

**TMCC Series ( Rev. 1.0 )**



TMCC 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**

$\frac{\text{TMCC}}{1}$      $\frac{1005}{2}$     -     $\frac{1N2}{3}$      $\frac{S}{4}$

1. Product Code
2. Size Code
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%

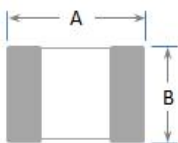

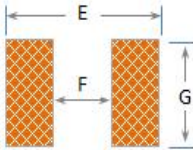
**Test Equipment**

- \* 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 ]**

	Front View	Side View	Pad Layout					
								
Size Code	A	B	C	D	E(ref.)	F(ref.)	G(ref.)	
0603	0.6±0.03	0.3±0.03	0.3±0.03	0.15±0.05	0.7	0.3	0.4	
1005	1.0±0.15	0.5±0.20	0.5±0.15	0.25±0.10	1.1	0.4	0.6	
1608	1.6±0.15	0.8±0.15	0.8±0.15	0.40±0.20	1.8	0.6	1.0	
2012	2.0±0.20	1.2±0.20	0.9±0.20	0.50±0.30	2.4	0.8	1.5	



## TMCC Series (Rev. 1.0)

## Electrical Characteristics

Part Number	Inductance (nH)	Q @500MHz		Q @800MHz	SRF (MHz) ref.	DCR (Ω) max.	IDC (mA) max.
		min.	typ.	typ.			
TMCC0603-0N6S	0.6	13	23	31	10000	0.06	600
TMCC0603-1N0S	1.0	13	23	31	10000	0.08	520
TMCC0603-1N2S	1.2	13	18	24	10000	0.12	440
TMCC0603-1N5S	1.5	13	18	23	10000	0.12	420
TMCC0603-2N0S	2.0	13	16	23	10000	0.20	360
TMCC0603-2N2S	2.2	13	16	23	10000	0.20	350
TMCC0603-2N4S	2.4	13	16	22	10000	0.22	330
TMCC0603-3N0S	3.0	13	16	21	5600	0.26	280
TMCC0603-3N3S	3.3	13	17	22	8100	0.30	270
TMCC0603-3N6S	3.6	13	15	22	7700	0.38	240
TMCC0603-3N9S	3.9	13	15	21	7400	0.42	230
TMCC0603-4N3S	4.3	13	15	20	6800	0.44	220
TMCC0603-4N7S	4.7	13	15	21	6200	0.45	220
TMCC0603-5N6S	5.6	13	15	20	5500	0.46	210
TMCC0603-6N8J	6.8	13	16	21	4900	0.50	200
TMCC0603-7N5J	7.5	13	15	20	4700	0.50	200
TMCC0603-8N2J	8.2	13	15	20	4300	0.56	190
TMCC0603-10NJ	10.0	13	15	19	3800	0.80	160
TMCC0603-12NJ	12.0	13	15	19	3400	0.80	160
TMCC0603-15NJ	15.0	13	14	18	2600	0.85	160
TMCC0603-18NJ	18.0	13	14	18	2300	1.00	140
TMCC0603-22NJ	22.0	13	14	18	1900	1.20	130
TMCC0603-27NJ	27.0	13	14	18	1800	1.60	120
TMCC0603-33NJ	33.0	13	13	14	1800	2.20	110
TMCC0603-39NJ	39.0	11	13	14	1600	2.30	100
TMCC0603-47NJ	47.0	11	13	14	1500	2.60	100
TMCC0603-68NJ	68.0	11	12	10	1200	3.20	80
TMCC0603-R10J	100.0	10	11	9	1000	4.00	60
TMCC0603-R12J	120.0	9	11	7	1000	5.00	50

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

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



## TMCC Series ( Rev. 1.0 )

## Electrical Characteristics

Part Number	Inductance (nH)	Q @100MHz		Q @800MHz	SRF (MHz) ref.	DCR (Ω) max.	IDC (mA) max.
		min.	typ.	typ.			
TMCC1005-1N0S	1.0	8	11	34	10000	0.10	400
TMCC1005-1N2S	1.2	8	11	34	10000	0.10	400
TMCC1005-1N5S	1.5	8	11	34	6000	0.10	300
TMCC1005-1N8S	1.8	8	11	30	6000	0.10	300
TMCC1005-2N0S	2.0	8	10	29	6000	0.20	300
TMCC1005-2N2S	2.2	8	10	29	6000	0.20	300
TMCC1005-2N7S	2.7	8	10	30	6000	0.20	300
TMCC1005-3N3S / K	3.3	8	10	30	6000	0.20	300
TMCC1005-3N9S / K	3.9	8	10	28	4000	0.20	300
TMCC1005-4N3S / K	4.3	8	10	28	4000	0.20	300
TMCC1005-4N7S / K	4.7	8	10	28	4000	0.20	300
TMCC1005-5N6S / K	5.6	8	10	28	4000	0.20	300
TMCC1005-6N8J / K	6.8	8	10	27	3900	0.30	300
TMCC1005-7N5J / K	7.5	8	10	27	3700	0.40	300
TMCC1005-8N2J / K	8.2	8	10	27	3600	0.40	300
TMCC1005-10NJ / K	10.0	8	10	27	3200	0.40	300
TMCC1005-12NJ / K	12.0	8	10	26	2700	0.50	300
TMCC1005-15NJ / K	15.0	8	10	26	2300	0.50	300
TMCC1005-18NJ / K	18.0	8	10	25	2100	0.60	300
TMCC1005-22NJ / K	22.0	8	10	25	1900	0.60	300
TMCC1005-27NJ / K	27.0	8	10	25	1600	0.70	300
TMCC1005-33NJ / K	33.0	8	10	22	1300	0.80	200
TMCC1005-39NJ / K	39.0	8	10	22	1200	1.00	200
TMCC1005-47NJ / K	47.0	8	10	21	1000	1.10	200
TMCC1005-56NJ / K	56.0	8	10	18	750	1.20	200
TMCC1005-68NJ / K	68.0	8	10	18	750	1.40	180
TMCC1005-82NJ / K	82.0	8	10	13	150	2.40	150
TMCC1005-R10J / K	100.0	8	10	12	700	2.60	150
TMCC1005-R12J / K	120.0	8	10	12	600	2.80	150

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

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



## TMCC Series ( Rev. 1.0 )

## Electrical Characteristics

Part Number	Inductance (nH)	Q @100MHz		Q @800MHz	SRF (MHz) ref.	DCR (Ω) max.	IDC (mA) max.
		min.	typ.	typ.			
TMCC1608-1N0S	1.0	8	14	35	10000	0.05	500
TMCC1608-1N2S	1.2	8	14	35	10000	0.10	500
TMCC1608-1N5S	1.5	8	14	38	10000	0.10	400
TMCC1608-1N8S	1.8	8	14	35	9800	0.12	400
TMCC1608-2N2S	2.2	8	14	39	7600	0.20	400
TMCC1608-2N7S	2.7	8	12	37	7000	0.20	400
TMCC1608-3N3S / K	3.3	8	12	36	6200	0.20	400
TMCC1608-3N9S / K	3.9	8	12	38	5600	0.25	400
TMCC1608-4N7S / K	4.7	8	12	38	4800	0.30	400
TMCC1608-5N6S / K	5.6	8	12	35	4600	0.30	400
TMCC1608-6N8J / K	6.8	8	12	35	4200	0.35	400
TMCC1608-8N2J / K	8.2	8	12	33	3600	0.35	400
TMCC1608-10NJ / K	10.0	8	13	38	3200	0.40	300
TMCC1608-12NJ / K	12.0	8	13	35	2800	0.40	300
TMCC1608-15NJ / K	15.0	8	13	34	2600	0.45	300
TMCC1608-18NJ / K	18.0	8	13	35	2400	0.60	300
TMCC1608-22NJ / K	22.0	8	15	38	2000	0.60	300
TMCC1608-27NJ / K	27.0	8	14	36	1900	0.80	300
TMCC1608-33NJ / K	33.0	8	14	35	1600	0.80	300
TMCC1608-39NJ / K	39.0	8	14	28	1400	1.00	300
TMCC1608-47NJ / K	47.0	8	15	30	1200	1.00	200
TMCC1608-56NJ / K	56.0	8	17	31	1000	1.00	200
TMCC1608-68NJ / K	68.0	8	17	25	900	1.00	200
TMCC1608-82NJ / K	82.0	8	17	22	800	1.00	200
TMCC1608-R10J / K	100.0	8	17	24	700	1.40	200
TMCC1608-R12J / K	120.0	8	15	-	600	1.60	150
TMCC1608-R15J / K	150.0	8	13	-	500	1.80	150
TMCC1608-R18J / K	180.0	8	13	-	500	1.80	150
TMCC1608-R22J / K	220.0	8@50MHz	15	-	350	2.40	150
TMCC1608-R33J / K	330.0	8@50MHz	15	-	350	2.80	150
TMCC1608-R47J / K	470.0	8@50MHz	15	-	250	3.60	150

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

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



**TMCC Series ( Rev. 1.0 )**

**Electrical Characteristics**

Part Number	Inductance (nH)	Q @100MHz		Q @800MHz	SRF (MHz) ref.	DCR (Ω) max.	IDC (mA) max.
		min.	typ.	typ.			
TMCC2012-1N5S	1.5	8	10	54	6000	0.10	600
TMCC2012-1N8S	1.8	8	13	55	6000	0.10	600
TMCC2012-2N2S	2.2	8	13	53	6000	0.10	600
TMCC2012-2N7S	2.7	8	13	45	6000	0.12	600
TMCC2012-3N3S / K	3.3	8	15	52	6000	0.13	600
TMCC2012-3N9S / K	3.9	8	15	55	5400	0.15	600
TMCC2012-4N7S / K	4.7	8	15	53	4500	0.20	400
TMCC2012-5N6S / K	5.6	8	16	45	4000	0.23	400
TMCC2012-6N8J / K	6.8	8	16	45	3650	0.25	400
TMCC2012-8N2J / K	8.2	8	16	45	3000	0.28	400
TMCC2012-10NJ / K	10.0	8	16	45	2500	0.30	300
TMCC2012-12NJ / K	12.0	8	16	45	2450	0.35	300
TMCC2012-15NJ / K	15.0	8	18	43	2000	0.40	300
TMCC2012-18NJ / K	18.0	8	18	42	1750	0.45	300
TMCC2012-22NJ / K	22.0	8	17	45	1700	0.50	300
TMCC2012-27NJ / K	27.0	8	17	45	1550	0.55	300
TMCC2012-33NJ / K	33.0	8	18	40	1350	0.60	300
TMCC2012-39NJ / K	39.0	8	19	31	1300	0.70	300
TMCC2012-47NJ / K	47.0	8	20	31	1200	0.80	300
TMCC2012-56NJ / K	56.0	8	21	35	1150	0.80	300
TMCC2012-68NJ / K	68.0	8	19	29	1000	0.85	300
TMCC2012-82NJ / K	82.0	8	19	27	850	0.90	300
TMCC2012-R10J / K	100.0	8	13	-	600	1.00	300
TMCC2012-R12J / K	120.0	8	19	-	500	1.20	300
TMCC2012-R15J / K	150.0	8	19	-	500	1.50	300
TMCC2012-R18J / K	180.0	8	19	-	400	1.80	300
TMCC2012-R22J / K	220.0	8	19	-	350	1.80	300
TMCC2012-R27J / K	270.0	8 @50MHz	20	-	350	1.80	300
TMCC2012-R33J / K	330.0	8 @50MHz	18	-	300	2.00	300
TMCC2012-R39J / K	390.0	8 @50MHz	17	-	250	2.00	300
TMCC2012-R47J / K	470.0	8 @50MHz	17	-	200	2.00	300

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

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

