

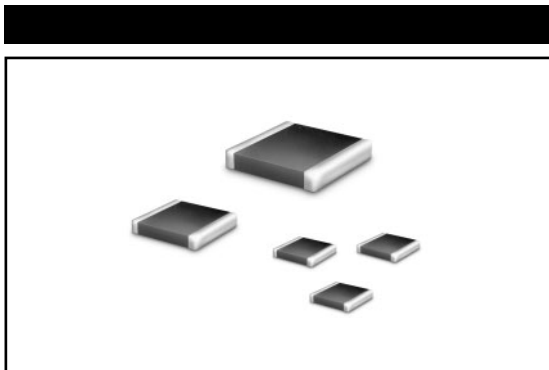
MODEL BMC SERIES

High Frequency

Multilayer

Surface Mount

Ceramic Chip Inductors



FEATURES AND BENEFITS

- Tight dimensional tolerances and a small package make this chip ideal for high density installation
- Monolithic glass ceramic material for high frequency UHF band applications
- Compatible with vapor phase and infrared reflow soldering
- High self-resonant frequency
- Industry standard sizes: 0402, 0603, 0805

APPLICATIONS

- RF and wireless communication
- Radar Detectors
- PDAs
- Keyless remote systems
- Video audio equipment
- Cellular phones and pagers

ELECTRICAL / ENVIRONMENTAL

Inductance Range	1.0nH to 270nH
Standard Tolerance	±10%
Operating Temperature Range	-55°C to +125°C
Storage Temperature Range	-40°C to +85°C
Humidity Range	-40°C to +85°C, 70% R.H., Max.
Ambient Temperature, Maximum	80°C
Resistance to Solder Heat	260°C for 10 sec.

Specifications subject to change without notice.
Last Update: 04/24/2003.

SPECIFICATIONS

Part Number	Thickness Inch/mm Tol: ±.002/.05	Inductance ⁽¹⁾ nH	Q (Typical) @ 100/800MHz	Self-Resonant	DCR Max. Ω	Rated Current mA
				Frequency Min./Typ. MHz		
BMC0402HF-1N0S	0.02/0.5	1.0	11/34	10000/13000	0.12	300
BMC0402HF-1N2S	0.02/0.5	1.2	11/34	10000/13000	0.12	300
BMC0402HF-1N5S	0.02/0.5	1.5	11/34	6000/13000	0.13	300
BMC0402HF-1N8S	0.02/0.5	1.8	11/30	6000/11000	0.14	300
BMC0402HF-2N2S	0.02/0.5	2.2	10/29	6000/10000	0.16	300
BMC0402HF-2N7S	0.02/0.5	2.7	10/29	6000/9000	0.17	300
BMC0402HF-3N3K	0.02/0.5	3.3	10/28	6000/8000	0.19	300
BMC0402HF-3N9K	0.02/0.5	3.9	10/28	4000/7000	0.22	300
BMC0402HF-4N7K	0.02/0.5	4.7	10/28	4000/6000	0.24	300
BMC0402HF-5N6K	0.02/0.5	5.6	10/28	4000/5700	0.27	300
BMC0402HF-6N8K	0.02/0.5	6.8	10/27	3900/5500	0.32	250
BMC0402HF-8N2K	0.02/0.5	8.2	10/28	3600/4900	0.37	250
BMC0402HF-10NK	0.02/0.5	10.0	10/30	3200/4300	0.42	250
BMC0402HF-12NK	0.02/0.5	12.0	11/31	2700/3900	0.5	250
BMC0402HF-15NK	0.02/0.5	15.0	11/30	2300/3500	0.55	250
BMC0402HF-18NK	0.02/0.5	18.0	11/30	2100/3100	0.65	200
BMC0402HF-22NK	0.02/0.5	22.0	11/30	1900/2800	0.8	200
BMC0402HF-27NK	0.02/0.5	27.0	11/27	1600/2300	0.9	200
BMC0402HF-33NK	0.02/0.5	33.0	11/25	1300/1900	1.0	200
BMC0402HF-39NK	0.02/0.5	39.0	11/24	1200/1700	1.2	150
BMC0402HF-47NK	0.02/0.5	47.0	11/23	1000/1500	1.3	150
BMC0402HF-56NK	0.02/0.5	56.0	11/21	750/1300	1.4	150
BMC0402HF-68NK	0.02/0.5	68.0	11/19	750/1200	1.4	150
BMC0402HF-82NK	0.02/0.5	82.0	10/16	600/1100	1.6	100
BMC0402HF-R10K	0.02/0.5	100.0	10/10	600/1000	1.6	100
BMC0603HF-1N5S	0.031/0.8	1.5	14/47	6000/13000	0.10	300
BMC0603HF-1N8S	0.031/0.8	1.8	10/30	6000/13000	0.10	300
BMC0603HF-2N2S	0.031/0.8	2.2	12/37	6000/12000	0.10	300
BMC0603HF-2N7S	0.031/0.8	2.7	13/41	6000/11000	0.10	300
BMC0603HF-3N3K	0.031/0.8	3.3	14/42	6000/9000	0.12	300
BMC0603HF-3N9K	0.031/0.8	3.9	13/42	6000/8000	0.14	300
BMC0603HF-4N7K	0.031/0.8	4.7	13/42	4000/6500	0.16	300
BMC0603HF-5N6K	0.031/0.8	5.6	14/42	4000/5800	0.18	300
BMC0603HF-6N8K	0.031/0.8	6.8	14/43	4000/5600	0.22	300
BMC0603HF-8N2K	0.031/0.8	8.2	14/44	3500/5200	0.24	300
BMC0603HF-10NK	0.031/0.8	10.0	14/43	3400/4600	0.26	300
BMC0603HF-12NK	0.031/0.8	12.0	14/45	2600/4000	0.28	300
BMC0603HF-15NK	0.031/0.8	15.0	15/46	2300/3400	0.32	300
BMC0603HF-18NK	0.031/0.8	18.0	15/44	2000/3000	0.35	300
BMC0603HF-22NK	0.031/0.8	22.0	16/44	1600/2900	0.40	300

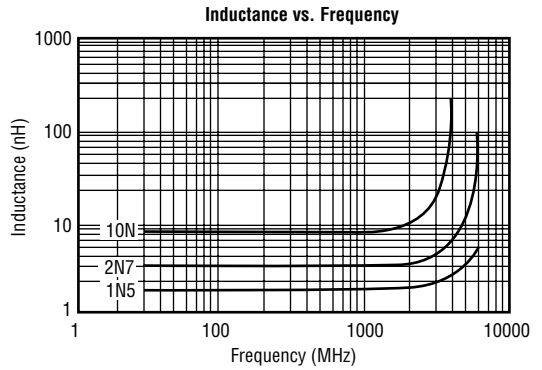
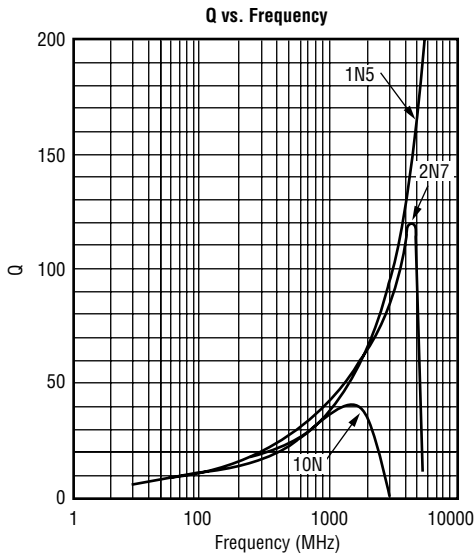
Notes: (1) Inductance measured at 100MHz without DC current.

SPECIFICATIONS

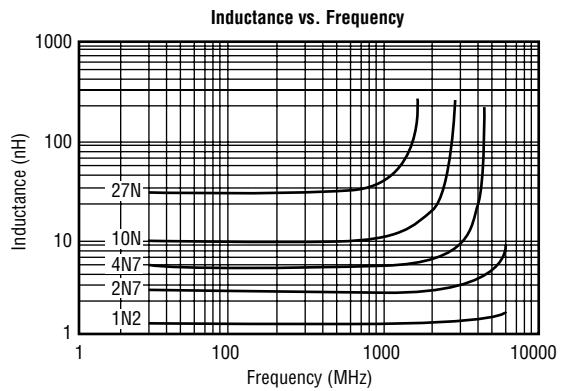
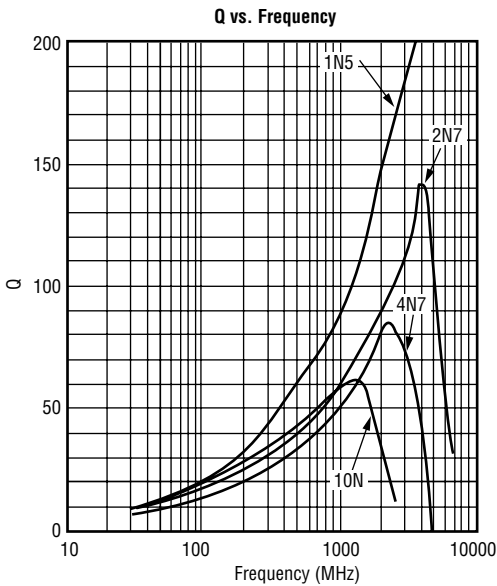
Part Number	Thickness Inch/mm Tol: ±.002/.05	Inductance ⁽¹⁾ nH	Q (Typical) @ 100/800MHz	Self-Resonant	DCR Max. Ω	Rated Current mA
				Frequency Min./Typ. MHz		
BMC0603HF-27NK	0.031/0.8	27.0	16/45	1400/2200	0.45	300
BMC0603HF-33NK	0.031/0.8	33.0	17/46	1200/1800	0.55	300
BMC0603HF-39NK	0.031/0.8	39.0	18/44	1100/1600	0.60	300
BMC0603HF-47NK	0.031/0.8	47.0	17/35	900/1600	0.70	300
BMC0603HF-56NK	0.031/0.8	56.0	17/34	900/1400	0.75	300
BMC0603HF-68NK	0.031/0.8	68.0	18/30	700/1200	0.85	300
BMC0603HF-82NK	0.031/0.8	82.0	18/127	600/1100	0.95	300
BMC0603HF-R10K	0.031/0.8	100.0	18/16	600/1000	1.0	300
BMC0603HF-R12K	0.031/0.8	120.0	50/-	500/800	1.20	300
BMC0603HF-R15K	0.031/0.8	150.0	13/-	500/800	1.20	300
BMC0603HF-R18K	0.031/0.8	180.0	13/-	400/700	1.30	300
BMC0603HF-R22K	0.031/0.8	220.0	12/-	400/600	1.50	300
BMC0805HF-1N5S	0.04/1.0	1.5	21/61	4000/6000	0.10	300
BMC0805HF-1N8S	0.04/1.0	1.8	18/55	4000/6000	0.10	300
BMC0805HF-2N2S	0.04/1.0	2.2	18/53	4000/6000	0.10	300
BMC0805HF-2N7S	0.04/1.0	2.7	19/56	4000/6000	0.10	300
BMC0805HF-3N3K	0.04/1.0	3.3	16/47	4000/6000	0.13	300
BMC0805HF-3N9K	0.04/1.0	3.9	18/54	4000/6000	0.15	300
BMC0805HF-4N7K	0.04/1.0	4.7	18/55	3500/6000	0.20	300
BMC0805HF-5N6K	0.04/1.0	5.6	20/60	3200/5400	0.23	300
BMC0805HF-6N8K	0.04/1.0	6.8	20/63	2800/4200	0.25	300
BMC0805HF-8N2K	0.04/1.0	8.2	21/63	2400/3700	0.28	300
BMC0805HF-10NK	0.04/1.0	10.0	20/60	2100/3100	0.30	300
BMC0805HF-12NK	0.04/1.0	12.0	21/60	1900/3000	0.35	300
BMC0805HF-15NK	0.04/1.0	15.0	22/63	1600/2600	0.40	300
BMC0805HF-18NK	0.04/1.0	18.0	24/63	1500/2300	0.45	300
BMC0805HF-22NK	0.04/1.0	22.0	23/60	1400/2100	0.50	300
BMC0805HF-27NK	0.04/1.0	27.0	23/58	1300/1800	0.55	300
BMC0805HF-33NK	0.04/1.0	33.0	24/55	1200/1700	0.60	300
BMC0805HF-39NK	0.04/1.0	39.0	23/47	1000/1400	0.65	300
BMC0805HF-47NK	0.04/1.0	47.0	23/43	900/1200	0.70	300
BMC0805HF-56NK	0.04/1.0	56.0	23/39	800/1100	0.75	300
BMC0805HF-68NK	0.04/1.0	68.0	25/30	700/900	0.80	300
BMC0805HF-82NK	0.04/1.0	82.0	24/-	600/800	0.90	300
BMC0805HF-R10K	0.04/1.0	100.0	23/-	600/800	0.90	300
BMC0805HF-R12K	0.04/1.0	120.0	22/-	500/700	1.30	300
BMC0805HF-R15K	0.04/1.0	150.0	22/-	500/700	1.50	300
BMC0805HF-R18K	0.04/1.0	180.0	23/-	400/600	1.80	300
BMC0805HF-R22K	0.04/1.0	220.0	23/-	350/550	1.20	300
BMC0805HF-R27K	0.04/1.0	270.0	19/-	300/480	1.30	300

Notes: (1) Inductance measured at 100MHz without DC current.

0402 ELECTRICAL SPECIFICATIONS

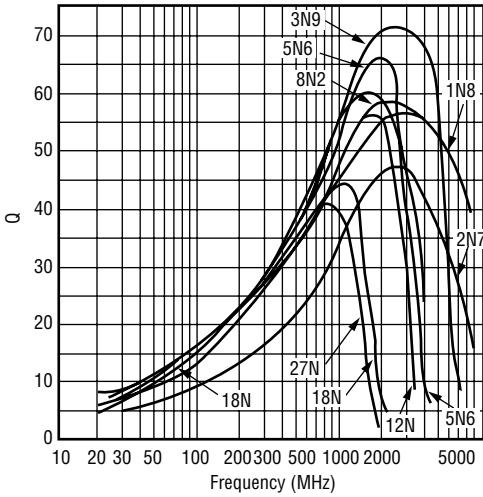


0603 ELECTRICAL SPECIFICATIONS

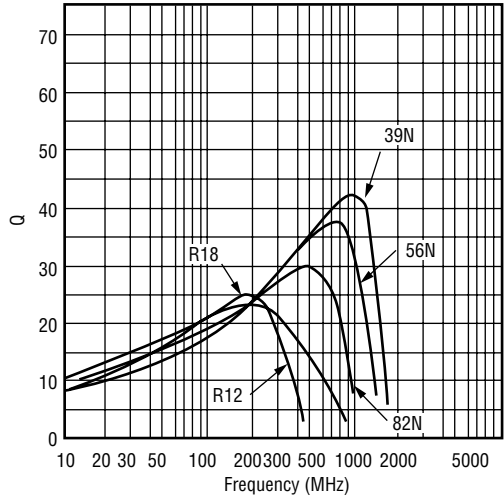


0805 ELECTRICAL SPECIFICATIONS

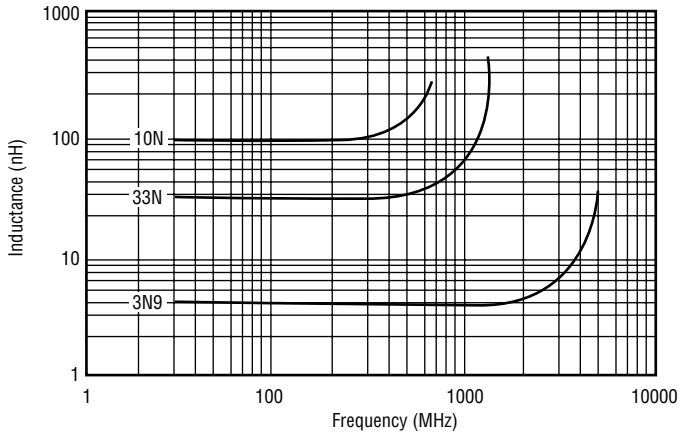
Q vs. Frequency



Q vs. Frequency

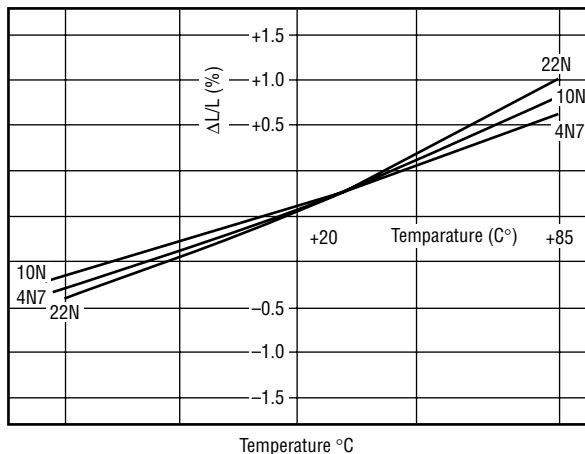


Inductance vs. Frequency

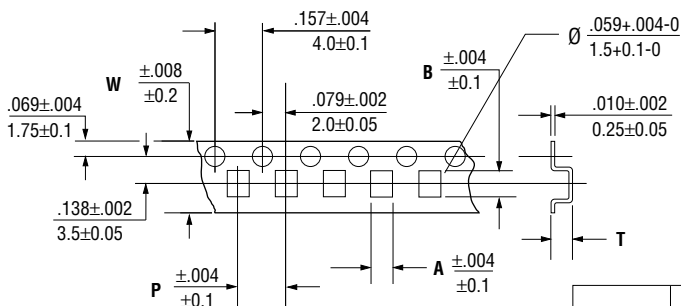


ELECTRICAL SPECIFICATIONS - ALL MODELS

Inductance vs. Temperature



PACKAGING (Inch/mm)



Tape Material: Polystyrene

Part #	A	B	W	P	T	7" Reel Diameter (Qty./Reel)
BMC 0805 (2012)	$\frac{.059}{1.5}$	$\frac{.091}{2.30}$	$\frac{.315}{8}$	$\frac{.158}{4}$	$\frac{.051}{1.3}$	3,000
BMC 0603 (1608)	$\frac{.047}{1.2}$	$\frac{.075}{1.9}$	$\frac{.315}{8}$	$\frac{.158}{4}$	$\frac{.049}{1.25}$	4,000
BMC 0402 (1005)	$\frac{.027}{.69}$	$\frac{.047}{1.19}$	$\frac{.315}{8}$	$\frac{.158}{4}$	$\frac{.026}{.66}$	4,000

ORDERING INFORMATION

