



Inductance Range : 1 to 270nH  
 Operating Temperature Range : -55°C to +125°C  
 Soldering Method: Reflow or Wave soldering  
 Packing Method: Per EIA specifications  
 Storage Temperature : -40°C to +85°, 70%RH Max

**Features**

Particular ceramic material and coil structure provide high frequency application range up to 10GHz  
 And high Q at high frequency.

**Application field**

RF and wireless communication, Information technology equipment which include computer, telecommunications, radar detectors, automotive electronics, cellular phones, pagers, audio equipment, PDAs, keyless, remotesystem and low voltage power supply modules.

**Part Number Code**

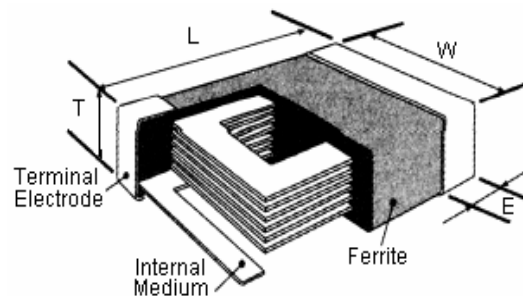
MCI    1608    HQ    39N    K    A  
 1       2       3       4       5       6

1. Series Name
2. Size Code : the first two digitals : length(mm), the last two digitals : width(mm)
3. HQ= High Q Value
4. Inductance (N=decimal point)
5. Totalance S = +-0.3nH, J = +-5%, K= +-10%
- 6.Soldering: A = lead-free



**Shape and dimensions**

Size	L mm(inch)	W mm(inch)	T mm(inch)	E mm(inch)
1005	1.00±0.10	0.50±0.100	0.50±0.100	0.25±0.10
(0402)	0.04±.004	0.02±.004	0.02±0.004	0.01±.004
1608	1.60±0.15	0.80±0.15	0.80±0.150	0.30±0.20
(0603)	0.063±.006	0.031±0.006	0.031±0.006	0.012±.008
2012	2.00±0.200	1.25±0.200	0.90±0.20	0.50±0.30
(0805)	0.079±.008	0.049±.008	0.035±0.008	.020±.0012



Series	Inductance μ H	Q Min	TestFre (MHz)	Q(Typical) Frequency (MHz)						SRF		DCR		IDC Max.(mA)
				100	300	500	800	1000	1800	Min	Typ	Max	Typ	
MCI1005HQ1N0S	1.0	8	100	11	20	26	34	39	30	10000	13000	0.12		300
MCI1005HQ1N2S	1.2	8	100	11	20	26	34	39	30	10000	13000	0.12		300
MCI1005HQ1N5S	1.5	8	100	11	20	26	34	39	30	6000	13000	0.13		300
MCI1005HQ1N8S	1.8	8	100	11	18	24	30	35	30	6000	11000	0.14		300
MCI1005HQ2N2S	2.2	8	100	10	17	24	29	35	30	6000	10000	0.16		300
MCI1005HQ2N7S	2.7	8	100	10	17	23	29	34	30	6000	9000	0.17		300
MCI1005HQ3N3S	3.3	8	100	10	17	23	28	34	30	6000	8000	0.19		300
MCI1005HQ3N9S	3.9	8	100	10	17	23	28	33	30	4000	5700	0.22		300
MCI1005HQ4N7S	4.7	8	100	10	17	23	28	33	30	4000	6000	0.24		300
MCI1005HQ5N6S	5.6	8	100	10	17	22	28	33	30	4000	5700	0.27		300
MCI1005HQ6N8J	6.8	8	100	10	16	22	27	33	30	3900	5500	0.32		250
MCI1005HQ8N2J	8.2	8	100	10	17	22	28	32	30	3600	4900	0.37		250
MCI1005HQ10NJ	10.0	8	100	10	17	22	30	32	28	3200	4300	0.42		250
MCI1005HQ12NJ	12.0	8	100	11	18	24	31	34	28	2700	3900	0.50		250
MCI1005HQ15NJ	15.0	8	100	11	18	24	30	33	27	2300	3500	0.55		250
MCI1005HQ18NJ	18.0	8	100	11	18	24	30	32	20	2100	3100	0.65		200
MCI1005HQ22NJ	22.0	8	100	11	18	24	30	31	13	1900	2800	0.80		200
MCI1005HQ27NJ	27.0	8	100	11	18	23	27	29	10	1600	2300	0.90		200
MCI1005HQ33NJ	33.0	8	100	11	18	22	25	25		1300	1900	1.00		200
MCI1005HQ39NJ	39.0	8	100	11	18	22	24	23		1200	1700	1.20		150
MCI1005HQ47NJ	47.0	8	100	11	18	21	23	21		1000	1500	1.30		150
MCI1005HQ56NJ	56.0	8	100	11	18	20	21	19		750	1300	1.40		150
MCI1005HQ68NJ	68.0	8	100	11	17	19	19	16		750	1200	1.40		150
MCI1005HQ82NJ	82.0	8	100	10	17	19	16	10		600	1100	1.60		100
MCI1005HQR10J	100.0	8	100	10	16	18	10			600	1100	1.60		100
MCI1608HQ1N0S	1.0	8	100	14	30	40	70	90	50	10000	13000	0.05	0.015	300
MCI1608HQ1N2S	1.2	8	100	14	30	40	70	90	50	10000	13000	0.05	0.015	300
MCI1608HQ1N5S	1.5	8	100	14	26	34	47	50	50	6000	13000	0.10	0.03	300
MCI1608HQ1N8S	1.8	8	100	10	18	24	30	34	50	6000	13000	0.10	0.06	300
MCI1608HQ2N2S	2.2	8	100	12	22	29	37	40	50	6000	12000	0.10	0.06	300
MCI1608HQ2N7S	2.7	10	100	13	24	32	41	45	55	6000	11000	0.10	0.06	300
MCI1608HQ3N3S	3.3	10	100	14	25	33	42	47	55	6000	9000	0.12	0.06	300
MCI1608HQ3N9S	3.9	10	100	13	25	33	42	46	55	6000	8000	0.14	0.07	300
MCI1608HQ4N7S	4.7	10	100	14	25	33	42	47	55	4000	6500	0.16	0.08	300
MCI1608HQ5N6S	5.6	10	100	14	25	33	42	46	55	4000	5800	0.18	0.09	300
MCI1608HQ6N8J	6.8	10	100	14	25	33	43	47	50	4000	5600	0.22	0.11	300
MCI1608HQ8N2J	8.2	10	100	14	26	34	44	48	40	3500	5200	0.24	0.13	300
MCI1608HQ10NJ	10.0	12	100	14	26	34	43	47	40	3400	4600	0.26	0.16	300
MCI1608HQ12NJ	12.0	12	100	14	27	35	45	49	35	2600	4000	0.28	0.17	300
MCI1608HQ15NJ	15.0	12	100	15	28	37	46	51	20	2300	3400	0.32	0.20	300
MCI1608HQ18NJ	18.0	12	100	15	27	36	44	48	15	2000	3000	0.35	0.21	300

Series	Inductance	Q min	Test Freq. (MHz)	Q(Typical)						SRF		DCR		IDC Max.(mA)
				100	300	500	800	1000	1000	MIN	Typ	Min	Typ	
MCI1005HQ1N0S_	1	8	100	10	16	21	26	30	36	10000	18000	0.12	-	300
MCI1005HQ1N2S_	1.2	8	100	10	18	23	26	31	44	10000	17000	0.12	-	300
MCI1005HQ1N5S_	1.5	8	100	11	20	25	30	35	51	6000	11000	0.13	-	300
MCI1005HQ1N8S_	1.8	8	100	11	20	25	30	35	48	6000	11000	0.14	-	300
MCI1005HQ2N2S_	2.2	8	100	10	18	23	28	32	45	6000	8700	0.16	-	300
MCI1005HQ2N7S_	2.7	8	100	10	17	21	25	30	40	6000	7800	0.17	-	300
MCI1005HQ3N3S_	3.3	8	100	10	17	22	27	31	41	6000	6400	0.19	-	300
MCI1005HQ3N9S_	3.9	8	100	10	16	19	24	26	35	4000	5800	0.22	-	300
MCI1005HQ4N7S_	4.7	8	100	10	15	19	23	26	35	4000	5100	0.24	-	300
MCI1005HQ5N6S_	5.6	8	100	10	15	20	25	26	35	4000	4700	0.27	-	300
MCI1005HQ6N8J_	6.8	8	100	10	15	19	23	26	35	3900	4200	0.32	-	250
MCI1005HQ8N2J_	8.2	8	100	10	18	22	26	29	35	3600	3800	0.37	-	250
MCI1005HQ10NJ_	10	8	100	10	15	18	21	23	25	3200	3200	0.42	-	250
MCI1005HQ12NJ_	12	8	100	10	15	18	22	23	24	2700	2900	0.5	-	250
MCI1005HQ15NJ_	15	8	100	10	15	19	22	24	23	2300	2500	0.55	-	250
MCI1005HQ18NJ_	18	8	100	10	16	20	24	25	23	2100	2400	0.65	-	200
MCI1005HQ22NJ_	22	8	100	10	18	22	25	26	18	1900	2200	0.8	-	200
MCI1005HQ27NJ_	27	8	100	10	18	22	25	25	16	1600	2000	0.9	-	200
MCI1005HQ33NJ_	33	8	100	10	16	19	21	20	-	1300	1800	1	-	200
MCI1005HQ39NJ_	39	8	100	10	18	21	23	20	-	1200	1600	1.2	-	150
MCI1005HQ47NJ_	47	8	100	10	16	18	18	15	-	1000	1500	1.3	-	150
MCI1005HQ56NJ_	56	8	100	11	18	21	17	14	-	750	1300	1.4	-	150
MCI1005HQ68NJ_	68	8	100	11	16	18	17	12	-	750	1250	1.4	-	150
MCI1005HQ82NJ_	82	8	100	11	17	19	15	8	-	600	1100	2	-	100
MCI1005HQR10J_	100	8	100	11	16	17	10	2	-	600	1000	2	-	100
MCI1005HQR12J_	120	8	100	11	-	15	-	-	-	600	1000	2	-	100
MCI1608HQ1N0S_	1	8	100	15	30	43	54	63	55	10000	15000	0.05	0.015	300
MCI1608HQ1N2S_	1.2	8	100	14	26	38	48	55	55	10000	14000	0.05	0.015	300
MCI1608HQ1N5S_	1.5	8	100	11	21	28	35	40	55	6000	13000	0.1	0.03	300
MCI1608HQ1N8S_	1.8	8	100	10	18	24	31	35	55	6000	11000	0.1	0.06	300
MCI1608HQ2N2S_	2.2	8	100	14	26	35	44	40	55	6000	10000	0.1	0.06	300
MCI1608HQ2N7S_	2.7	10	100	12	22	29	37	45	55	6000	7000	0.1	0.06	300
MCI1608HQ3N3S_	3.3	10	100	16	30	40	51	47	55	4000	5900	0.12	0.06	300
MCI1608HQ3N9S_	3.9	10	100	11	20	25	31	35	51	3500	4500	0.14	0.07	300
MCI1608HQ4N7S_	4.7	10	100	11	20	26	33	35	55	3500	4500	0.16	0.08	300
MCI1608HQ5N6S_	5.6	10	100	15	27	36	44	46	64	3500	4000	0.18	0.09	300
MCI1608HQ6N8J_	6.8	10	100	15	29	38	44	47	65	3000	3600	0.22	0.11	300
MCI1608HQ8N2J_	8.2	10	100	13	24	31	37	41	45	3000	3500	0.24	0.13	300
MCI1608HQ10NJ_	10	12	100	15	27	34	40	47	40	2800	3000	0.26	0.16	300
MCI1608HQ12NJ_	12	12	100	12	21	27	30	49	24	2000	2500	0.28	0.17	300
MCI1608HQ15NJ_	15	12	100	15	23	30	34	36	22	2000	2200	0.32	0.2	300
MCI1608HQ18NJ_	18	12	100	15	22	28	31	31	11	1800	2000	0.35	0.21	300

Series	Inductance	Q min	Test Freq. (MHz)	Q(Typical)						SRF		DCR		IDC Max (mA)
				100	300	500	800	1000	1000	MIN	Typ	Min	Typ	
MCI1608HQ22NJ_	22	12	100	17	28	34	37	36	-	1800	1900	0.4	0.25	300
MCI1608HQ27NJ_	27	12	100	15	25	31	32	30	-	1500	1700	0.45	0.28	300
MCI1608HQ33NJ_	33	12	100	15	24	28	28	24	-	1200	1500	0.55	0.35	300
MCI1608HQ39NJ_	39	12	100	14	26	31	28	23	-	1100	1300	0.6	0.38	300
MCI1608HQ47NJ_	47	12	100	17	27	31	28	24	-	900	1300	0.7	0.45	300
MCI1608HQ56NJ_	56	12	100	19	30	34	26	16	-	900	1200	0.75	0.5	300
MCI1608HQ68NJ_	68	12	100	17	27	30	20	7	-	700	1000	0.85	0.55	300
MCI1608HQ82NJ_	82	12	100	16	26	29	18	-	-	600	1000	0.95	0.6	300
MCI1608HQR10J_	100	12	100	18	26	24	3	-	-	600	800	1	0.65	300
MCI1608HQR12J_	120	8	50	17	24	21	-	-	-	500	800	1.2	0.68	300
MCI1608HQR15J_	150	8	50	19	25	20	-	-	-	500	700	1.2	0.73	300
MCI1608HQR18J_	180	8	50	18	22	13	-	-	-	400	600	1.3	0.85	300
MCI1608HQR22J_	220	8	50	18	21	-	-	-	-	400	500	1.5	0.95	300
MCI1608HQR27J_	270	8	50	19	-	-	-	-	-	350	490	1.6	1.05	300
MCI2012HQ1N5S_	1.5	10	100	16	32	43	55	67	93	4000	7000	0.1	0.02	300
MCI2012HQ1N8S_	1.8	10	100	16	40	56	55	59	90	4000	7000	0.1	0.02	300
MCI2012HQ2N2S_	2.2	10	100	16	29	40	51	58	84	4000	7000	0.1	0.03	300
MCI2012HQ2N7S_	2.7	12	100	16	32	43	55	60	83	4000	6500	0.1	0.03	300
MCI2012HQ3N3S_	3.3	12	100	19	39	52	65	70	96	4000	5500	0.13	0.04	300
MCI2012HQ3N9S_	3.9	12	100	19	39	52	65	75	91	3000	4400	0.15	0.05	300
MCI2012HQ4N7S_	4.7	12	100	19	40	53	65	70	76	3000	3500	0.2	0.05	300
MCI2012HQ5N6S_	5.6	15	100	19	40	53	62	70	66	3000	3500	0.23	0.05	300
MCI2012HQ6N8J_	6.8	15	100	19	35	44	55	60	61	2500	3300	0.25	0.06	300
MCI2012HQ8N2J_	8.2	15	100	19	35	45	53	60	41	2000	2600	0.28	0.07	300
MCI2012HQ10NJ_	10	15	100	20	41	53	60	60	36	2000	2300	0.3	0.09	300
MCI2012HQ12NJ_	12	15	100	20	28	36	40	45	15	1500	2000	0.35	0.1	300
MCI2012HQ15NJ_	15	15	100	20	37	46	48	45	9	1500	1800	0.4	0.11	300
MCI2012HQ18NJ_	18	15	100	20	42	52	54	45	2	1300	1700	0.45	0.13	300
MCI2012HQ22NJ_	22	18	100	20	33	40	38	31	-	1200	1400	0.5	0.16	300
MCI2012HQ27NJ_	27	18	100	20	37	44	38	29	-	1000	1300	0.55	0.17	300
MCI2012HQ33NJ_	33	18	100	20	32	36	28	15	-	1000	1200	0.6	0.19	300
MCI2012HQ39NJ_	39	18	100	20	32	36	21	12	-	800	1100	0.65	0.25	300
MCI2012HQ47NJ_	47	18	100	21	31	33	17	12	-	800	1000	0.7	0.26	300
MCI2012HQ56NJ_	56	18	100	21	31	31	12	9	-	700	900	0.75	0.28	300
MCI2012HQ68NJ_	68	18	100	21	31	30	9	-	-	600	800	0.8	0.33	300
MCI2012HQ82NJ_	82	18	100	22	31	26	4	-	-	500	700	0.9	0.37	300
MCI2012HQR10J_	100	18	100	22	30	22	16	-	-	500	700	0.9	0.4	300
MCI2012HQR12J_	120	13	50	22	27	17	20	-	-	400	600	0.95	0.43	300
MCI2012HQR15J_	150	13	50	22	27	9	-	-	-	300	600	1	0.46	300
MCI2012HQR18J_	180	13	50	21	21	8	-	-	-	300	500	1.1	0.5	300
MCI2012HQR22J_	220	12	50	20	20	4	-	-	-	300	500	1.2	0.75	300
MCI2012HQR27J_	270	12	50	24	17	17	-	-	-	200	400	1.3	0.85	300
MCI2012HQR33J_	330	12	50	24	10	-	-	-	-	200	380	1.05	0.9	300
MCI2012HQR39J_	390	12	50	24	-	-	-	-	-	200	300	1.5	0.95	300

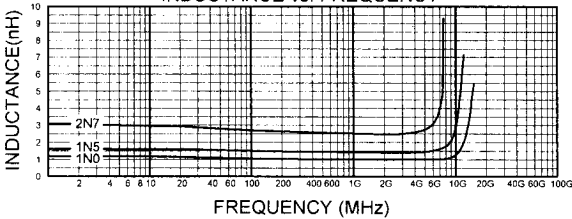
**MTC****High Frequency Ceramic Chip Inductor**

Series	Inductance μ H	Tolerance	Q min	Test Frequency (MHz)	Q frequency			SRF min	DCR ohm max	IDC (mA max)
					100	500	800			
MCI0603HQ1N0SA	1	S	4	100	5	12	16	10,000	0.2	250
MCI0603HQ1N2SA	1.2	S	4	100	5	12	16	10,000	0.2	250
MCI0603HQ1N5SA	1.5	S	4	100	5	12	16	9,000	0.3	230
MCI0603HQ1N8SA	1.8	S	4	100	5	12	18	8,500	0.3	200
MCI0603HQ2N2SA	2.2	S	4	100	5	13	18	7,500	0.35	200
MCI0603HQ2N7SA	2.7	S	4	100	5	13	18	6,500	0.35	200
MCI0603HQ3N3□A	3.3	S,K	4	100	5	13	18	5,500	0.4	180
MCI0603HQ3N9□A	3.9	S,K	4	100	5	13	18	5,000	0.4	170
MCI0603HQ4N7□A	4.7	S,K	4	100	6	15	20	4,500	0.45	150
MCI0603HQ5N6□A	5.6	S,K	5	100	6	15	20	4,200	0.45	150
MCI0603HQ6N8□A	6.8	J,K	5	100	6	15	20	3,500	0.5	150
MCI0603HQ8N2□A	8.2	J,K	5	100	6	15	20	3,200	0.55	150
MCI0603HQ10N□A	10	J,K	5	100	6	13	17	2,800	0.65	150
MCI0603HQ12N□A	12	J,K	5	100	6	13	17	2,400	0.7	100
MCI0603HQ15N□A	15	J,K	5	100	6	14	18	2,200	0.8	100
MCI0603HQ18N□A	18	J,K	5	100	7	15	19	2,000	0.9	100
MCI0603HQ22N□A	22	J,K	5	100	7	15	19	1,800	1.2	100
MCI0603HQ27N□A	27	J,K	5	100	7	15	19	1,800	1.8	50
MCI0603HQ33N□A	33	J,K	5	100	6	12	14	1,700	2.1	50
MCI0603HQ39N□A	39	J,K	5	100	6	12	14	1,500	2.4	50

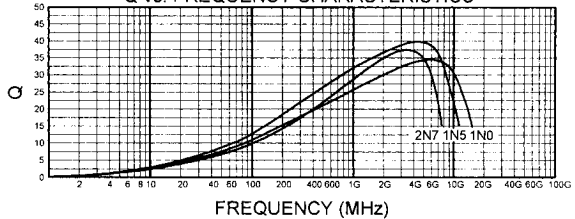
**MOTOCRAFT**

### MCI1005HQ 1N0,1N5&2N7

#### INDUCTANCE vs. FREQUENCY

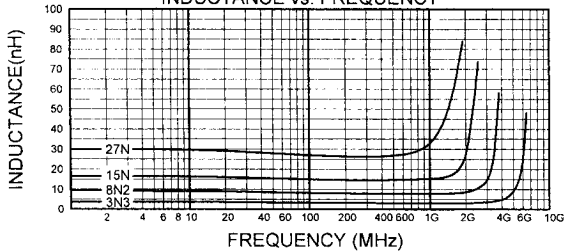


#### Q vs. FREQUENCY CHARACTERISTICS

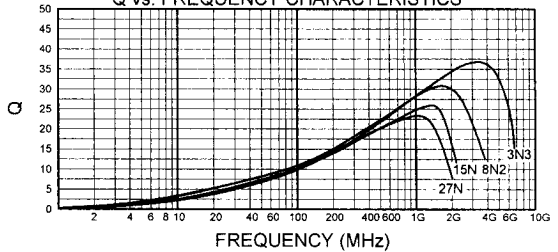


### MCI1005HQ 3N3,8N2,15N&27N

#### INDUCTANCE vs. FREQUENCY

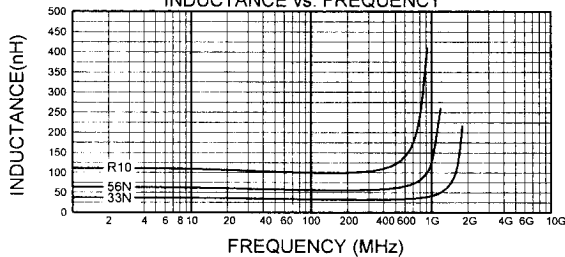


#### Q vs. FREQUENCY CHARACTERISTICS

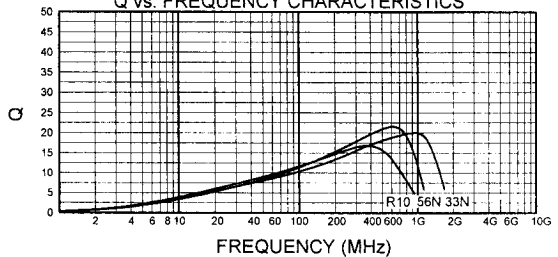


### MCI1005HQ 33N,56N&R10

#### INDUCTANCE vs. FREQUENCY

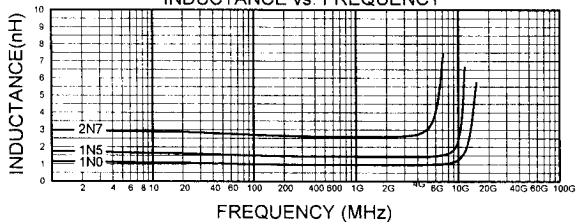


#### Q vs. FREQUENCY CHARACTERISTICS

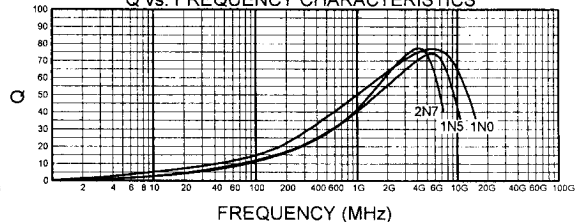


### MCI1608HQ 1N0,1N5&2N7

#### INDUCTANCE vs. FREQUENCY

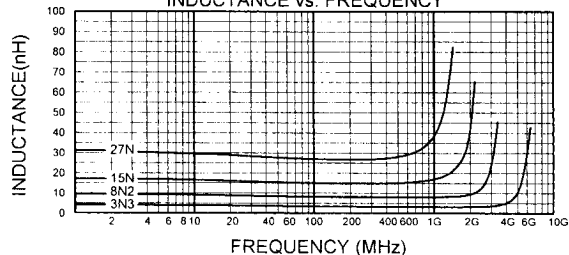


#### Q vs. FREQUENCY CHARACTERISTICS

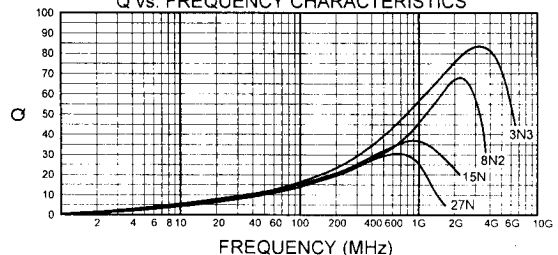


### MCI1608HQ 3N3,8N2,15N&27N

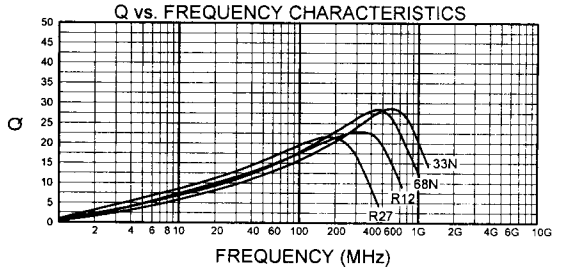
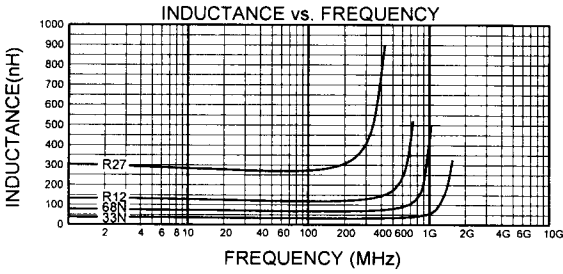
#### INDUCTANCE vs. FREQUENCY



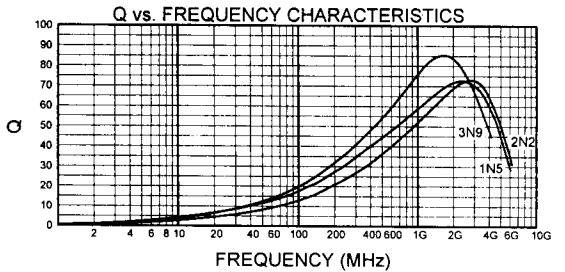
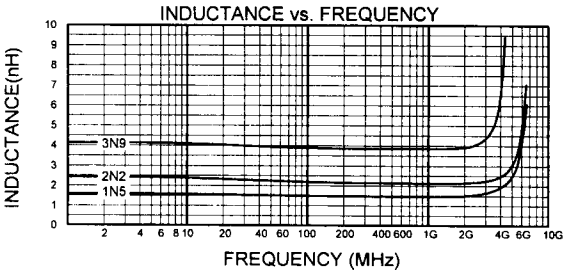
#### Q vs. FREQUENCY CHARACTERISTICS



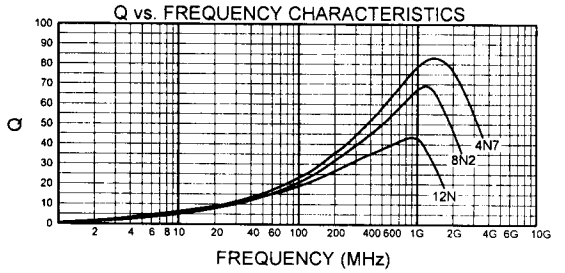
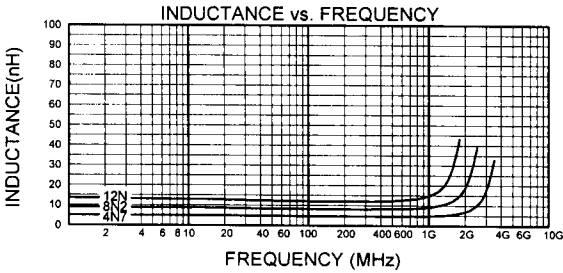
### MCI1608HQ 33N,68N,R12&R27



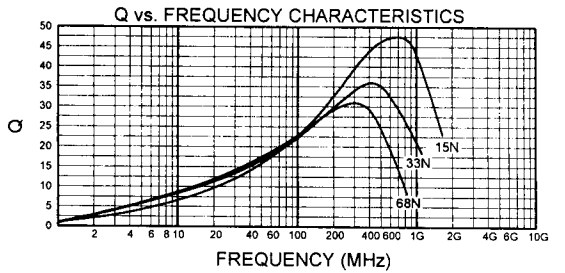
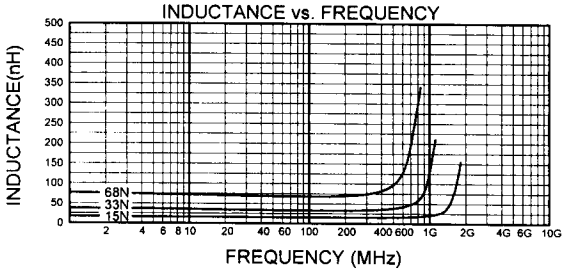
### MCI2012HQ 1N5,2N2&3N9



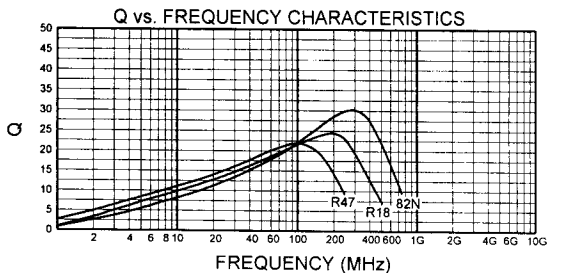
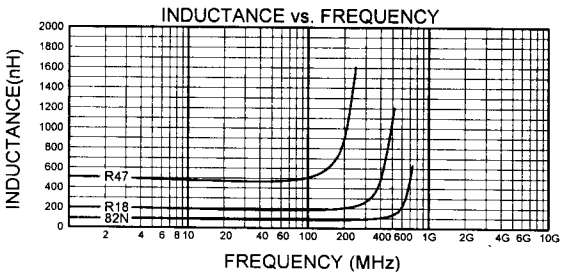
### MCI2012HQ 4N7,8N2&12N



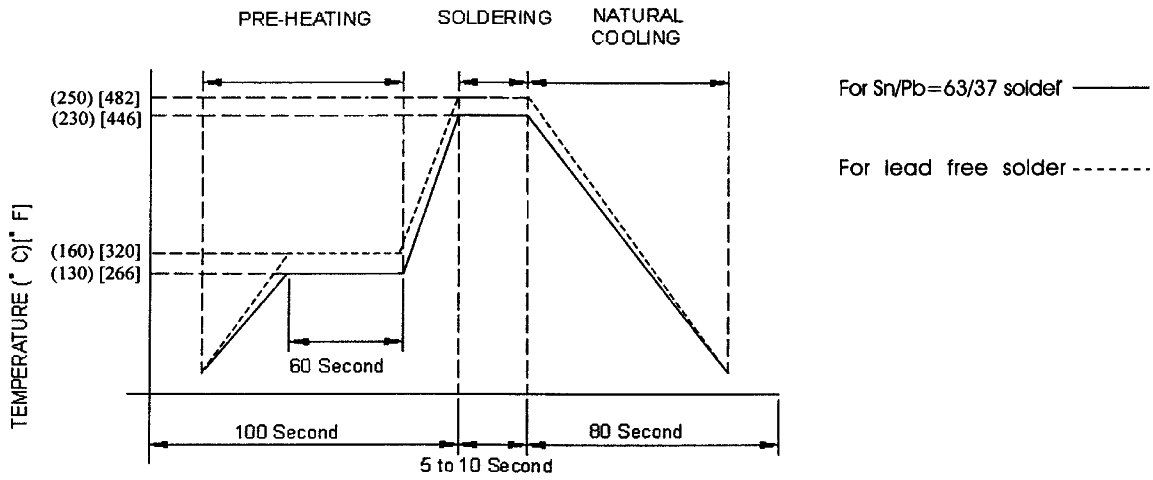
### MCI2012HQ 15N,33N&68N



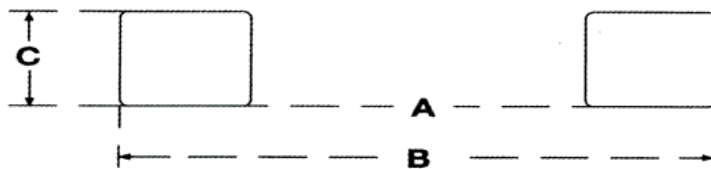
### MCI2012HQ 82N,R18&R47



## Recommended soldering Conditions



## Land patterns for Reflow Soldering



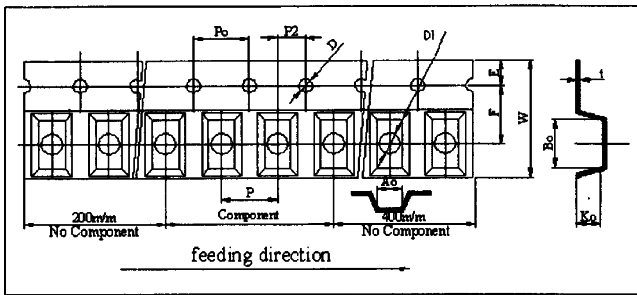
## Solder Land Information

SIZE	A	B	C
1005	04~0.6 (0.015~0.023)	1.6~2.6 (0.063~0.102)	04~0.7 (0.0157~0.027)
1608	0.5~0.7 (0.19~0.027)	2.1~3.1 (0.083~0.122)	0.65~0.95 (0.026~0.037)
2012	1.0~1.2 (0.039~0.047)	3.0~4.0 (0.118~0.157)	0.8~1.1 (0.031~0.043)
3216	2.0~2.4 (0.079~0.094)	4.2~5.2 (0.165~0.204)	1.0~1.4 (0.039~0.055)
3225	2.1~2.3 (0.082~0.09)	4.2~5.2 (0.165~0.204)	2.2~2.5 (0.0866~0.098)
4516	3.4~3.7 (0.133~0.145)	6.3~7.3 (0.248~0.287)	1.3~1.7 (0.051~0.067)
4532	3.4~3.7 (0.133~0.145)	6.3~7.3 (0.248~0.287)	2.9~3.2 (0.144~0.126)

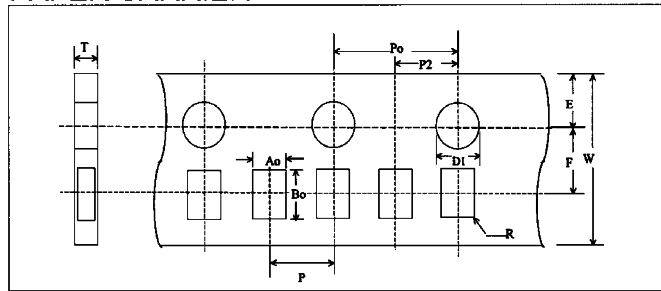
\* Note : for W133E soldring ,add 0.030"(0.7620tothe "C" dimension.

# Tape and Reel Specification

## PLASTIC CARRIER



## PAPER CARRIER



## Reel Packaging Quantity

PART SIZE	1005	1608	201209	201212	3216	3225	4516	4532
7" REEL	4,000	4,000	4,000	3,000	3,000	2,000	2,000	1,000
13"	10,000	10,000	10,000	10,000	10,000	5,000	5,000	2,500
BULK	20,000	20,000	20,000	20,000	20,000	10,000	10,000	10,000

## TAPING DIMENSIONS

TYPE	453215	451616	322513	321611	201212	201209	160808	100505
W	12±0.1	11.9~12.3	7.9~8.3	7.9~8.3	7.9~8.3	7.9~8.3	7.9~8.3	7.9~8.3
P	8	4.0~0.1	4.0~0.1	4.0~0.1	4.0~0.1	4.0~0.1	4.0~0.1	4.0~0.1
E	1.75±0.1	1.75±0.1	1.75±0.1	1.75±0.1	1.75±0.1	1.75±0.1	1.75±0.1	1.75±0.1
F	5.5±0.05	5.5±0.1	3.5±0.05	3.5±0.05	3.5±0.05	3.5±0.05	3.5±0.05	3.5±0.05
D	1.55±0.05	1.55±0.1	1.55±0.05	1.55±0.05	1.50±0.05	1.50±0.05	1.5±0.05	1.50±0.05
D1	1.5~1.75	1.5~1.75	1.0~1.25	1.55±0.05	1.0~1.25	1.0~1.25	0.79±0.125	0.0±0
Po	4.0±0.1	4.0±0.1	4.0±0.1	1.0~1.25	4.0±0.1	4.0±0.1	4.0±0.1	4.0±0.1
Po10	40±0.2	40±0.2	40±0.2	4.0±0.2	40±0.2	40±0.2	40±0.2	40±0.2
P2	2.0±0.05	2.0±0.05	2.0±0.05	2.0±0.05	2.0±0.05	2.0±0.05	2.0±0.05	2.0±0.05
Ao	3.66±0.1	1.829±0.1	2.57±0.1	1.854±0.1	1.42±0.1	1.42±0.1	1.0±0.1	0.65±0.1
Bo	4.95±0.1	4.849±0.1	3.4±0.1	3.429±0.1	2.24±0.1	2.24±0.1	1.8±0.1	1.18±0.1
Ko	1.83±0.1	1.829±0.1	1.32±0.1	1.219±0.1	1.04±0.1	1.04±0.1	1.0±0.1	0.62±0.1
T	0.23±0.1	0.292±0.1	0.25±0.1	0.254±0.1	0.25±0.1	0.25±0.1	0.254±0.1	0.25±0.1
Pcs/Reel	1000 pcs	2000 pcs	2000 pcs	3000 pcs	3000 pcs	4000 pcs	4000 pcs	4000 pcs

Reel	13"	13"	7"	7"
W	8±1.0	12±1.0	8±1.0	12±1.0
	0.31±0.039	0.47±0.039	0.31±0.039	0.47±0.039
A	330±2.0 (13.00±0.078)		178±2.0 (7.00±0.078)	
B	95±1.0 (3.74±0.039)			
C	13±0.5 (0.51±0.020)			
D	21±0.8 (0.82±0.031)			
E	2±0.5 (0.08±0.020)			
t	2 (0.078)		1 (0.039)	

## Reel Dimensions (per EIA Standard)

