

◆ Feature

- 1.The monolithic construction performs high reliability and ensures a closed magnetic flux in a component avoids magnetic leakage and interference
- 2.Allow for higher mounting density

◆ Application

RF and wireless communication, information technology equipment which includes computer, telecommunications, radar detectors, automotive electronics, cellular phones, pagers, audio equipment, PDAs, keyless remote system and low-voltage power supply modules.



◆ How to Order

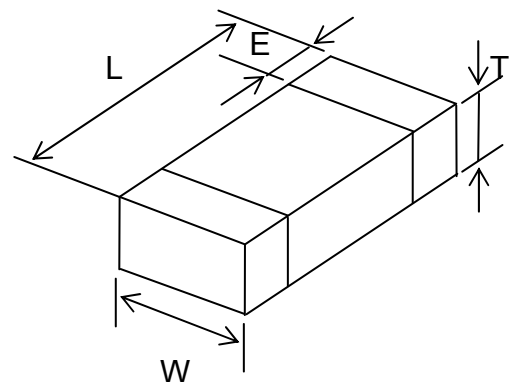
MFI **3216** **4R7** **K** **B** =
 (1) (2) (3) (4) (5) (6)

- (1) Series Type
- (2) Chip Size(mm): Length x Width
- (3) Inductance(μH): R means decimal point
Ex.: $0.47\mu\text{H} \rightarrow 4R7$
- (4) Tolerance: J= $\pm 5\%$, K= $\pm 10\%$, M= $\pm 20\%$
- (5) Soldering: Green Parts: B- Lead-Free for whole chip
- (6) Packaging: P – Embossed paper tape, 7" reel
E – Embossed plastic tape, 7" reel

◆ Dimension

Unit: mm

Size(EIA)	1608 (0603)	2012_09 (0805)	2012_12 (0805)	3216 (1206)
L	1.60 ± 0.15	2.00 ± 0.20	2.00 ± 0.20	3.20 ± 0.20
W	0.80 ± 0.15	1.25 ± 0.20	1.25 ± 0.20	1.60 ± 0.20
T	0.80 ± 0.15	0.90 ± 0.20	1.25 ± 0.20	1.10 ± 0.20
E	0.30 ± 0.20	0.50 ± 0.30	0.50 ± 0.30	0.50 ± 0.30



◆ Specification

Part Number	Inductance & Tolerance (μH)	Q Min.	Test Freq. (MHz)	SRF (MHz) Min.	DCR Max. (Ω)	Rated Current Max. (mA)
1608 (EIA 0603) Packaging Code: P						
MFI1608R047MB_	0.047 \pm 20%	10	50	260	0.25	50
MFI1608R056MB_	0.056 \pm 20%	10	50	255	0.25	50
MFI1608R068MB_	0.068 \pm 20%	10	50	250	0.25	50
MFI1608R082MB_	0.082 \pm 20%	10	50	245	0.25	50
MFI1608R10KB_	0.10 \pm 10%	15	25	240	0.50	50
MFI1608R12KB_	0.12 \pm 10%	15	25	235	0.50	50
MFI1608R15KB_	0.15 \pm 10%	15	25	205	0.60	50
MFI1608R18KB_	0.18 \pm 10%	15	25	190	0.60	50
MFI1608R22KB_	0.22 \pm 10%	15	25	170	0.80	50
MFI1608R27KB_	0.27 \pm 10%	15	25	155	0.80	50
MFI1608R33KB_	0.33 \pm 10%	15	25	140	0.80	35
MFI1608R39KB_	0.39 \pm 10%	15	25	125	1.00	35
MFI1608R47KB_	0.47 \pm 10%	15	25	120	1.00	35
MFI1608R56KB_	0.56 \pm 10%	15	25	110	1.55	35
MFI1608R68KB_	0.68 \pm 10%	15	25	100	1.70	35
MFI1608R82KB_	0.82 \pm 10%	15	25	95	2.10	35
MFI16081R0KB_	1.0 \pm 10%	35	10	85	0.60	25
MFI16081R2KB_	1.2 \pm 10%	35	10	70	0.80	25
MFI16081R5KB_	1.5 \pm 10%	35	10	65	0.80	25
MFI16081R8KB_	1.8 \pm 10%	35	10	60	0.80	25
MFI16082R2KB_	2.2 \pm 10%	35	10	55	1.00	15
MFI16082R7KB_	2.7 \pm 10%	35	10	50	1.20	15
MFI16083R3KB_	3.3 \pm 10%	35	10	45	1.40	15
MFI16083R9KB_	3.9 \pm 10%	40	10	42	1.60	15
MFI16084R7KB_	4.7 \pm 10%	40	10	40	1.80	15
MFI16085R6KB_	5.6 \pm 10%	40	4	35	1.80	5
MFI16086R8KB_	6.8 \pm 10%	40	4	20	1.90	5
MFI16088R2KB_	8.2 \pm 10%	40	4	18	2.10	5
MFI160810RKB_	10 \pm 10%	30	2	17	1.85	3
2012 (EIA 0805) Packaging Code: P、E						
MFI2012R047MB_	0.047 \pm 20%	20	50	320	0.20	300
MFI2012R056MB_	0.056 \pm 20%	20	50	300	0.20	300
MFI2012R068MB_	0.068 \pm 20%	20	50	280	0.20	300
MFI2012R082MB_	0.082 \pm 20%	20	50	275	0.20	300
MFI2012R10KB_	0.10 \pm 10%	20	25	255	0.30	250
MFI2012R12KB_	0.12 \pm 10%	20	25	250	0.30	250
MFI2012R15KB_	0.15 \pm 10%	20	25	230	0.40	250
MFI2012R18KB_	0.18 \pm 10%	20	25	210	0.40	250
MFI2012R22KB_	0.22 \pm 10%	20	25	195	0.50	250
MFI2012R27KB_	0.27 \pm 10%	20	25	170	0.50	250
MFI2012R33KB_	0.33 \pm 10%	20	25	165	0.50	250
MFI2012R39KB_	0.39 \pm 10%	25	25	155	0.60	200
MFI2012R47KB_	0.47 \pm 10%	25	25	140	0.60	200
MFI2012R56KB_	0.56 \pm 10%	25	25	130	0.70	150
MFI2012R68KB_	0.68 \pm 10%	25	25	120	0.80	150
MFI2012R82KB_	0.82 \pm 10%	25	25	115	1.00	150

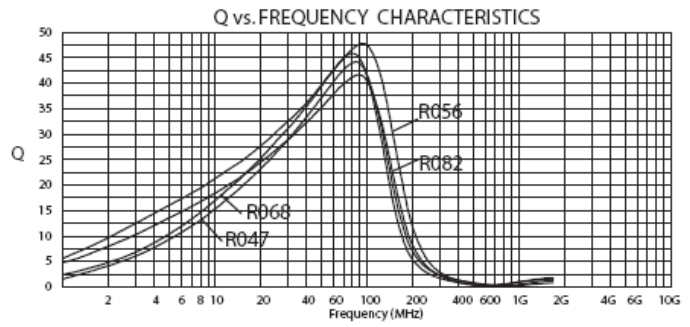
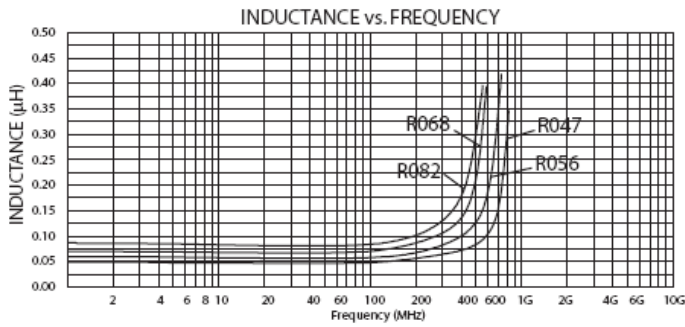
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MFI20121R8KB_	1.8 \pm 10%	45	10	60	0.60	50
MFI20122R2KB_	2.2 \pm 10%	45	10	55	0.60	30
MFI20122R7KB_	2.7 \pm 10%	45	10	50	0.70	30
MFI20123R3KB_	3.3 \pm 10%	45	10	45	0.80	30
MFI20123R9KB_	3.9 \pm 10%	45	10	44	0.90	30
MFI20124R7KB_	4.7 \pm 10%	45	10	41	1.00	30
MFI20125R6KB_	5.6 \pm 10%	50	4	37	0.90	15
MFI20126R8KB_	6.8 \pm 10%	50	4	34	1.00	15
MFI20128R2KB_	8.2 \pm 10%	50	4	30	1.10	15
MFI201210RKB_	10 \pm 10%	50	2	28	1.00	15
MFI201212RKB_	12 \pm 10%	50	2	26	1.10	15
MFI201215RKB_	15 \pm 10%	35	1	22	0.80	5
MFI201218RKB_	18 \pm 10%	35	1	21	0.90	5
MFI201222RKB_	22 \pm 10%	35	1	19	1.10	5
3216 (EIA 1206) Packaging Code: E						
MFI3216R047MB_	0.047 \pm 20%	20	50	320	0.15	300
MFI3216R056MB_	0.056 \pm 20%	20	50	310	0.25	300
MFI3216R068MB_	0.068 \pm 20%	20	50	280	0.25	300
MFI3216R082MB_	0.082 \pm 20%	20	50	275	0.25	300
MFI3216R10KB_	0.10 \pm 10%	20	25	270	0.25	250
MFI3216R12KB_	0.12 \pm 10%	20	25	250	0.30	250
MFI3216R15KB_	0.15 \pm 10%	20	25	200	0.30	250
MFI3216R18KB_	0.18 \pm 10%	20	25	185	0.40	250
MFI3216R22KB_	0.22 \pm 10%	20	25	170	0.40	250
MFI3216R27KB_	0.27 \pm 10%	20	25	150	0.50	250
MFI3216R33KB_	0.33 \pm 10%	20	25	145	0.50	250
MFI3216R39KB_	0.39 \pm 10%	25	25	135	0.50	200
MFI3216R47KB_	0.47 \pm 10%	25	25	125	0.60	200
MFI3216R56KB_	0.56 \pm 10%	25	25	115	0.70	150
MFI3216R68KB_	0.68 \pm 10%	25	25	105	0.80	150
MFI3216R82KB_	0.82 \pm 10%	25	25	100	0.90	150
MFI32161R0KB_	1.0 \pm 10%	45	10	87	0.40	100
MFI32161R2KB_	1.2 \pm 10%	45	10	75	0.50	100
MFI32161R5KB_	1.5 \pm 10%	45	10	69	0.50	50
MFI32161R8KB_	1.8 \pm 10%	45	10	64	0.50	50
MFI32162R2KB_	2.2 \pm 10%	45	10	58	0.60	50
MFI32162R7KB_	2.7 \pm 10%	45	10	52	0.60	50
MFI32163R3KB_	3.3 \pm 10%	45	10	48	0.70	50
MFI32163R9KB_	3.9 \pm 10%	45	10	44	0.80	50
MFI32164R7KB_	4.7 \pm 10%	45	10	41	0.90	50
MFI32165R6KB_	5.6 \pm 10%	50	4	32	0.80	25
MFI32166R8KB_	6.8 \pm 10%	50	4	29	0.90	25
MFI32168R2KB_	8.2 \pm 10%	50	4	26	1.00	25
MFI321610RKB_	10 \pm 10%	50	2	26	0.60	25
MFI321612RKB_	12 \pm 10%	50	2	26	0.60	15
MFI321615RKB_	15 \pm 10%	50	1	22	0.70	5
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MFI321622RKB_	22 \pm 10%	50	1	19	0.90	5

◆ General Technical Data

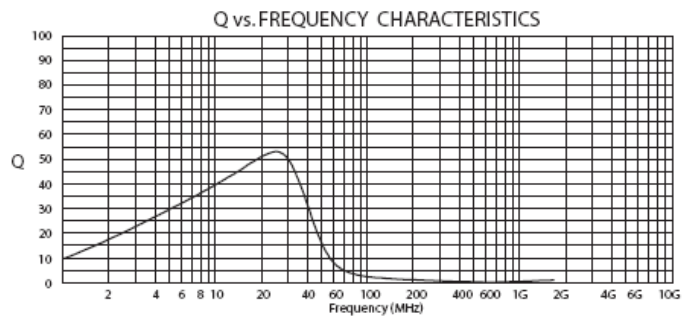
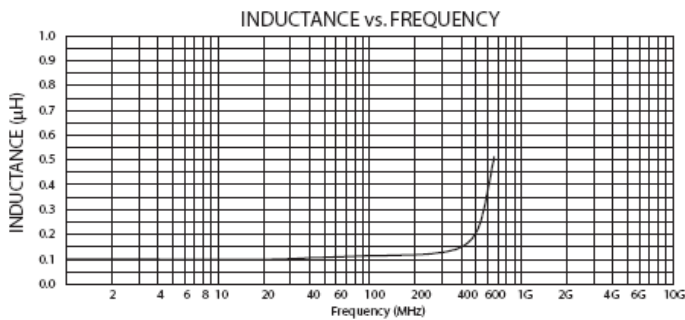
Operating Temperature Range	-55°C ~ +125°C
Storage Condition	Less than 40°C and 70% RH
Soldering Method	Reflow or Wave Soldering

◆ Characteristics

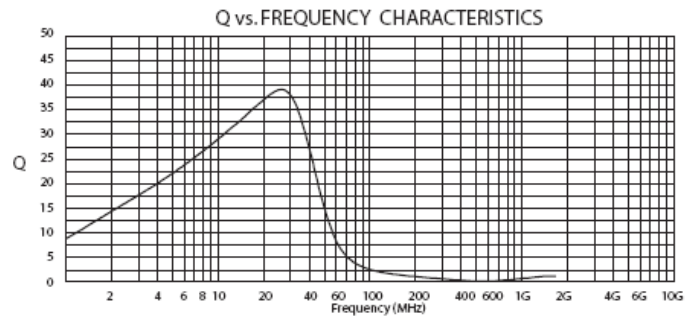
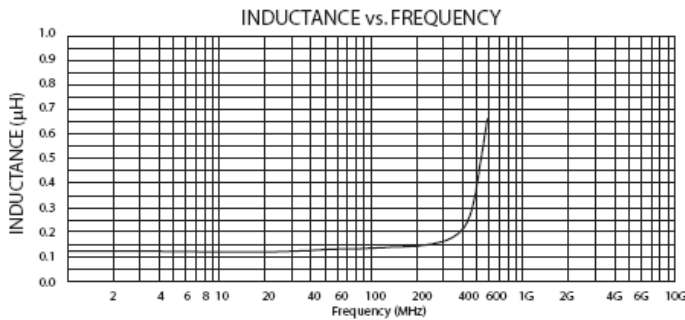
MFI1608 R047, R056, R068 & R082



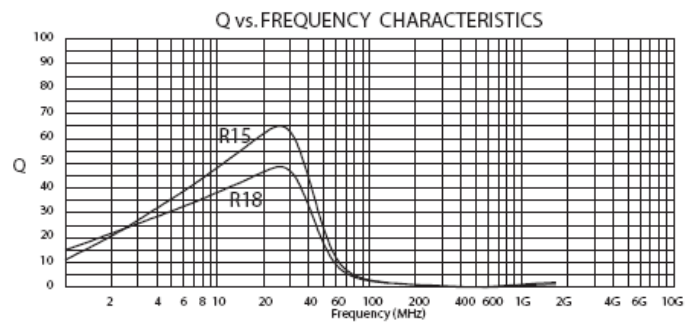
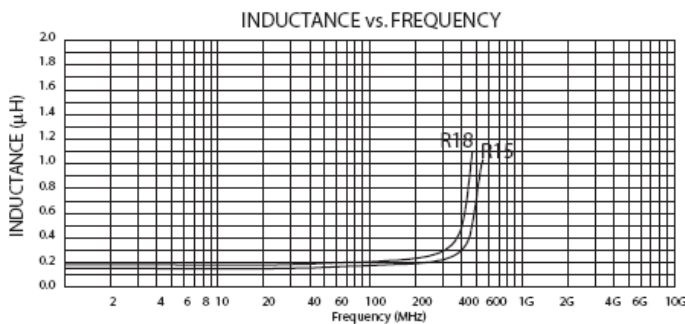
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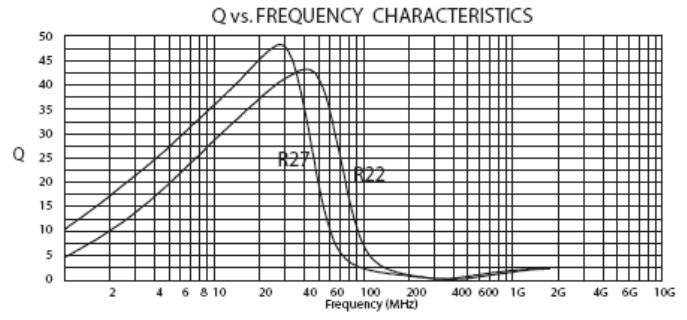
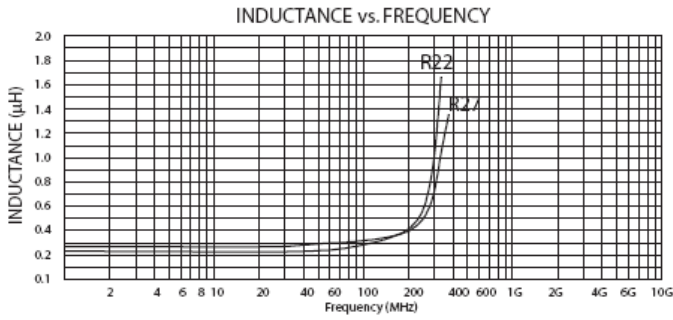
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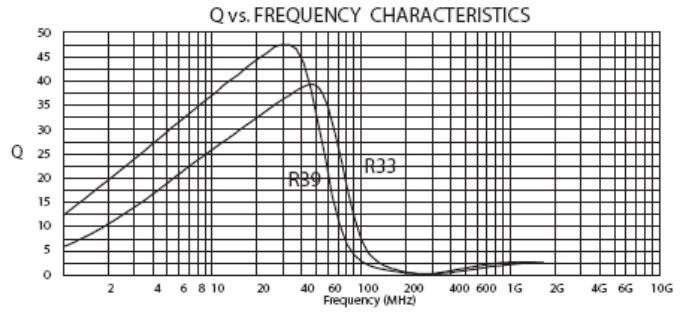
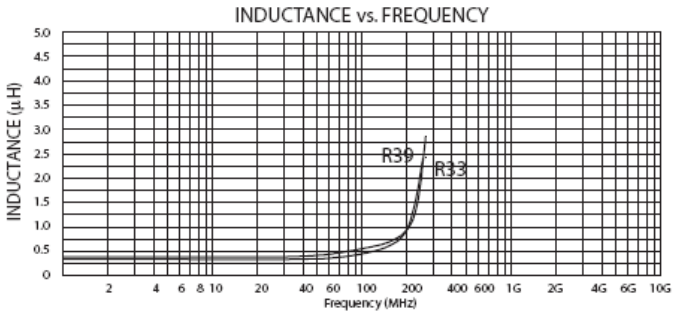
MFI1608 R15 & R18



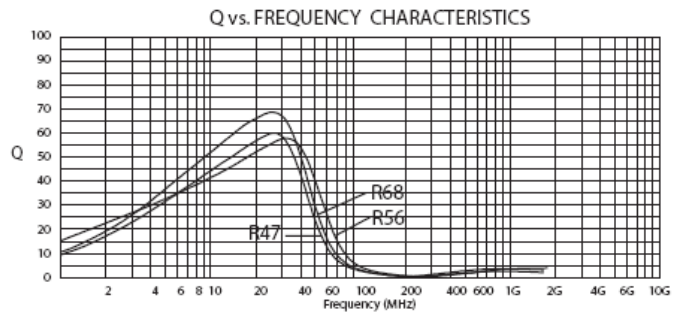
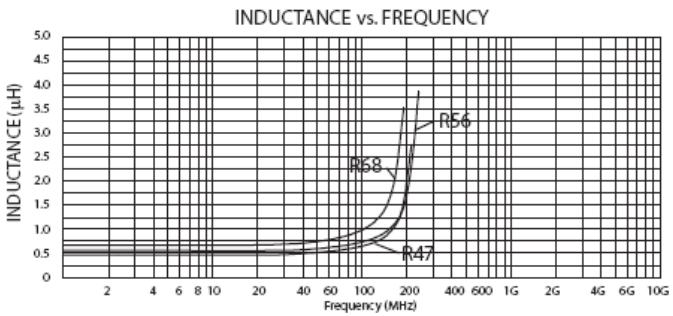
MFI1608 R22 & R27



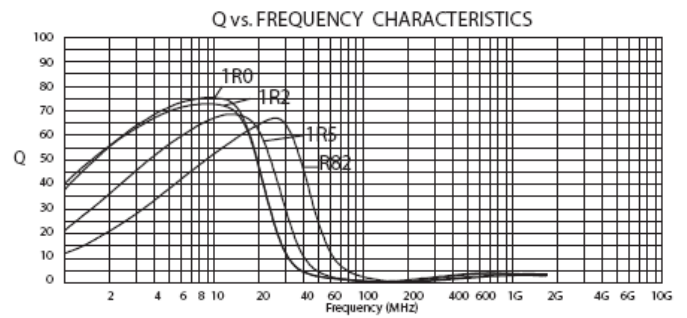
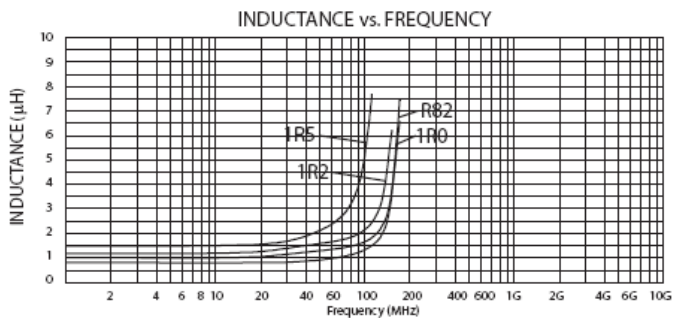
MFI1608 R33 & R39



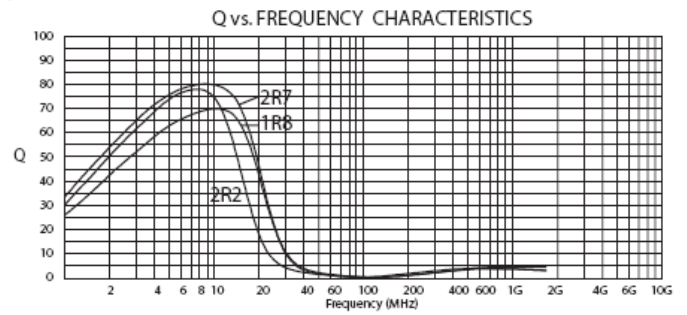
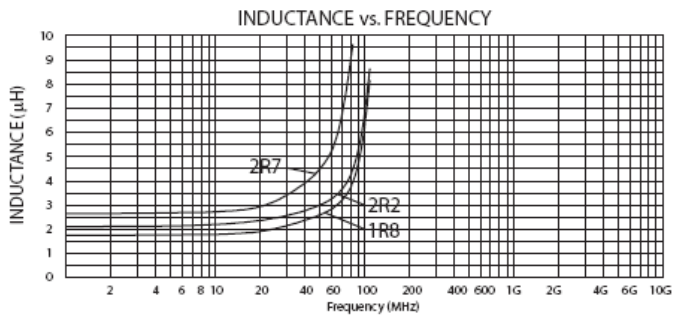
MFI1608 R47, R56 & R68



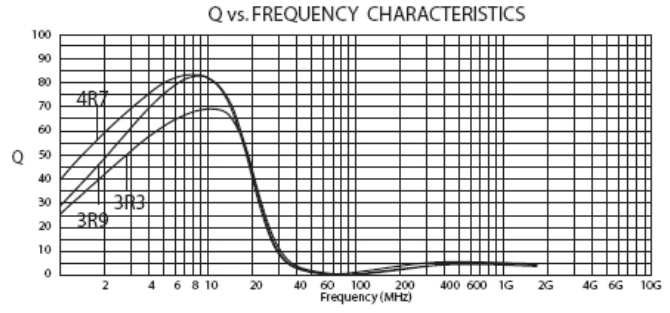
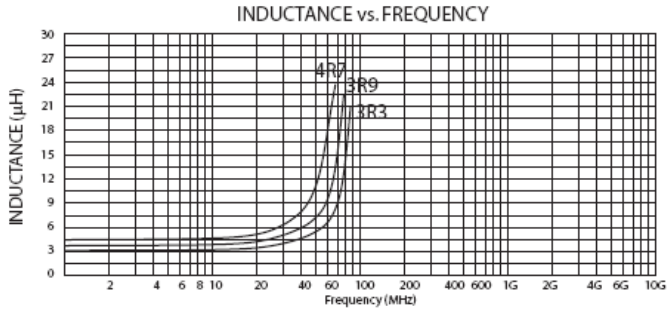
MFI1608 R82, 1R0, 1R2 & 1R5



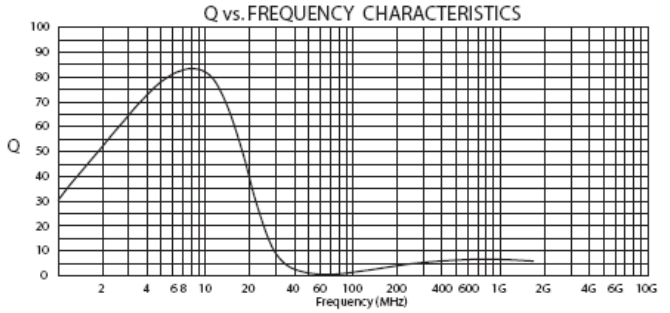
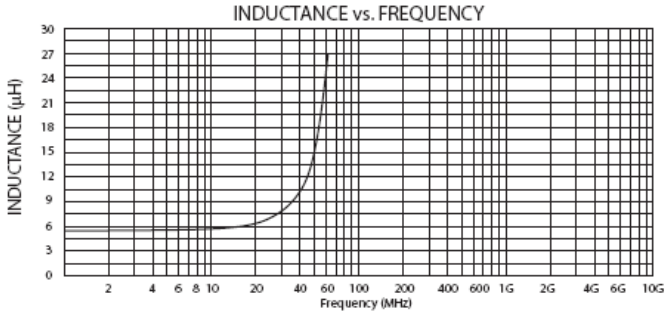
MFI1608 1R8, 2R2 & 2R7



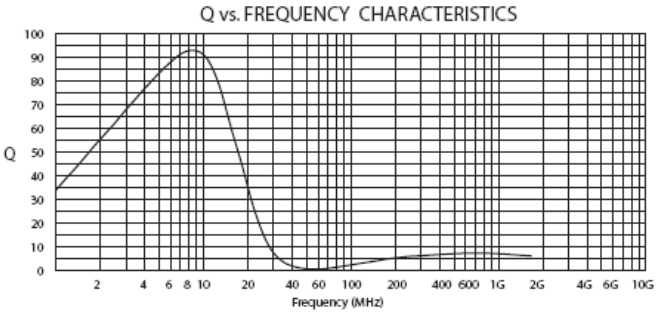
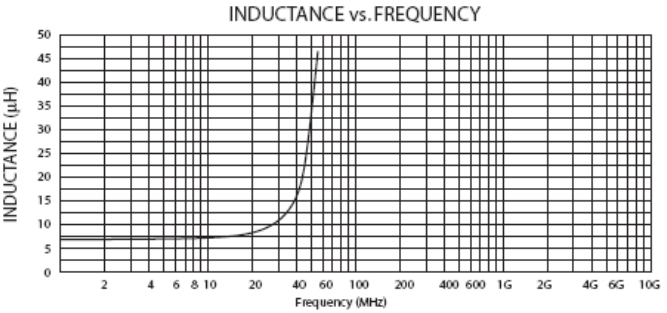
MFI1608 3R3, 3R9 & 4R7



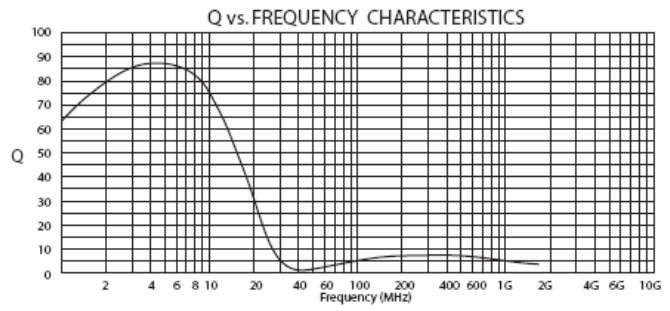
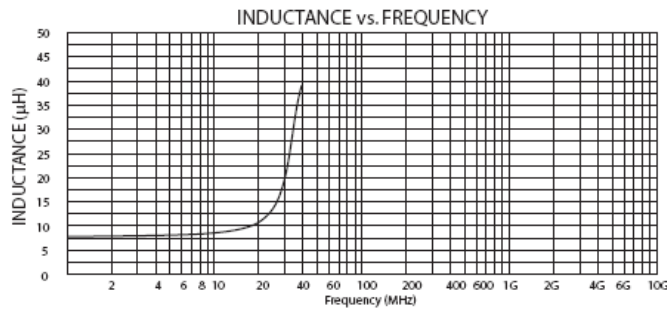
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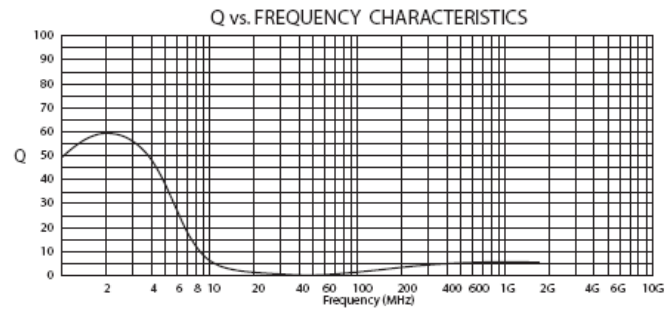
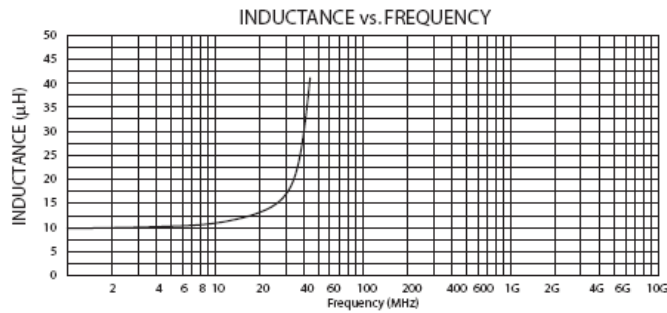
MFI1608 6R8K



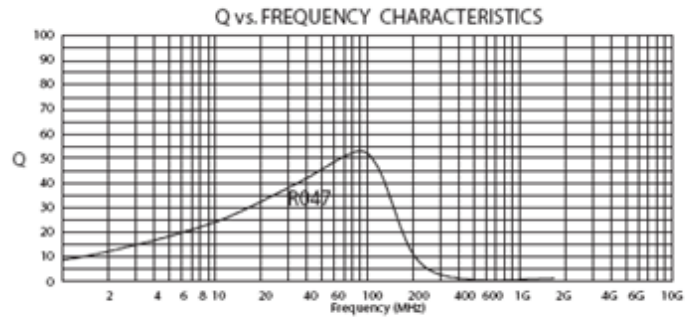
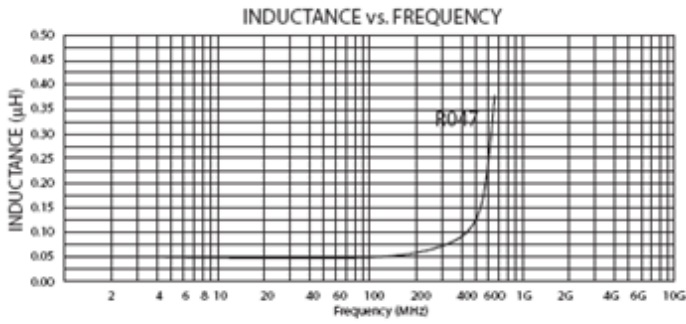
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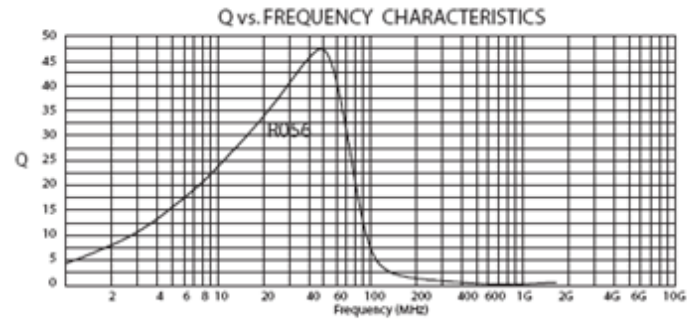
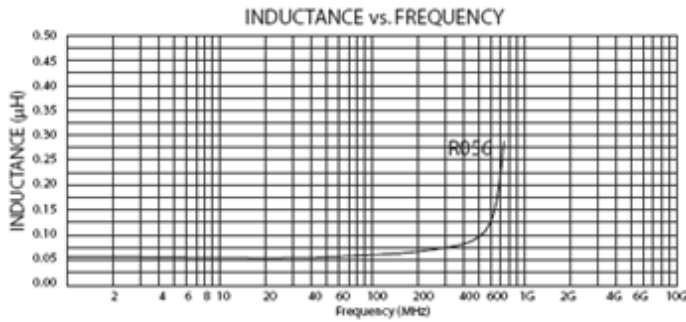
MFI1608 10R



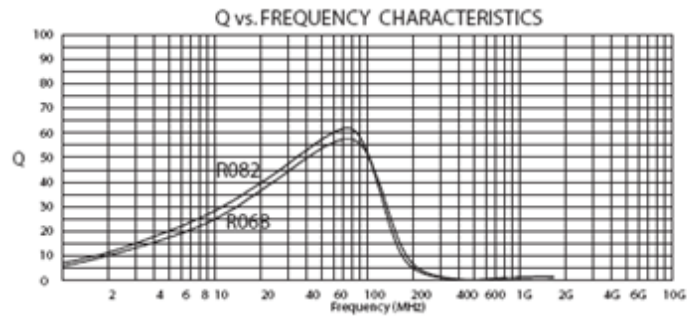
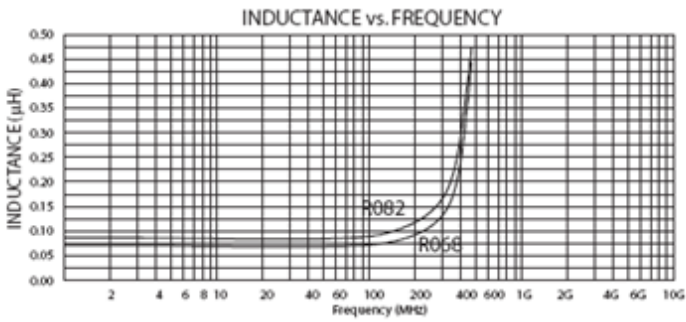
MFI2012 R047



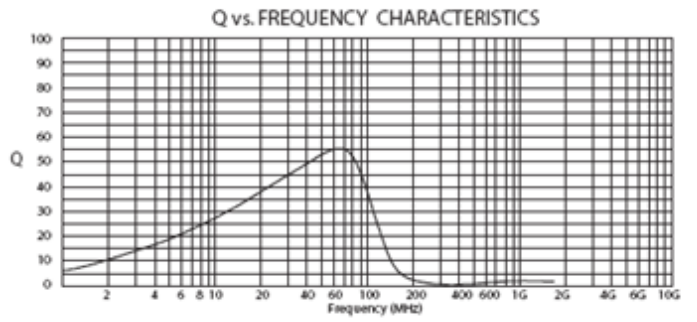
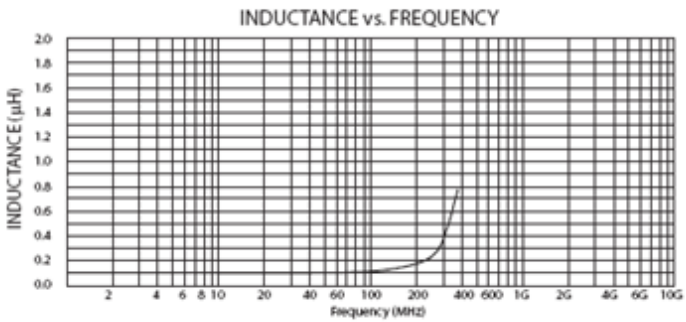
MFI2012 R056



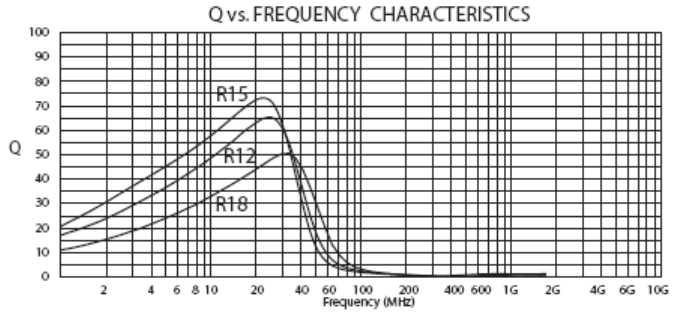
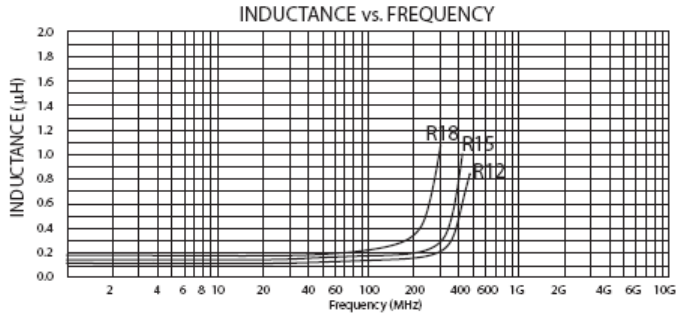
MFI2012 R068 & R082



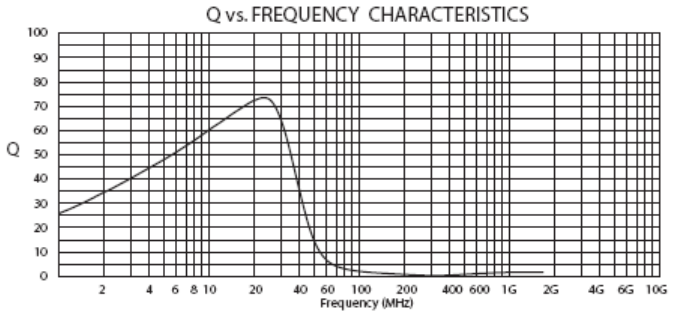
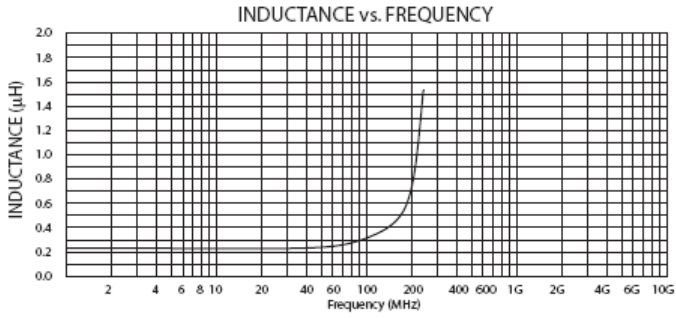
MFI2012 R10



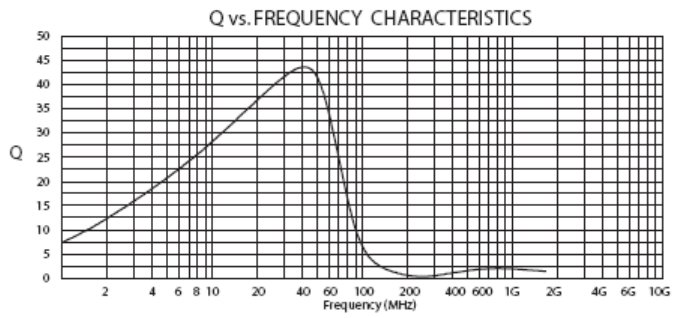
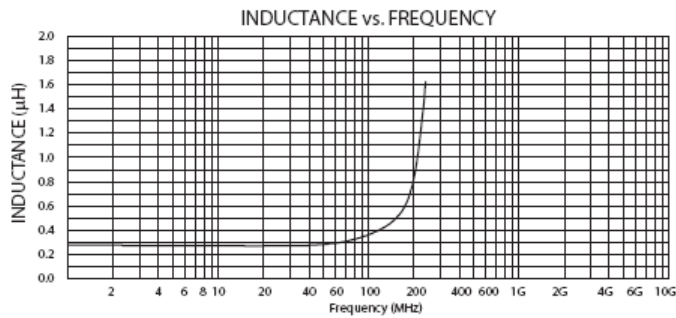
MFI2012 R12, R15, R18



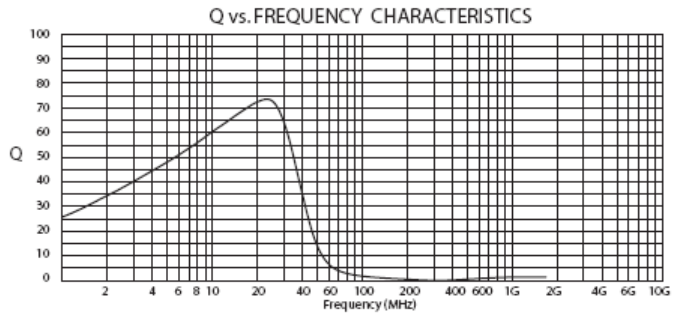
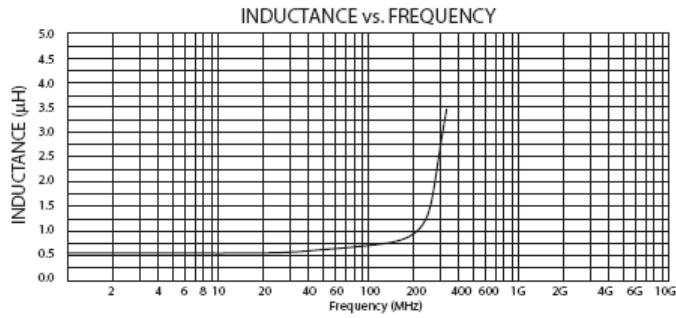
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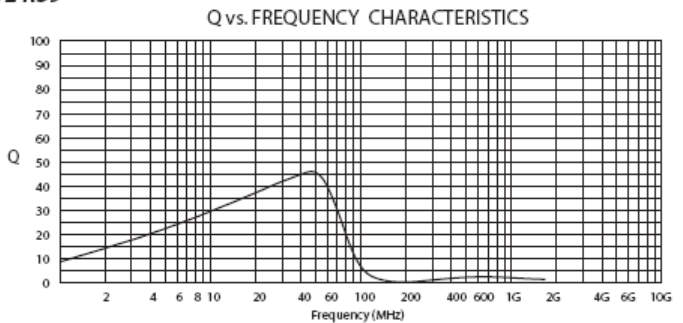
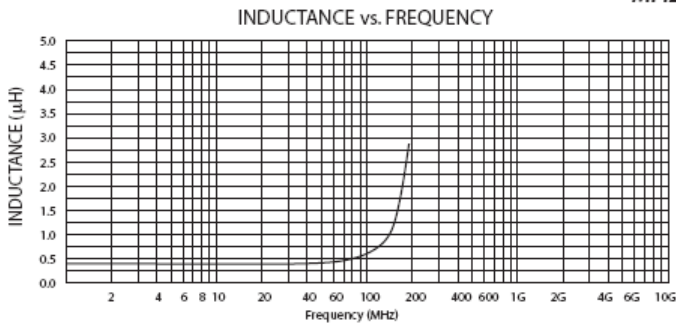
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MFI2012 R33

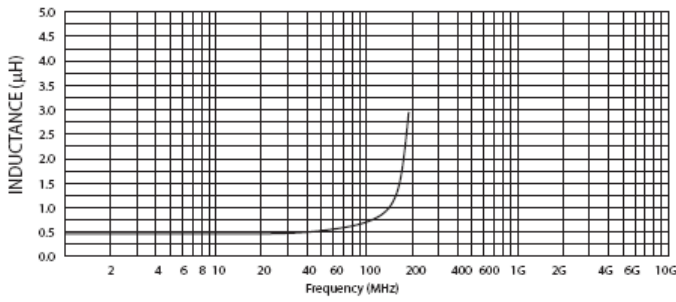


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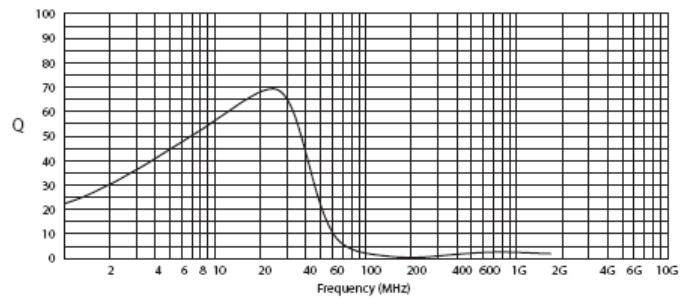


MFI2012 R47

INDUCTANCE vs. FREQUENCY

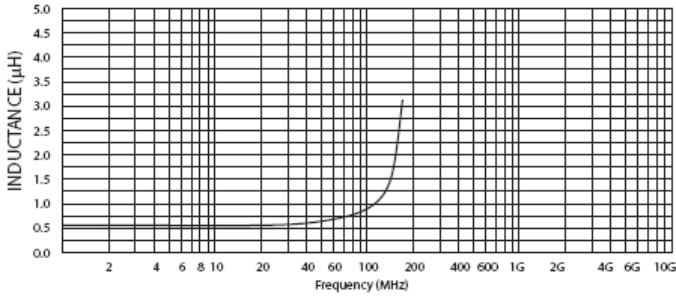


Q vs. FREQUENCY CHARACTERISTICS

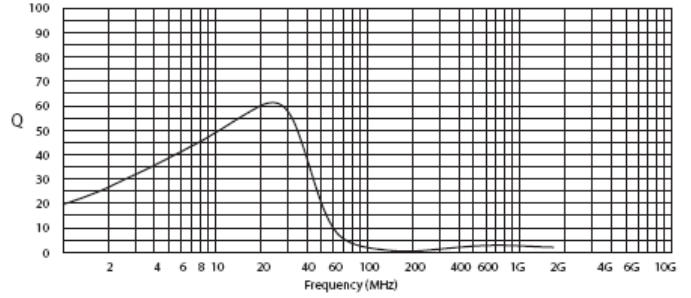


MFI2012 R56

INDUCTANCE vs. FREQUENCY

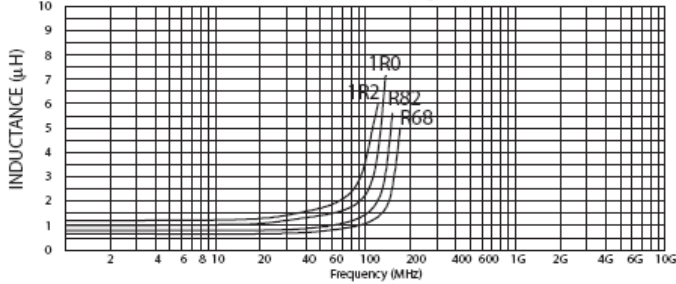


Q vs. FREQUENCY CHARACTERISTICS

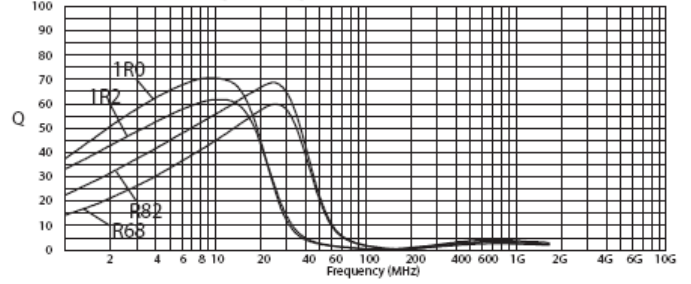


MFI2012 R68, R82, 1R0 & 1R2

INDUCTANCE vs. FREQUENCY

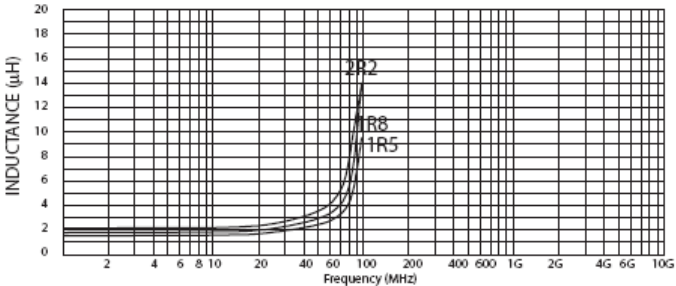


Q vs. FREQUENCY CHARACTERISTICS

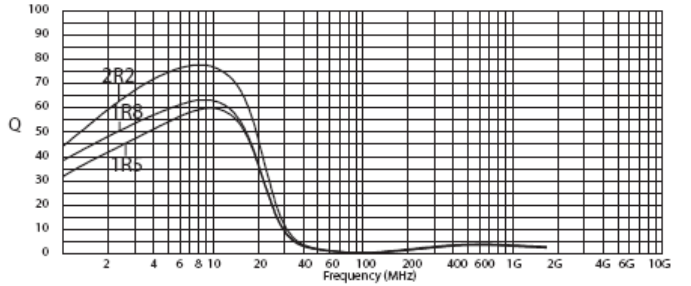


MFI2012 1R5, 1R8 & 2R2

INDUCTANCE vs. FREQUENCY

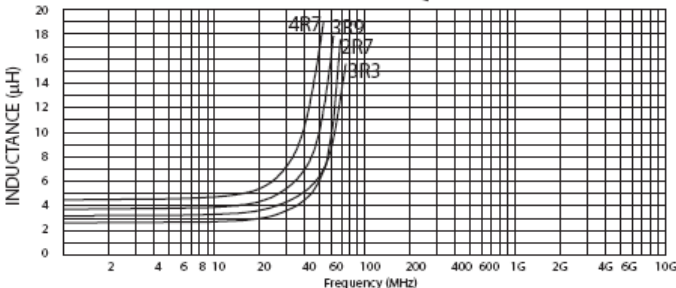


Q vs. FREQUENCY CHARACTERISTICS

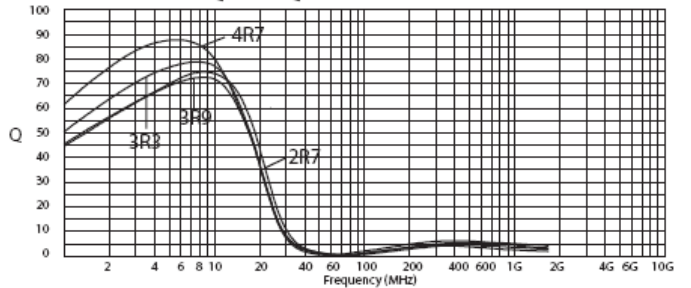


MFI2012 2R7, 3R3, 3R9 & 4R7

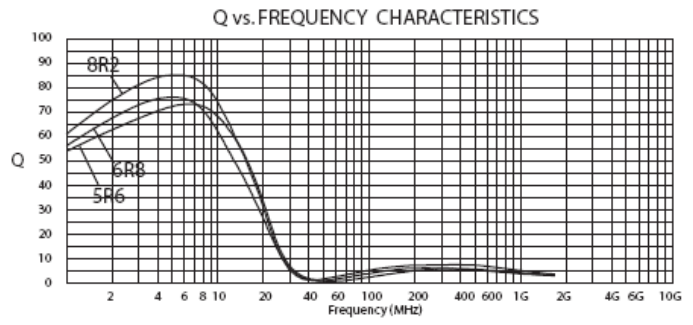
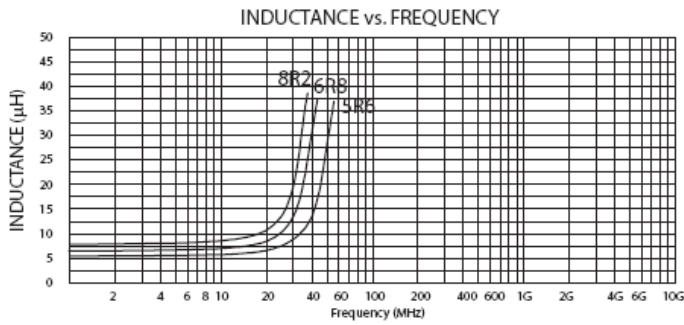
INDUCTANCE vs. FREQUENCY



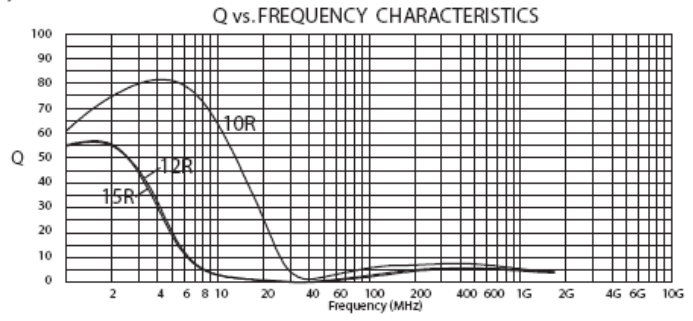
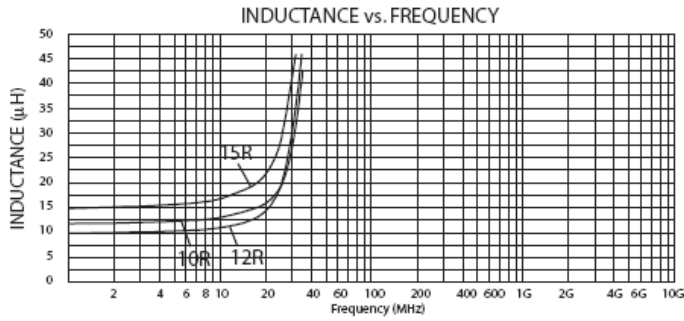
Q vs. FREQUENCY CHARACTERISTICS



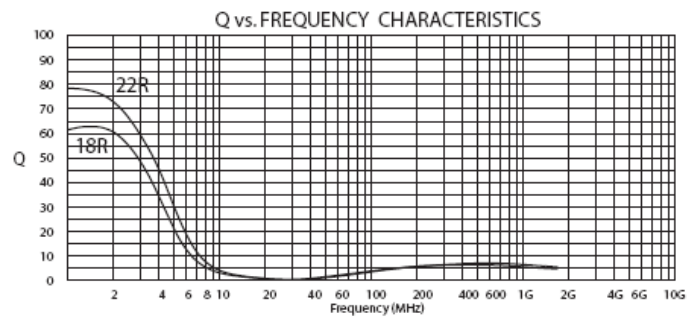
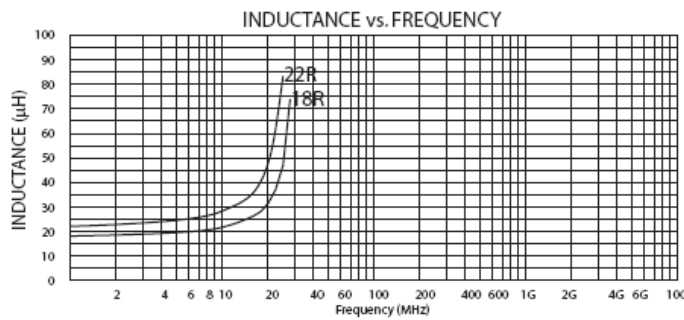
MFI2012 5R6, 6R8 & 8R2



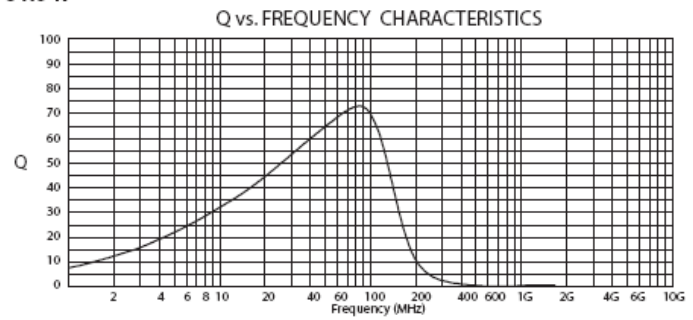
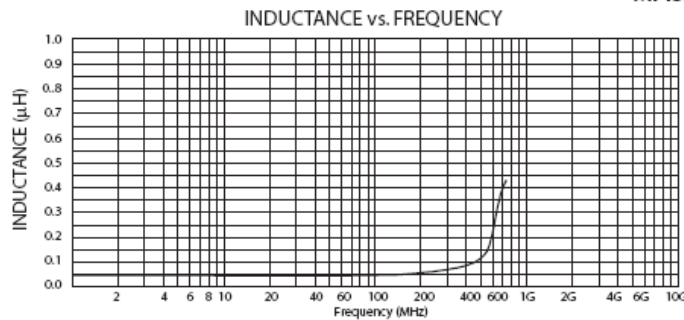
MFI2012 10R, 12R & 15R



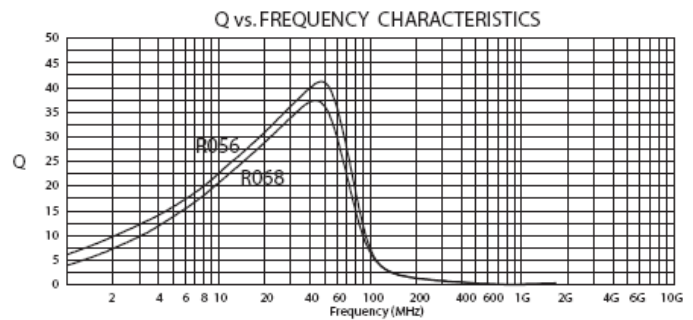
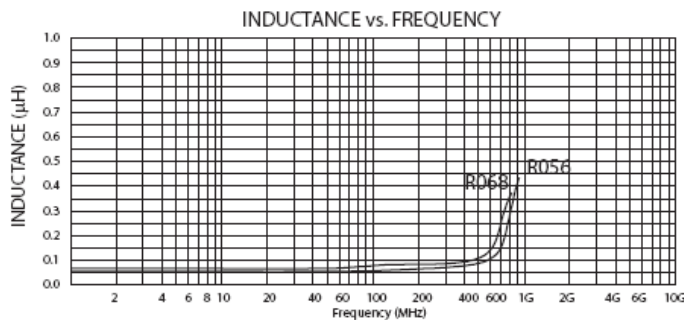
MFI2012 18R & 22R



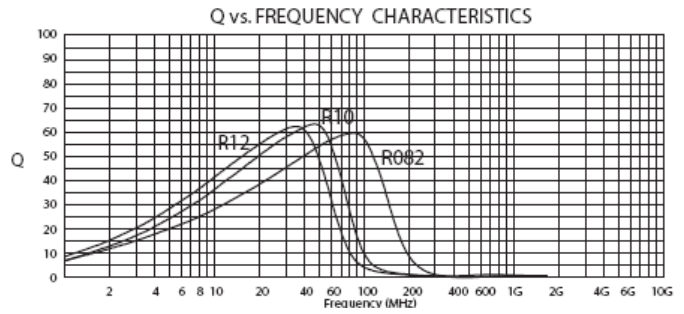
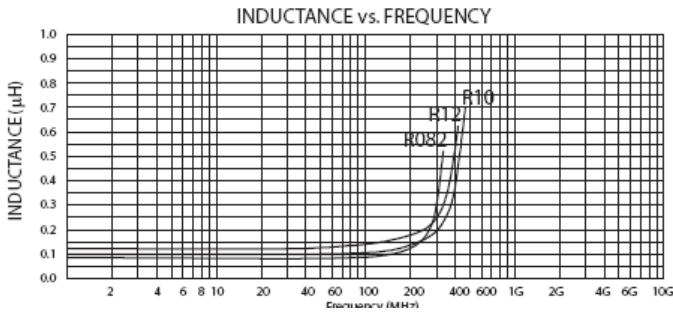
MFI3216 R047



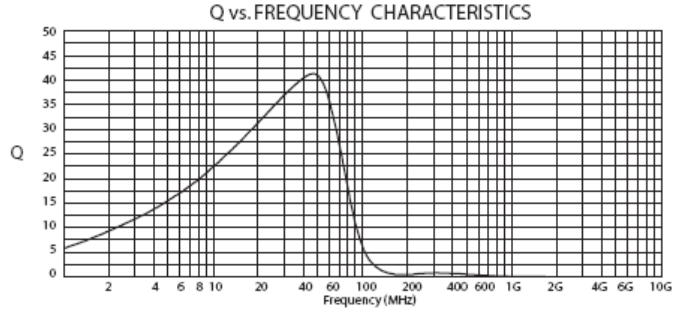
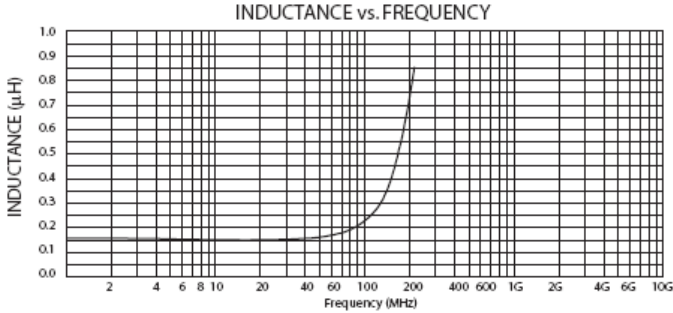
MFI3216 R056 & R068



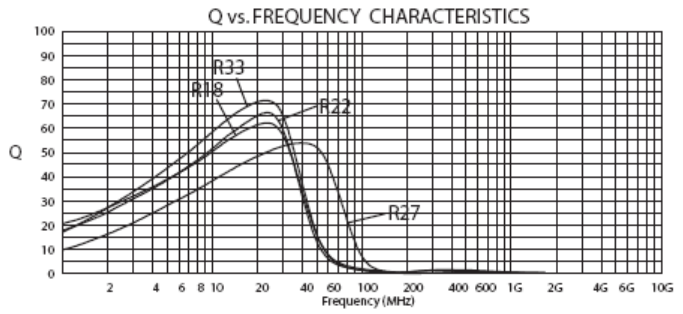
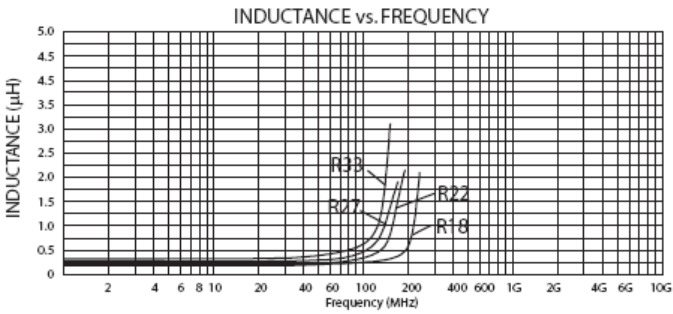
MFI3216 R082, R10 & R12



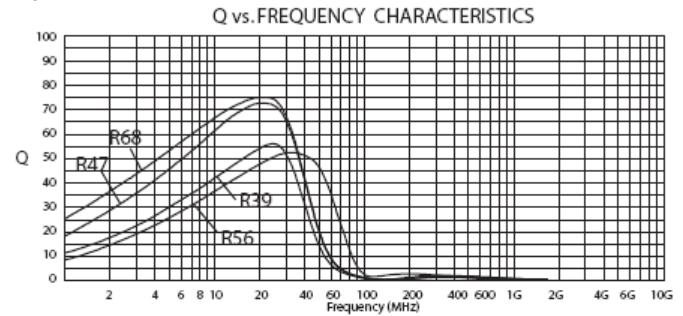
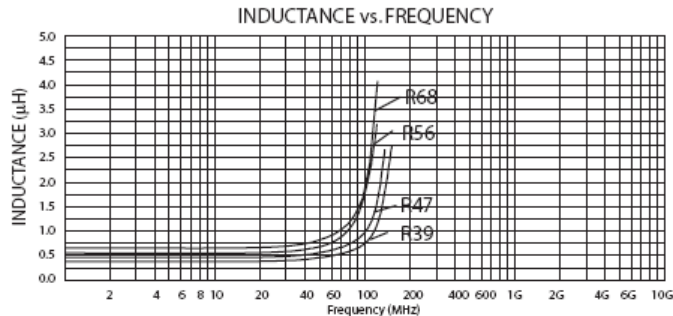
MFI3216 R15



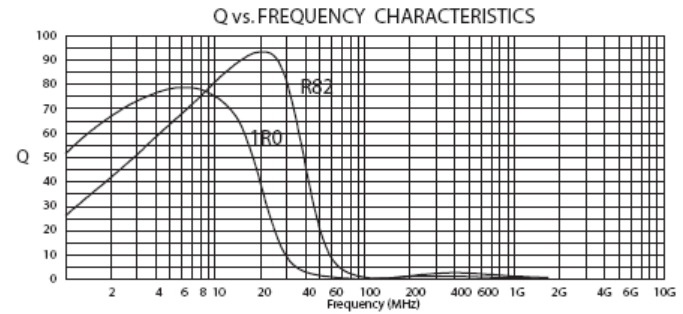
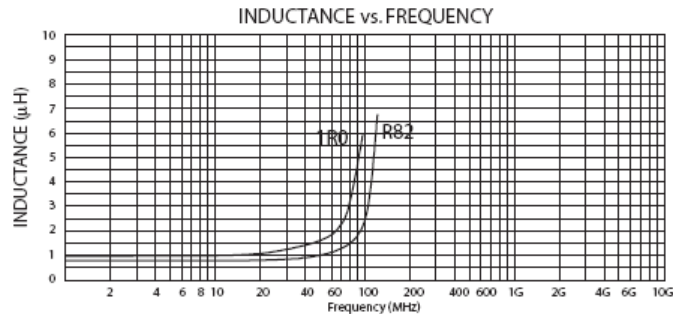
MFI3216 R18, R22, R27 & R33



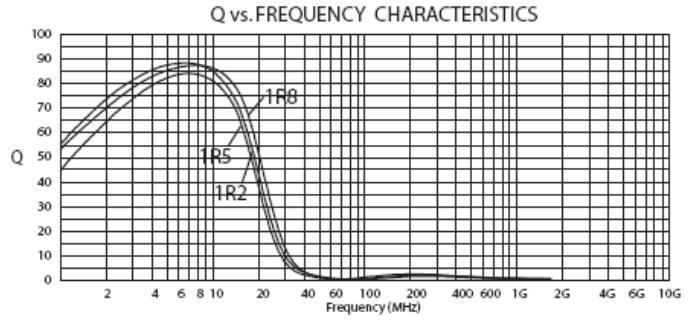
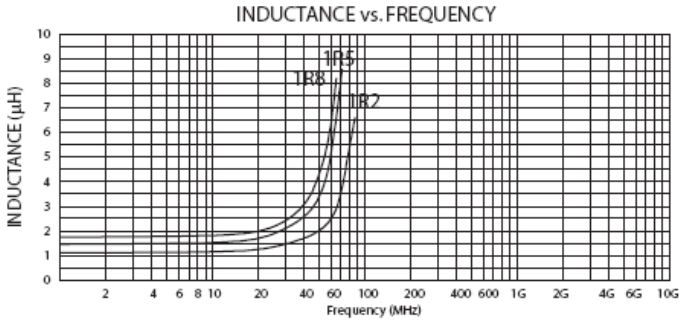
MFI3216 R39, R47, R56 & R68



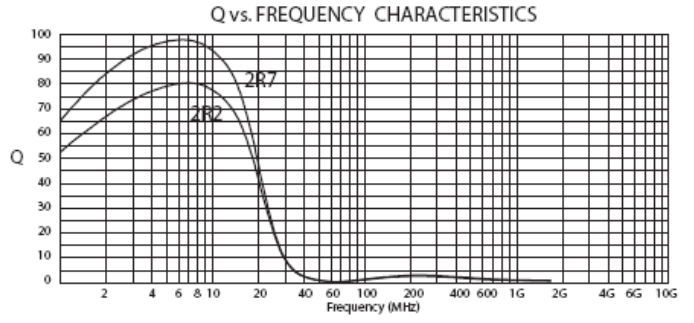
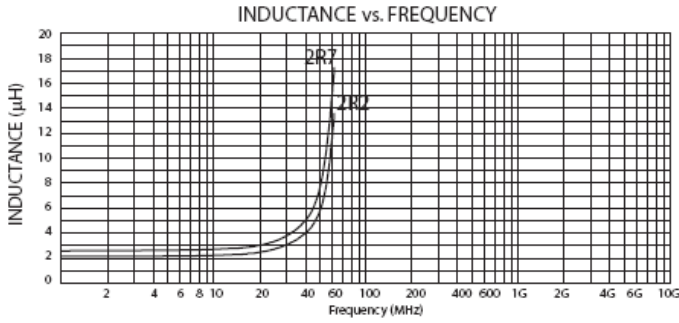
MFI3216 R82 & 1R0



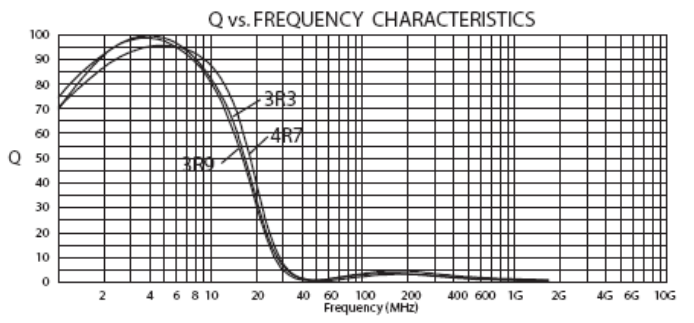
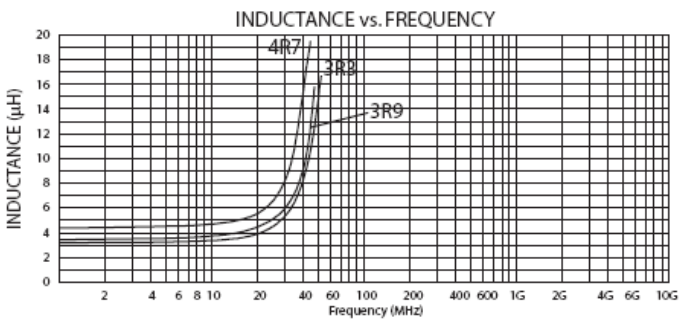
MFI3216 1R2, 1R5 & 1R8



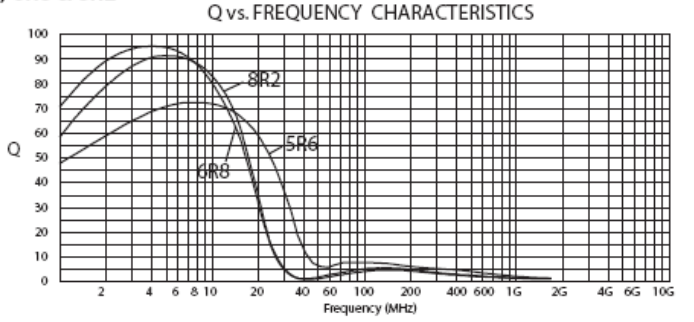
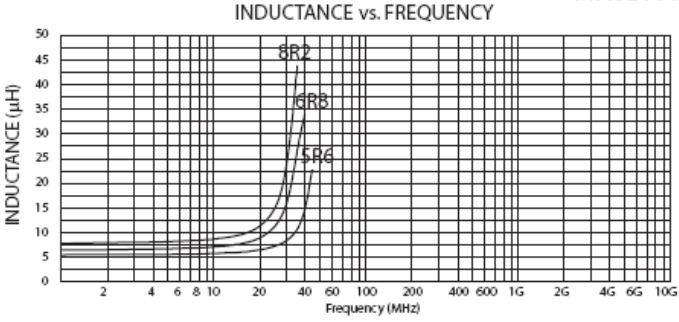
MFI3216 2R2 & 2R7



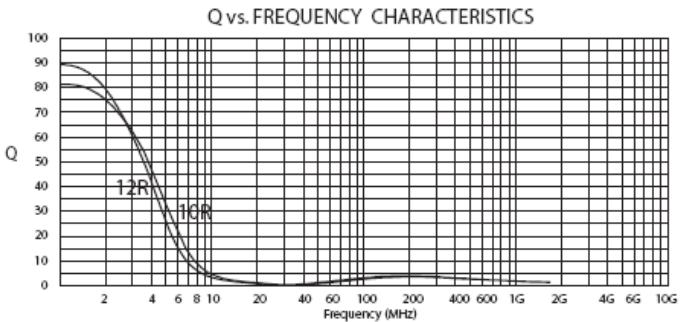
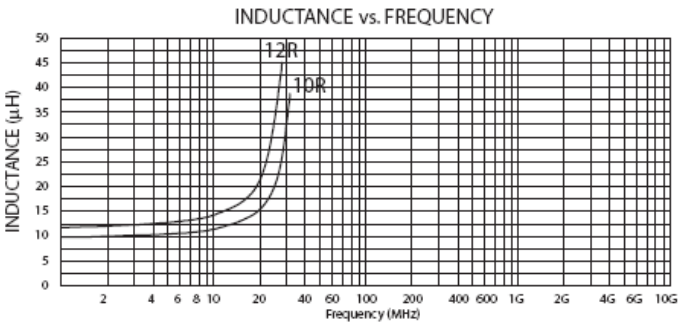
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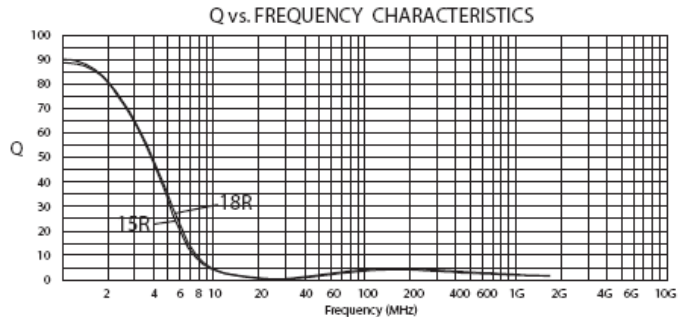
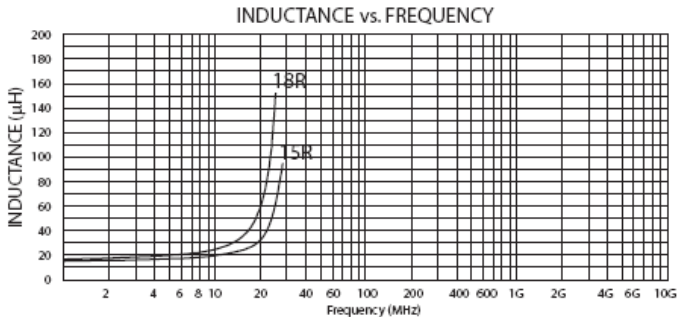
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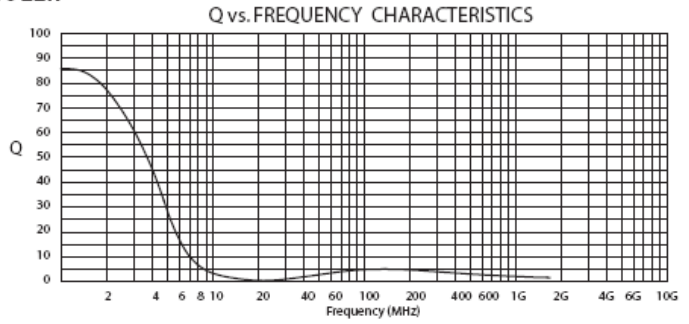
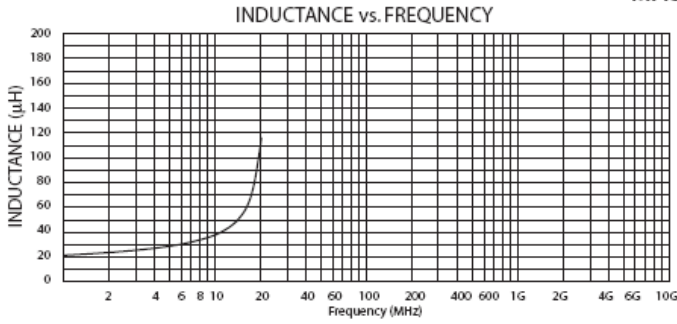
MFI3216 10R & 12R



MFI3216 15R & 18R



MFI3216 22R



◆ Package

Size EIA (EIA)	1608 (0603)	201209 (0805)	201212 (0805)	321611 (1206)
Standard Packing Quantity (pcs / reel)	4,000	4,000	3,000	3,000