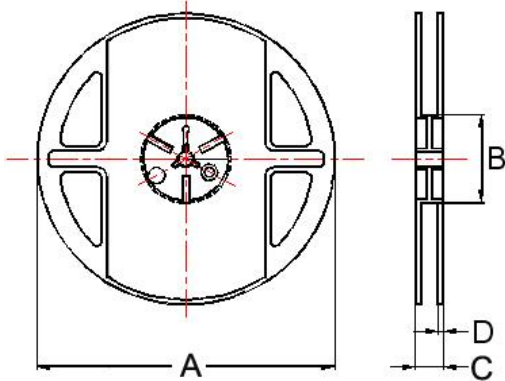


Tape Material

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



Reel Dimensions



Dimensions in mm

TYPE	Tape Dimensions								Reel Dimensions				Quantity PCS / Reel
	A	B	T	W	P	F	K	Tape	A	B	C	D	
160808	1.05	1.85	0.95	8.0	4.0	3.5	-	B	178	60	12	1.5	4000
201209	1.50	2.30	0.97	8.0	4.0	3.5	-	B	178	60	12	1.5	4000
201212	1.35	2.25	0.22	8.0	4.0	3.5	1.35	A	178	60	12	1.5	3000
321611	1.88	3.50	0.22	8.0	4.0	3.5	1.27	A	178	60	12	1.5	3000