

FMCC series (Rev. 4.0)



FMCC series made of advanced ceramics and low resistance silver conductors provides excellent Q and SRF characteristics.

Features

- * RoHS compliant
- * High frequency SRF up to 10GHz
- * Fit for 2.4GHz/ 5GHz...etc. RF circuit
- * Monolithic structure for high reliability.
- * To help you go pass the CE/ FCC standard.

Applications

- * RF circuit and module
- * Tablet, notebook, desktop computer and peripheral equipment
- * DSC/ DVC/ LCD television/ set top box
- * Mobile device/ handheld device/ low profile device/ panel...
- * Various electronic equipment

Product Identification

FMCC 1005 - 1N2 S
1 2 3 4

1. Product Code
2. Size Code (L*W): 1.0 * 0.5mm
3. Inductance: 1.2nH
4. Tolerance: S=±0.3nH, J=±5%, K=±10%

Operating & Storage Condition :

- * Operating Temp. : -40 to +85 °C
- * Storage Temp. : -40 to +85 °C
- * Storage Life Time : 12 Months @25 °C , RH 65%

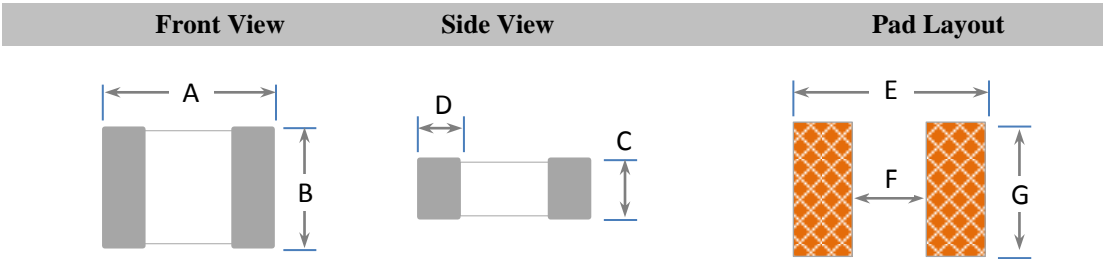
Test Equipment :

- * HP4284A, HP42841A, HP4287A, HP433B- L, IDC, Q, RDC
- * HP8753D NETWORK ANALYZER- SRF

Standard Atmospheric Conditions :

- * Ambient Temp : 20+/-15 °C
- * Relative Humidity : 65+/-20%

Dimension & Recommended PAD Layout: [mm]



Size Code	A	B	C	D	E	F(ref.)	G(ref.)
1005	1.0±0.15	0.5±0.20	0.5±0.15	0.15±0.10	1.3±0.10	0.40	0.40
1608	1.6±0.15	0.8±0.15	0.8±0.15	0.25±0.10	2.9±0.50	0.80	0.60
2012	2.0±0.20	1.2±0.20	0.9±0.20	0.30±0.15	3.5±0.50	1.20	1.00

FMCC series (Rev. 4.0)

Electrical Characteristics

Part Number	Inductance (nH)	Q @100MHz		Q @800MHz	SRF (MHz) ref.	DCR (Ω) max.	IDC (mA) max.
		min.	typ.	typ.			
FMCC1005-1N0S	1.0	8	9	28	10000	0.10	300
FMCC1005-1N2S	1.2	8	9	28	10000	0.10	300
FMCC1005-1N5S	1.5	8	10	28	9000	0.10	300
FMCC1005-1N8S	1.8	8	10	28	8700	0.12	300
FMCC1005-2N0S	2.0	8	10	29	8100	0.15	300
FMCC1005-2N2S	2.2	8	10	29	8100	0.15	300
FMCC1005-2N7S	2.7	8	11	30	7700	0.15	300
FMCC1005-3N3S / K	3.3	8	11	30	6300	0.16	300
FMCC1005-3N9S / K	3.9	8	11	31	6100	0.21	300
FMCC1005-4N3S / K	4.3	8	11	31	5400	0.21	300
FMCC1005-4N7S / K	4.7	8	11	31	5400	0.21	300
FMCC1005-5N6S / K	5.6	8	11	31	5100	0.23	300
FMCC1005-6N8J / K	6.8	8	11	31	4550	0.25	250
FMCC1005-7N5J / K	7.5	8	11	31	4300	0.25	250
FMCC1005-8N2J / K	8.2	8	12	31	4100	0.30	250
FMCC1005-10NJ / K	10.0	8	12	31	3900	0.35	250
FMCC1005-12NJ / K	12.0	8	12	31	3000	0.40	250
FMCC1005-15NJ / K	15.0	8	12	31	2600	0.50	250
FMCC1005-18NJ / K	18.0	8	12	31	2350	0.55	200
FMCC1005-22NJ / K	22.0	8	12	31	2000	0.70	200
FMCC1005-27NJ / K	27.0	8	12	32	1900	0.80	200
FMCC1005-33NJ / K	33.0	8	10	32	1700	1.00	200
FMCC1005-39NJ / K	39.0	8	10	32	1600	1.20	150
FMCC1005-47NJ / K	47.0	8	10	33	1300	1.30	150
FMCC1005-56NJ / K	56.0	8	10	34	1250	2.00	150
FMCC1005-68NJ / K	68.0	8	10	35	1000	2.20	100
FMCC1005-82NJ / K	82.0	8	10	35	900	2.50	100
FMCC1005-R10J / K	100.0	8	10	35	850	2.50	100
FMCC1005-R12J / K	120.0	8	10	35	750	2.50	100

* Test Condition: L-value @100MHz, 25 °C Ambient

* Inductance tolerance: S=±0.3nH, J=±5%, K=±10%

FMCC series (Rev. 4.0)

Electrical Characteristics

Part Number	Inductance (nH)	Q @100MHz		Q @800MHz	SRF (MHz) ref.	DCR (Ω) max.	IDC (mA) max.
		min.	typ.	typ.			
FMCC1608-1N0S	1.0	8	12	50	>17000	0.10	300
FMCC1608-1N2S	1.2	8	13	65	>17000	0.10	300
FMCC1608-1N5S	1.5	8	13	55	>17000	0.10	300
FMCC1608-1N7S	1.7	8	13	-	8000	0.10	300
FMCC1608-1N8S	1.8	8	13	51	13000	0.15	300
FMCC1608-2N7S	2.7	8	13	45	8600	0.20	300
FMCC1608-3N3S / K	3.3	8	13	51	6500	0.25	300
FMCC1608-3N9S / K	3.9	8	13	52	6300	0.25	300
FMCC1608-4N7S / K	4.7	8	13	41	5400	0.30	300
FMCC1608-5N6S / K	5.6	8	13	41	4600	0.30	300
FMCC1608-6N8J / K	6.8	8	13	44	4500	0.35	300
FMCC1608-8N2J / K	8.2	8	13	44	3800	0.40	300
FMCC1608-10NJ / K	10.0	8	13	45	3700	0.45	300
FMCC1608-12NJ / K	12.0	8	15	46	3200	0.50	300
FMCC1608-15NJ / K	15.0	8	15	48	2900	0.55	300
FMCC1608-18NJ / K	18.0	10	15	48	2100	0.60	300
FMCC1608-22NJ / K	22.0	10	17	45	2100	0.65	300
FMCC1608-27NJ / K	27.0	10	17	43	2000	0.70	300
FMCC1608-33NJ / K	33.0	10	18	39	1600	0.80	300
FMCC1608-39NJ / K	39.0	10	18	37	1500	0.85	300
FMCC1608-47NJ / K	47.0	12	18	35	1200	1.00	300
FMCC1608-56NJ / K	56.0	12	18	32	1100	1.10	300
FMCC1608-62NJ / K	62.0	12	18	-	1050	0.85	300
FMCC1608-82NJ / K	82.0	12	18	32	850	1.80	300
FMCC1608-R10J / K	100.0	12	18	20	750	2.00	300
FMCC1608-R12J / K	120.0	8@50MHz	16	23	700	2.30	300
FMCC1608-R15J / K	150.0	8@50MHz	14	23	650	2.40	300
FMCC1608-R18J / K	180.0	8@50MHz	14	21	550	2.70	300
FMCC1608-R22J / K	220.0	8@50MHz	13	20	450	2.80	300

* Test Condition: L-value @100MHz, 25 °C Ambient

* Inductance tolerance: S=±0.3nH, J=±5%, K=±10%

FMCC series (Rev. 4.0)

Electrical Characteristics

Part Number	Inductance (nH)	Q @100MHz		Q @800MHz	SRF (MHz) ref.	DCR (Ω) max.	IDC (mA) max.
		min.	typ.	typ.			
FMCC2012-1N0S	1.0	10	12	38	>6000	0.10	300
FMCC2012-1N2S	1.2	10	12	38	>6000	0.10	300
FMCC2012-1N5S	1.5	10	13	40	>6000	0.10	300
FMCC2012-1N8S	1.8	10	13	45	>6000	0.10	300
FMCC2012-2N2S	2.2	10	13	48	>6000	0.10	300
FMCC2012-2N7S	2.7	12	13	40	>6000	0.12	300
FMCC2012-3N3S / K	3.3	12	15	56	>6000	0.13	300
FMCC2012-3N9S / K	3.9	12	15	54	5600	0.15	300
FMCC2012-4N7S / K	4.7	12	15	50	5500	0.20	300
FMCC2012-5N6S / K	5.6	12	15	53	4700	0.23	300
FMCC2012-6N8J / K	6.8	15	15	51	3900	0.25	300
FMCC2012-8N2J / K	8.2	15	15	53	3200	0.28	300
FMCC2012-10NJ / K	10.0	15	16	45	3100	0.30	300
FMCC2012-12NJ / K	12.0	15	16	48	2800	0.35	300
FMCC2012-15NJ / K	15.0	15	17	48	2400	0.40	300
FMCC2012-18NJ / K	18.0	15	17	43	2100	0.45	300
FMCC2012-22NJ / K	22.0	15	17	47	2000	0.50	300
FMCC2012-27NJ / K	27.0	15	18	38	1800	0.55	300
FMCC2012-33NJ / K	33.0	15	19	35	1700	0.60	300
FMCC2012-39NJ / K	39.0	18	21	40	1400	0.65	300
FMCC2012-47NJ / K	47.0	18	21	38	1200	0.70	300
FMCC2012-56NJ / K	56.0	18	21	31	1000	0.75	300
FMCC2012-68NJ / K	68.0	18	21	28	900	0.80	300
FMCC2012-82NJ / K	82.0	18	22	25	900	0.85	300
FMCC2012-R10J / K	100.0	18	23	25	700	0.90	300
FMCC2012-R12J / K	120.0	13@50MHz	22	25	600	0.95	300
FMCC2012-R15J / K	150.0	13@50MHz	22	24	500	1.00	300
FMCC2012-R18J / K	180.0	13@50MHz	23	23	430	1.10	300
FMCC2012-R22J / K	220.0	12@50MHz	20	22	400	1.20	300
FMCC2012-R27J / K	270.0	12@50MHz	20	22	340	1.30	300
FMCC2012-R33J / K	330.0	12@50MHz	22	20	320	1.50	300
FMCC2012-R39J / K	390.0	10@50MHz	17	20	270	1.60	300
FMCC2012-R47J / K	470.0	10@50MHz	17	20	250	1.80	300
FMCC2012-R56J / K	560.0	10@50MHz	17	20	230	2.50	300
FMCC2012-R68J / K	680.0	10@50MHz	17	20	180	3.00	300

* Test Condition: L-value @100MHz, 25 °C Ambient

* Inductance tolerance: S=±0.3nH, J=±5%, K=±10%