

# WCM203 Series

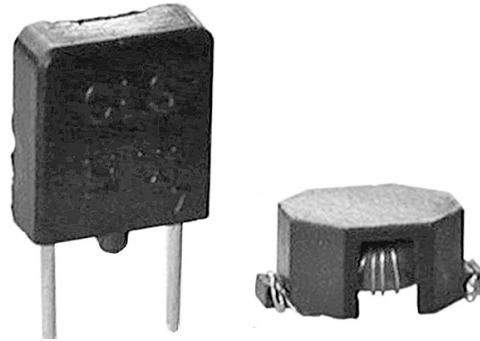
## RF Inductors

### Product Description

West Coast Magnetics' high Q RF inductors are designed for resonant circuit applications requiring exceptionally high Q's and tight tolerances on inductance specifications. These RF inductors are available in through hole and surface mount packaging. The surface mount package assures mechanical stability and excellent lead coplanarity. This SMD package is suitable for automatic pick and place equipment.

### Features and Benefits

High Q values at RF frequencies – Standard inductance tolerance +/-5%  
 – Tighter tolerances available on request – Surface Mount – Tape and reel – Custom designs available.



### Engineering Data

Product Code	Nominal Inductance (μH)	Q min at	Frequency (MHz)	Q min at	Frequency (MHz)	Q min at	Frequency (MHz)	Nominal DCR (mΩ)	Self Resonant Frequency (MHz)
WCM203-01	0.039	60	50	70	70	80	100	37	>700
WCM203-02	0.047	60	50	70	70	80	100	40	665
WCM203-03	0.056	60	50	70	70	80	100	47	555
WCM203-04	0.068	80	30	90	50	90	70	27	500
WCM203-05	0.082	80	30	95	50	90	70	30	480
WCM203-06	0.100	85	30	95	50	90	70	33	450
WCM203-07	0.120	85	30	95	50	90	70	37	410
WCM203-08	0.150	75	20	85	30	95	50	44	335
WCM203-09	0.180	80	20	90	30	95	50	47	320
WCM203-10	0.200	85	20	95	30	100	50	51	290
WCM203-11	0.270	100	15	110	20	105	30	37	250
WCM203-12	0.330	100	15	110	20	105	30	40	230

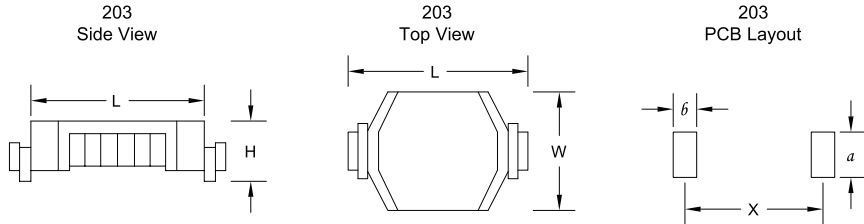


## Engineering Data Continued

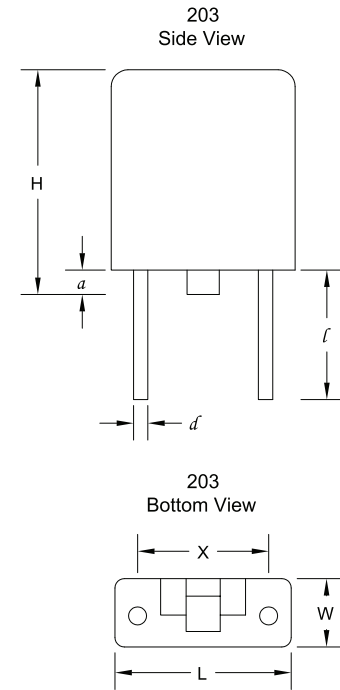
Product Code	Nominal Inductance ( $\mu$ H)	Q min at	Frequency (MHz)	Q min at	Frequency (MHz)	Q min at	Frequency (MHz)	Nominal DCR (m $\Omega$ )	Self Resonant Frequency (MHz)
WCM203-13	0.390	100	10	115	20	110	30	54	205
WCM203-14	0.470	100	10	115	20	110	30	63	180
WCM203-15	0.560	100	10	115	20	110	30	83	170
WCM203-16	0.680	105	10	110	20	95	30	83	155
WCM203-17	0.820	105	10	110	20	95	30	120	140
WCM203-18	1.000	110	10	110	20	90	30	130	120
WCM203-19	1.200	110	10	110	20	90	30	150	110
WCM203-20	1.500	110	7	120	10	110	15	200	100
WCM203-21	1.800	110	7	120	10	110	15	230	90
WCM203-22	2.200	115	7	120	10	110	15	250	75
WCM203-23	2.700	115	7	115	10	110	15	440	62
WCM203-24	3.300	100	4	115	7	115	10	480	55
WCM203-25	3.900	100	4	115	7	115	10	530	46
WCM203-26	4.700	100	4	110	7	110	10	570	43
WCM203-27	5.600	100	4	110	7	110	10	980	36
WCM203-28	6.800	100	4	105	7	105	10	1080	32
WCM203-29	8.200	100	4	105	7	100	10	1210	28
WCM203-30	10.000	100	4	95	7	95	10	1310	26

# Schematics WCM203 Series

## SMD Option



## Through Hole Option



OPTION	L	W	H	X	a	b	d	l
SMD	<u>0.330</u> 8.4	<u>0.225</u> 5.7	<u>0.160</u> 4.1	<u>0.286</u> 7.3	<u>0.125</u> 3.2	<u>0.060</u> 1.5	NA	NA
Through Hole	<u>0.275</u> 7.0	<u>0.104</u> 2.6	<u>0.345</u> 8.8	<u>0.197</u> 5.0	<u>0.040</u> 1.0	NA	<u>0.025</u> 0.6	<u>0.197</u> 5.0

**Dimensions:** Inches / mm

**Note:** All materials of construction minimum Class B 130° C rated.