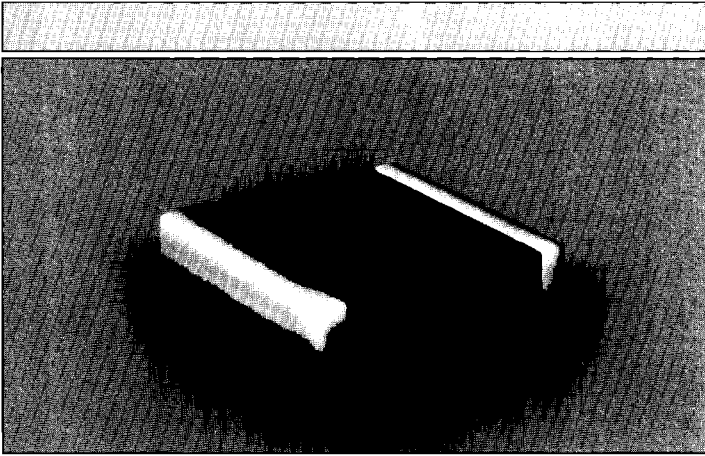


# Model BML Series Surface Mount Multi-Layer Chip Inductor

Helimag™



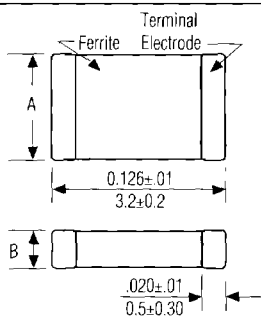
## Outstanding Features

- Tight dimensional tolerances and a small package make this chip ideal for high density installation
- Monolithic structure for high reliability
- Magnetic shielded construction minimizes coupling to other components
- Compatible with vapor phase and infra-red reflow soldering

## Electrical / Environmental

Inductance Range	0.047μH to 220μH
Standard Tolerance	±20%: 0.047μH & 0.068μH ±10% or ±20%: 0.10μH to 220μH
Storage Temperature	-40°C to +85°C
Operating Temperature	-20°C to +85°C
Ambient Temperature, Maximum	80°C
Resistance to Solder Heat	260°C for 10 sec.
Resistance to Solvent	Per MIL-STD-202F

## Outline Dimensions



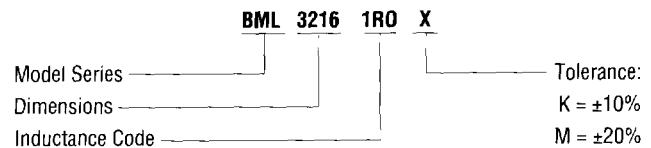
Model	A Dim.	B Dim.
BML-321606	0.063±.01	0.024±.01
	1.6±0.2	0.6±0.20
BML-321611	0.063±.01	.043±.012
	1.6±0.2	1.1±0.20
BML-322511	0.098±.01	0.043±.012
	2.5±0.2	1.1±0.3
BML-322525	0.098±.01	0.098±.01
	2.5±0.2	2.5±0.3

Specifications subject to change without notice.

## Specifications

Model	Thickness (mm)	Inductance (μH)	SRF Min. (MHZ)	RDC Max (OHM)	Rated Current IDC (mA)*
BML3216 R12 X	1.1±0.2	0.12	220	0.3	100
BML3216 R15 X	1.1±0.2	0.15	200	0.3	100
BML3216 R18 X	1.1±0.2	0.18	185	0.4	100
BML3216 R22 X	1.1±0.2	0.22	170	0.4	100
BML3216 R27 X	1.1±0.2	0.27	150	0.5	100
BML3216 R33 X	1.1±0.2	0.33	145	0.6	100
BML3216 R39 X	1.1±0.3	0.39	135	0.5	100
BML3216 R47 X	1.1±0.3	0.47	125	0.6	100
BML3216 R56 X	1.1±0.3	0.56	115	0.7	100
BML3216 R68 X	1.1±0.3	0.68	105	0.8	100
BML3216 R82 X	1.1±0.3	0.82	100	0.9	100
BML3216 1R0 X	1.1±0.2	1.0	75	0.4	100
BML3216 1R2 X	1.1±0.2	1.2	65	0.5	100
BML3216 1R5 X	1.1±0.3	1.5	60	0.5	50
BML3216 1R8 X	1.1±0.3	1.8	55	0.5	50
BML3216 2R2 X	1.1±0.3	2.2	50	0.6	50
BML3216 2R7 X	1.1±0.3	2.7	45	0.6	50
BML3216 3R3 X	1.1±0.3	3.3	41	0.7	50
BML3216 3R9 X	1.1±0.3	3.9	36	0.8	50
BML3216 4R7 X	1.1±0.3	4.7	35	0.9	50
BML3216 5R6 X	1.1±0.3	5.6	32	0.7	25
BML3216 6R8 X	1.1±0.3	6.8	29	0.8	25
BML3216 8R2 X	1.1±0.3	8.2	26	0.9	25
BML3216 100 X	1.1±0.3	10.0	24	1.0	25

## Ordering Information



\* Current Rating: The current at which a smaller change of inductance will occur due to either temperature increase or DC Current Superposition.

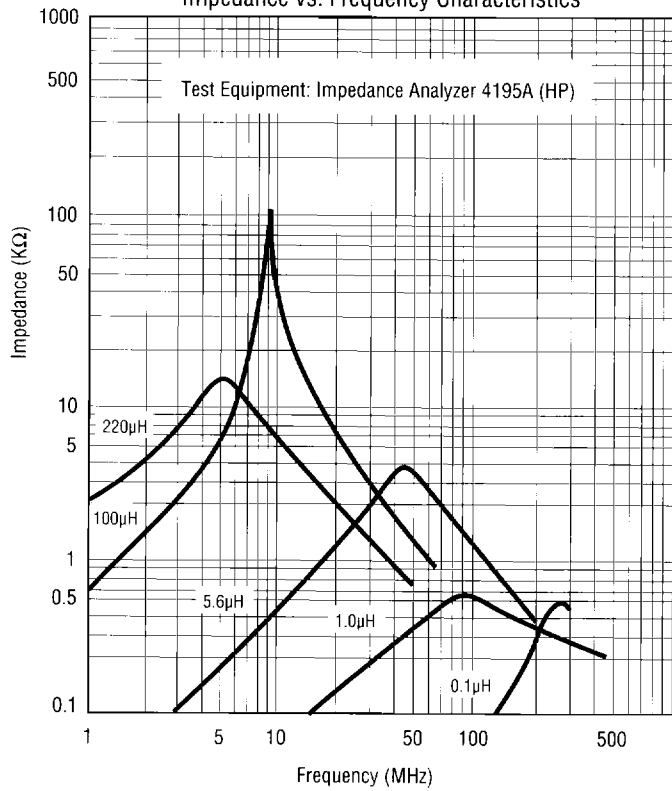
**Beckman Industrial™**

Affiliate of Emerson Electric Co.

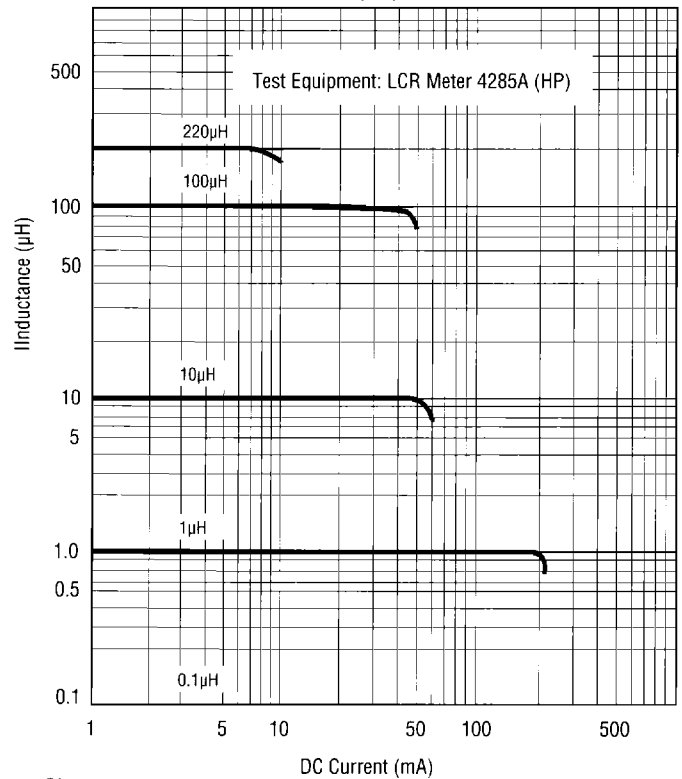
**Magnetic  
Components**

**Performance**

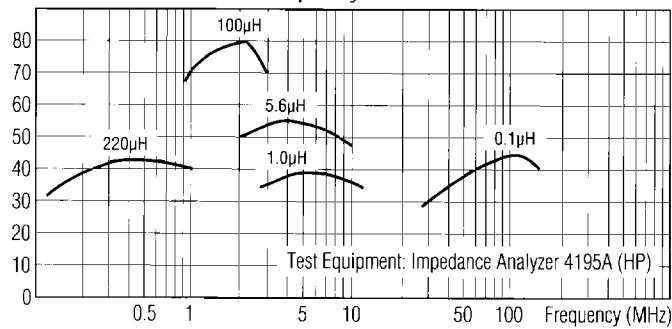
Impedance vs. Frequency Characteristics



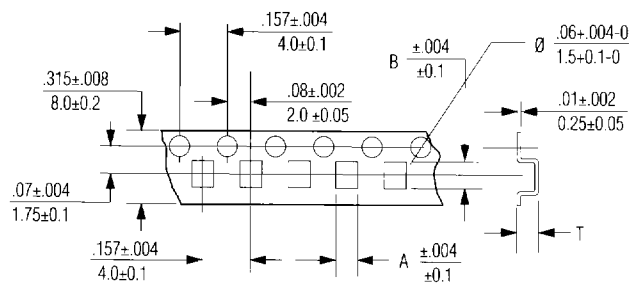
Inductance vs. DC Superposition Characteristics



Q vs. Frequency Characteristics



**Packaging**



Tape Material: Polystyrene.  
Supplied on 7" Dia. Reels.

Part #	A	B	T	Qty/Reel
BML-3216	.075	.138	.043	4,000
	1.9	3.5	1.1	4,000
BML-3216	.075	.138	.08	2,000
	1.9	3.5	2.0	2,000
BML-3225	.014	.142	.08	2,000
	2.9	3.6	2.0	2,000
BML-3225	.014	.142	.12	1,000
	2.9	3.6	3.0	1,000

Dimensions are in inch/mm.