



Features

- Small chip suitable for surface mounting
- Higher inductance than ceramic inductors
- Excellent solderability and heat resistance
- Ferrite construction for high current handling

General Specifications

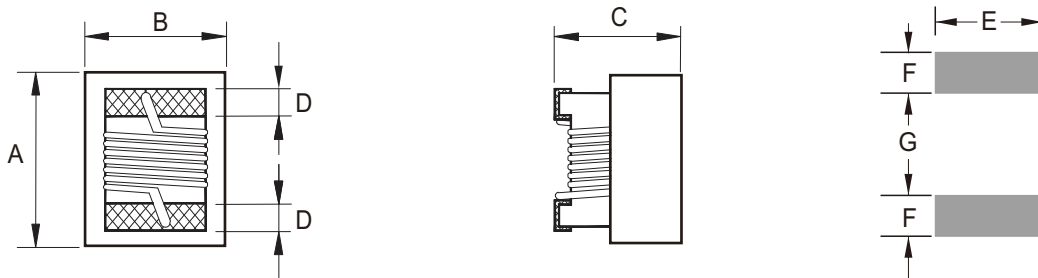
- Storage temp range: -40°C to +85°C
- Operating temp range: -40°C to +85°C
- Moisture Sensitivity Level(MSL): 2

Applications

- Wireless communication equipment
- Bluetooth, Audio circuit
- Other Electronic Equipment



► Dimensions & Configurations [Unit: mm]



Type	A max	B max	C max	D	E	F	G
MSFC0402 [1005]	1.19	0.66	0.64	0.23	0.64	0.40	0.46
MSFC0603 [1608]	1.80	1.12	0.95	0.30	1.02	0.64	0.64
MSFC0805 [2012]	2.29	1.73	1.52	0.50	1.78	1.02	0.76
MSFC1008 [2520]	2.92	2.70	2.23	0.50	2.54	1.02	1.27
MSFC1210 [3225]	3.50	2.90	2.25	0.50	2.54	1.02	1.78

► Product Identification

MSFC **0402** - **1R0** **J**
 (1) (2) (3) (4)

(1) Series Name

(2) Product Dimensions (L*W Inch)

(3) Inductance Value (R47: 0.47uH / 1R0: 1.0uH / 100: 10uH / 101: 100uH)

(4) Inductance Tolerance: J±5%, K±10%, M±20%

► Electrical Characteristics For MSFC0402(1005) Series

Part Number	Inductance [nH]	Tolerance	Freq [MHz]	SRF (Min) [MHz]	DCR (max) [Ω]	Isat(Max) [mA]
MSFC0402-R10□	100	K,M	7.9	1400	0.16	900
MSFC0402-R15□	150	K,M	7.9	1220	0.26	630
MSFC0402-R18□	180	K,M	7.9	1150	0.28	560
MSFC0402-R20□	200	K,M	7.9	1000	0.44	400
MSFC0402-R22□	220	K,M	7.9	1150	0.53	380
MSFC0402-R25□	250	K,M	7.9	900	0.9	360
MSFC0402-R27□	270	K,M	7.9	860	0.9	360
MSFC0402-R30□	300	K,M	7.9	860	0.9	360
MSFC0402-R33□	330	K,M	7.9	820	0.56	350
MSFC0402-R36□	360	K,M	7.9	810	0.9	250
MSFC0402-R39□	390	K,M	7.9	760	1	200
MSFC0402-R47□	470	K,M	7.9	650	1	200
MSFC0402-R56□	560	K,M	7.9	600	1.2	200
MSFC0402-R68□	680	K,M	7.9	290	1.6	100
MSFC0402-R82□	820	K,M	7.9	385	5.85	90
MSFC0402-1R0□	1000	J,K,M	7.9	200	6.5	50
MSFC0402-2R2□	2200	J,K,M	7.9	100	2.3	40
MSFC0402-4R7□	4700	J,K,M	7.9	50 Typ	4.8	10

► Electrical Characteristics For MSFC0603(1608) Series

Part Number	Inductance [uH]	Tolerance	Freq [MHz]	Q (Min)	SRF (Typ) [MHz]	DCR (max) [Ω]	Irms(Typ) [mA]
MSFC0603-R12□	0.12	K,M	7.9	12	1000	0.15	1000
MSFC0603-R15□	0.15	K,M	7.9	12	950	0.15	1000
MSFC0603-R18□	0.18	K,M	7.9	12	950	0.2	1000
MSFC0603-R22□	0.22	K,M	7.9	12	775	0.3	700
MSFC0603-R27□	0.27	K,M	7.9	12	775	0.3	700
MSFC0603-R33□	0.33	K,M	7.9	12	725	0.32	600
MSFC0603-R39□	0.39	K,M	7.9	12	620	0.51	500
MSFC0603-R47□	0.47	K,M	7.9	12	540	0.43	570
MSFC0603-R56□	0.56	K,M	7.9	12	600	0.65	400
MSFC0603-R68□	0.68	K,M	7.9	12	500	1	380
MSFC0603-R82□	0.82	K,M	7.9	12	500	1.3	350
MSFC0603-1R0□	1.0	J,K,M	7.9	12	400	0.81	330
MSFC0603-1R2□	1.2	J,K,M	7.9	12	380	1.7	320
MSFC0603-1R5□	1.5	J,K,M	7.9	12	300	1.3	310
MSFC0603-1R8□	1.8	J,K,M	7.9	12	180	2.2	300
MSFC0603-2R2□	2.2	J,K,M	7.9	12	180	2.3	280
MSFC0603-2R7□	2.7	J,K,M	7.9	12	150	2.6	250
MSFC0603-3R3□	3.3	J,K,M	7.9	12	150	2.9	230
MSFC0603-3R9□	3.9	J,K,M	7.9	12	100	2	200
MSFC0603-4R7□	4.7	J,K,M	7.9	12	100	4	200
MSFC0603-5R6□	5.6	J,K,M	7.9	12	32	2.6	240
MSFC0603-6R8□	6.8	J,K,M	7.9	12	31	3.9	200
MSFC0603-8R2□	8.2	J,K,M	7.9	12	26	4.2	190
MSFC0603-100□	10	J,K,M	2.5	12	25	4.8	180
MSFC0603-150□	15	J,K,M	2.5	10	23	8.5	170
MSFC0603-220□	22	J,K,M	2.5	10	10	12	100

► **Electrical Characteristics For MSFC0805(2012) Series**

Part Number	Inductance [uH]	Tolerance	Freq [MHz]	Q (Typ)	SRF (min) [MHz]	DCR (max) [Ω]	Isat(max) [mA]
MSFC0805-R12□	0.12	K,M	7.9	19	340	0.27	750
MSFC0805-R15□	0.15	K,M	7.9	19	480	0.30	720
MSFC0805-R18□	0.18	K,M	7.9	19	480	0.40	720
MSFC0805-R22□	0.22	K,M	7.9	19	480	0.40	720
MSFC0805-R27□	0.27	K,M	7.9	19	500	0.31	650
MSFC0805-R39□	0.39	K,M	7.9	19	500	0.31	720
MSFC0805-R47□	0.47	K,M	7.9	19	500	0.31	720
MSFC0805-R56□	0.56	K,M	7.9	12	400	0.46	400
MSFC0805-R62□	0.62	K,M	7.9	19	400	0.46	590
MSFC0805-R68□	0.68	K,M	7.9	19	400	0.46	590
MSFC0805-R81□	0.81	K,M	7.9	12	360	1.00	520
MSFC0805-R88□	0.88	K,M	7.9	12	360	1.00	520
MSFC0805-R91□	0.91	K,M	7.9	12	360	1.00	430
MSFC0805-1R0□	1.0	K,M	7.9	12	360	1.00	430
MSFC0805-1R2□	1.2	K,M	7.9	12	350	1.15	410
MSFC0805-1R5□	1.5	K,M	7.9	12	300	1.20	400
MSFC0805-1R8□	1.8	K,M	7.9	12	300	1.35	380
MSFC0805-2R2□	2.2	K,M	7.9	12	170	1.50	350
MSFC0805-2R7□	2.7	K,M	7.9	12	100	1.70	320
MSFC0805-3R0□	3.0	K,M	7.9	12	90	1.80	300
MSFC0805-3R3□	3.3	K,M	7.9	12	90	1.80	300
MSFC0805-3R9□	3.9	K,M	7.9	12	90	1.95	280
MSFC0805-4R7□	4.7	K,M	7.9	12	85	2.05	250
MSFC0805-5R6□	5.6	K,M	7.9	12	70	2.30	240
MSFC0805-6R8□	6.8	K,M	7.9	12	55	2.60	220
MSFC0805-7R5□	7.5	K,M	7.9	12	50	2.60	180
MSFC0805-8R2□	8.2	K,M	7.9	12	50	3.00	180
MSFC0805-100□	10	K,M	2.5	10	40	2.55	150
MSFC0805-120□	12	K,M	2.5	10	16	3.50	100
MSFC0805-150□	15	K,M	2.5	10	16	4.20	100
MSFC0805-180□	18	K,M	2.5	10	15	4.50	95
MSFC0805-220□	22	K,M	2.5	10	14	6.00	80
MSFC0805-270□	27	K,M	2.5	10	17	10.70	60
MSFC0805-330□	33	K,M	2.5	10	17	10.70	60
MSFC0805-470□	47	K,M	2.5	10	14	13.80	55
MSFC0805-560□	56	K,M	2.5	10	8	14.00	30
MSFC0805-680□	68	K,M	2.5	8	11	17.50	40
MSFC0805-101□	100	K,M	1	8	5	25.00	30
MSFC0805-111□	110	K,M	1	8	5	26.00	20

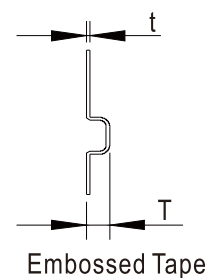
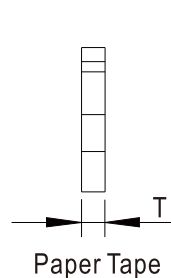
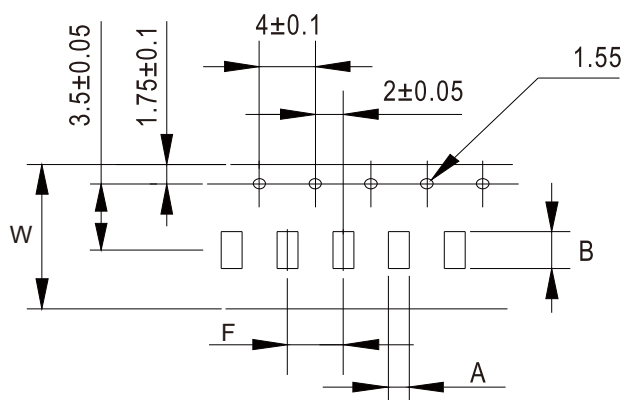
► Electrical Characteristics For MSFC1008(2520) Series

Part Number	Inductance [uH]	Tolerance	Freq [MHz]	Q (Typ)	SRF (min) [MHz]	DCR (max) [Ω]	Isat(max) [mA]
MSFC1008-R39□	0.39	K,M	7.9	12	400	0.40	500
MSFC1008-R47□	0.47	K,M	25	12	600	0.27	700
MSFC1008-R56□	0.56	K,M	7.9	12	230	0.62	700
MSFC1008-R68□	0.68	K,M	7.9	12	230	0.62	700
MSFC1008-R82□	0.82	K,M	7.9	12	230	0.62	700
MSFC1008-R90□	0.9	K,M	7.9	20	300	0.35	1400
MSFC1008-1R0□	1.0	K,M	7.9	18	230	0.62	700
MSFC1008-1R2□	1.2	K,M	7.9	18	210	0.68	650
MSFC1008-1R5□	1.5	K,M	7.9	18	190	0.76	630
MSFC1008-1R8□	1.8	K,M	7.9	18	170	0.84	600
MSFC1008-2R0□	2.0	K,M	7.9	18	160	1.10	550
MSFC1008-2R2□	2.2	K,M	7.9	18	150	1.10	520
MSFC1008-2R7□	2.7	K,M	7.9	18	135	1.28	490
MSFC1008-3R3□	3.3	K,M	7.9	18	120	1.46	450
MSFC1008-3R9□	3.9	K,M	7.9	18	105	2.30	300
MSFC1008-4R7□	4.7	K,M	7.9	18	90	2.00	400
MSFC1008-5R6□	5.6	K,M	7.9	15	80	1.80	380
MSFC1008-6R8□	6.8	K,M	7.9	15	70	2.00	360
MSFC1008-8R2□	8.2	K,M	7.9	15	65	2.65	330
MSFC1008-100□	10	J,K,M	2.5	12	60	2.95	300
MSFC1008-150□	15	J,K,M	2.5	12	30	3.70	280
MSFC1008-180□	18	J,K,M	2.5	12	26	4.00	160
MSFC1008-220□	22	J,K,M	2.5	12	22	6.14	270
MSFC1008-330□	33	J,K,M	2.5	10	12	7.0	200
MSFC1008-390□	39	J,K,M	2.5	10	16	10.0	180
MSFC1008-470□	47	J,K,M	2.5	10	10	10.7	160
MSFC1008-560□	56	J,K,M	2.5	10	8	12.0	170
MSFC1008-680□	68	J,K,M	2.5	10	6	13.5	145
MSFC1008-820□	82	J,K,M	2.5	8	6	20.0	100
MSFC1008-101□	100	J,K,M	1	8	4	21.0	80

► Electrical Characteristics For MSFC1210(3225) Series

Part Number	Inductance [uH]	Tolerance	Freq [MHz]	Q (Min)	SRF (min) [MHz]	DCR (max) [Ω]	Irms(max) [mA]
MSFC1210-R56□	0.56	K,M	25	20	180	0.55	450
MSFC1210-R82□	0.82	K,M	7.9	20	200	0.4	450
MSFC1210-1R0□	1.0	K,M	7.9	20	200	0.4	450
MSFC1210-1R2□	1.2	K,M	7.9	20	200	0.4	450
MSFC1210-1R5□	1.5	K,M	7.9	20	200	0.4	450
MSFC1210-1R8□	1.8	K,M	7.9	20	195	0.8	450
MSFC1210-2R2□	2.2	K,M	7.9	30	175	0.8	450
MSFC1210-3R3□	3.3	K,M	7.9	20	150	1.2	400
MSFC1210-4R7□	4.7	K,M	7.9	18	60	1.3	350
MSFC1210-5R6□	5.6	K,M	7.9	18	50	2	320
MSFC1210-6R8□	6.8	K,M	7.9	18	35	1.5	310
MSFC1210-8R2□	8.2	K,M	7.9	15	33	1.6	305
MSFC1210-100□	10	J,K,M	2.5	15	30	1	300
MSFC1210-120□	12	J,K,M	2.5	15	25	1.8	300
MSFC1210-150□	15	J,K,M	2.5	15	22	2	225
MSFC1210-180□	18	J,K,M	2.5	15	22	2.05	215
MSFC1210-220□	22	J,K,M	2.5	15	20	2.4	210
MSFC1210-270□	27	J,K,M	2.5	15	20	2.8	160
MSFC1210-330□	33	J,K,M	2.5	15	15	2.9	160
MSFC1210-470□	47	J,K,M	2.5	15	10	5.2	140
MSFC1210-560□	56	J,K,M	2.5	8	8	5.6	125
MSFC1210-680□	68	J,K,M	1	6	10	13	100
MSFC1210-820□	82	J,K,M	1	6	10	13	100
MSFC1210-101□	100	J,K,M	1	6	10	13	100
MSFC1210-221□	220	J,K,M	1	8	2.6	30	65
MSFC1210-331□	330	J,K,M	1	8	2.3	35	55
MSFC1210-471□	470	J,K,M	1	8	2	42	40
MSFC1210-561□	560	J,K,M	1	8	3	60	10
MSFC1210-621□	620	J,K,M	1	8	2	85	10
MSFC1210-681□	680	J,K,M	1	6	2	90	10
MSFC1210-102□	1000	J,K,M	1	6	1	130	30

Package Specifications:



Type	Tape Dimensions (mm)						Tape type	Reel OD (mm)	Quantity PCS / Reel
	W	A	B	F	T	t			
MSFC0402 [1005]	8	0.74	1.23	2.0	0.75	-	Paper Tape	178	10,000
MSFC0603 [1608]	8	1.15	1.85	4.0	0.95	0.30	Embossed Tape	178	4,000
MSFC0805 [2012]	8	1.85	2.40	4.0	1.55	0.30	Embossed Tape	178	2,000
MSFC1008 [2520]	8	2.90	3.10	4.0	2.50	0.30	Embossed Tape	178	2,000
MSFC1210 [3225]	8	3.22	3.80	4.0	2.50	0.30	Embossed Tape	178	2,000