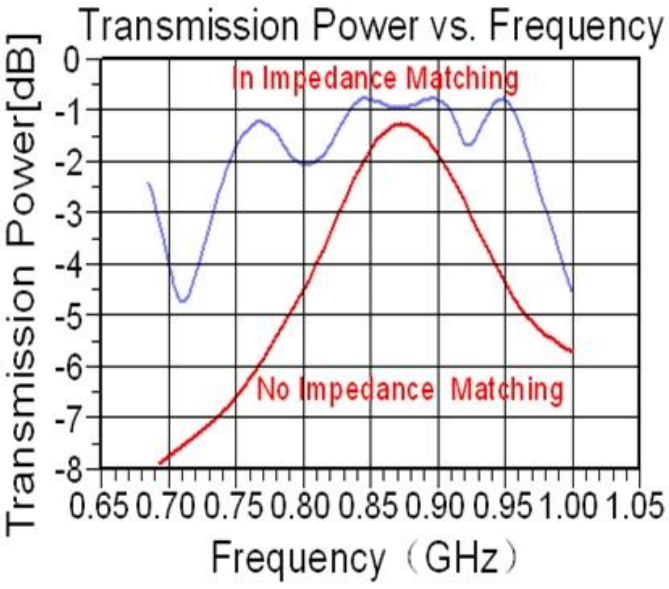
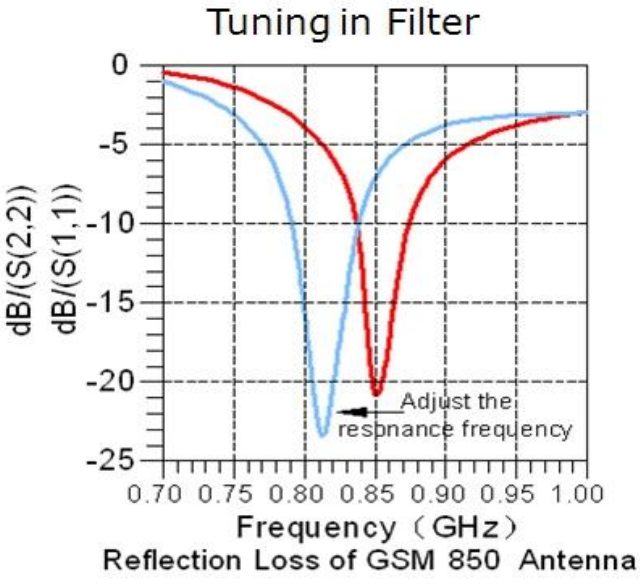
A New Approach to Tuning Resonant Circuits at 1GHz or higher

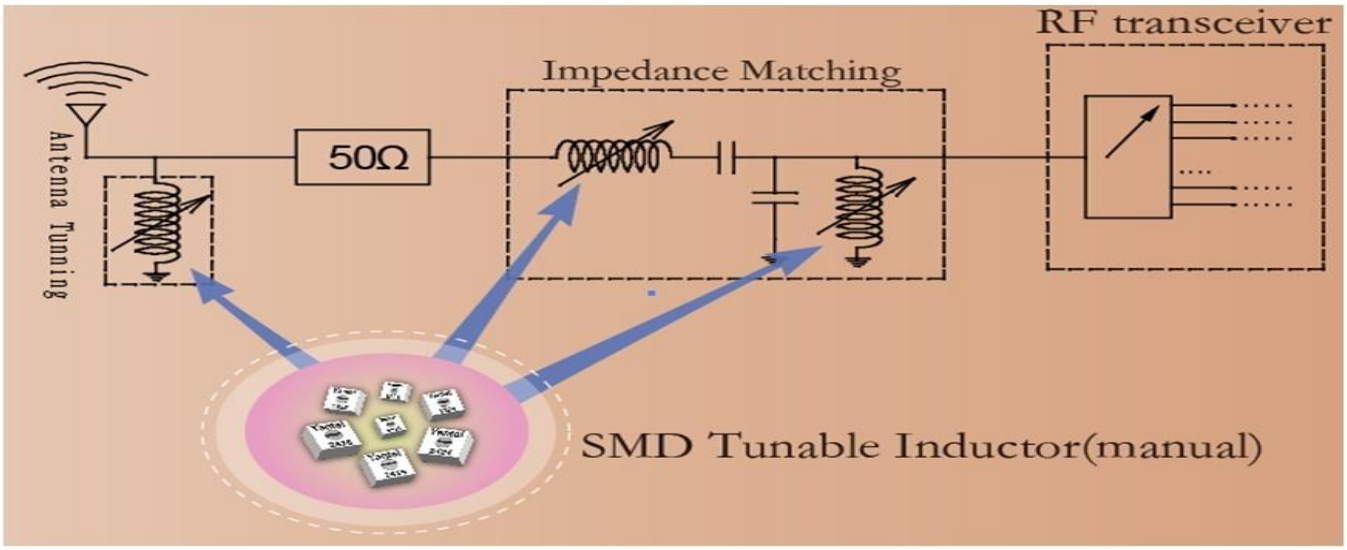
——Yantel SMD RF Tunable Inductor （Up to1GHz、6GHz）

- World- first inductor to realize accurate tuning, up to 1GHz or higher frequency.
- High handling power, high reliability, resistant to high temperature.
- Widely used in Antenna, Tunable Filter, Resonant Circuit ,Phase Shifter, RF Impedance Matching etc.
- Boasting high performance and low cost, this inductor offer an unprecedented solution to tuning at 1GHz or higher frequency



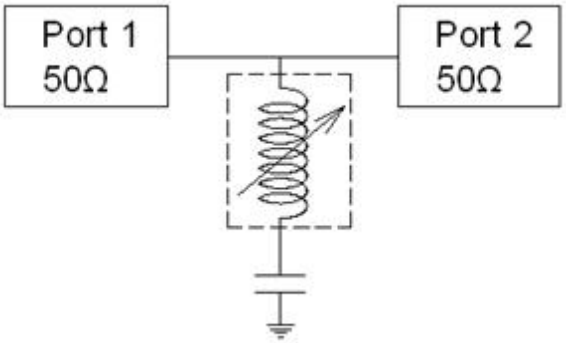


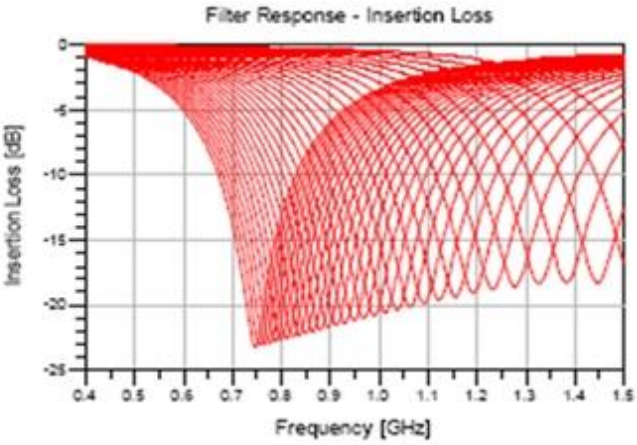
Application 1: Tuning in antenna、 Impedance matching



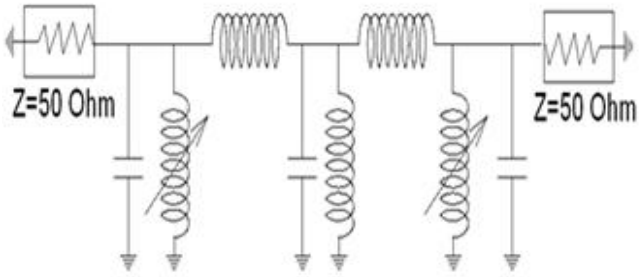
Application 2 : in Filter

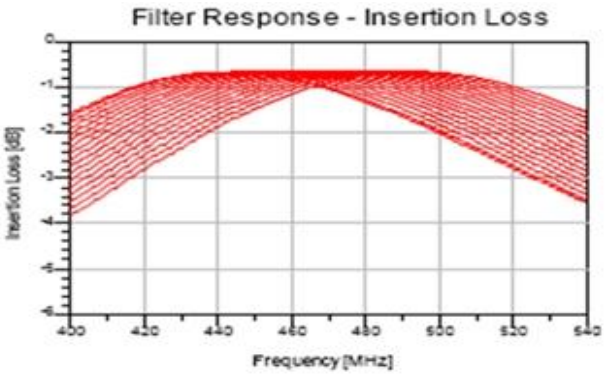
1>Notch filter



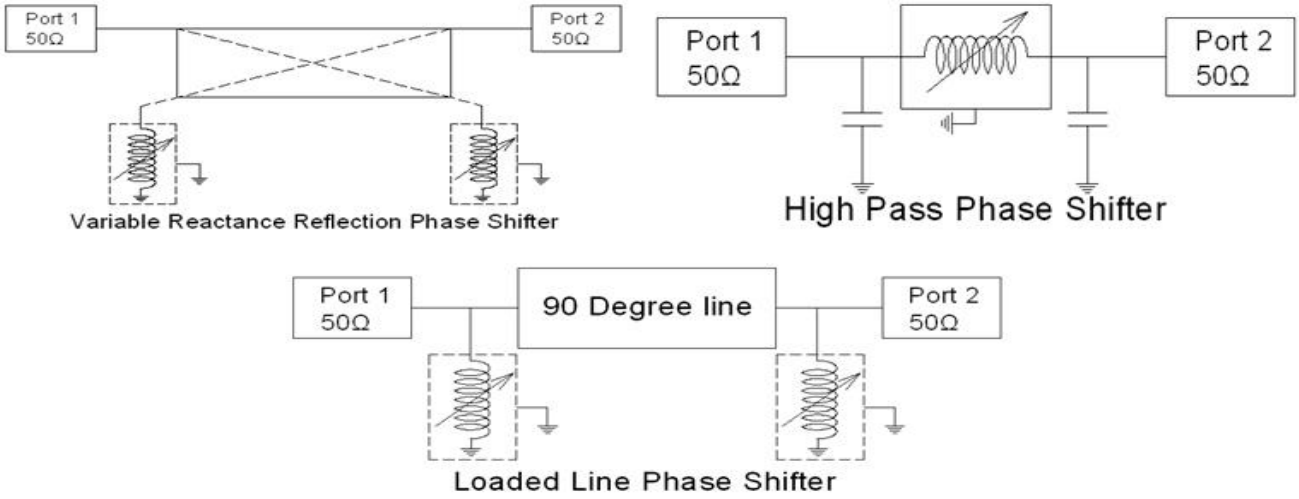


2>Band-pass filter





Application 3: Phase Shifter



Product Specifications:

Φ1 Type Spec.

● Aluminum core ● Size:3×3×2.5(mm)●Operating Frequency is based on the half of the maximum Q value.

Part No.	No core		at L max		at L min		Freq at max Q (MHz)	Freq Range at 1/2 Qmax	No Core SRF min (MHz)	Irms (A)
	L (nH)	Q min	L (nH)	Q min	L (nH)	Q min				
1221	2.65	135	2.65	135	2.5	110	2200	300~5100	7200	1.7
1210	3.46	186	3.46	186	2.95	125	2100	300~5100	7200	1.7
1211	4.1	130	4.1	130	3.37	93	2100	280~4800	6400	1.7
1212	4.4	130	4.4	130	3.9	110	2100	270~4700	6400	1.7
1213	5.7	147	5.7	147	4.9	115	1400	200~2600	4700	1.7
1214	6.5	117	6.5	117	5.8	102	1500	180~2500	4500	1.7
1215	7.1	110	7.1	110	6.4	95	1450	170~2400	4300	1.7
1216	8.3	138	8.3	138	7.2	112	1100	160~2100	3800	1.7
1217	9.6	108	9.6	108	8	80	1200	150~2000	3600	1.7
1218	11.2	100	11.2	100	9.9	85	1100	150~1900	3400	1.7
1224	12	86	12	86	10.3	68	900	150~1600	2900	1.7
1225	14	84	14	84	12	64	800	130~1350	2600	1.5
1226	24	68	24	68	21	58	600	100~900	1830	1.5
1227	29.5	66	29.5	66	26	55	500	100~800	1600	1.4

1228	32.5	64	32.5	64	27.5	52	480	80~730	1480	1.4
1229	41	63	41	63	35	50	410	60~620	1250	1.3
1230	52	86	52	86	42	59	370	55~600	1180	1.3
1231	61	78	61	78	52	58	310	55~600	1030	1.3
1232	73	87	73	87	59	60	300	50~500	1000	1.3
1233	83	78	83	78	70	58	300	45~450	900	1.3
1234	100	83	100	83	82	57	240	45~450	800	1.3

Φ 1.6 Type Spec.

● Aluminum core ● Size:4.2×4.2×2.5(mm)●Operating Frequency is based on the half of the maximum Q value.

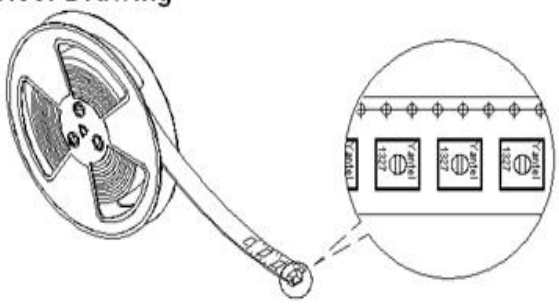
Part No.	No core		at L max		at L min		Freq at max Q (MHz)	Freq Range at 1/2 Qmax	No Core SRF min (MHz)	Irms (A)
	L (nH)	Q min	L (nH)	Q min	L (nH)	Q min				
1321	3.5	105	3.5	105	3.2	81	1780	130~3500	5500	2.1
1310	5.25	177	5.25	177	4.65	143	1700	250~4500	5600	2.1
1311	6.2	136	6.2	136	5.19	100	1700	230~4500	5300	2.1
1312	6.8	130	6.8	130	6.17	96	1600	200~3000	4800	2.1
1313	7.1	140	7.1	140	5.8	110	1200	200~3000	4000	1.9
1314	8.4	117	8.4	117	7.2	99	1200	160~2500	3800	1.9
1315	9.4	115	9.4	115	8.3	99	1000	150~2500	3600	1.9
1323	10.2	90	10.2	90	8.1	71	900	125~1700	3200	1.8
1316	12.3	130	12.3	130	10.2	105	800	130~2000	2700	1.7
1317	14.7	105	14.7	105	12.6	89	800	130~1500	2800	1.7
1318	16.6	95	16.6	95	14.8	85	700	130~1000	2300	1.7
1325	19.4	90	19.4	90	15.2	65	550	110~980	2000	2.1
1326	32	74	32	74	26	60	340	100~700	1140	2.1
1327	39.5	73	39.5	73	33	54	300	80~550	1050	1.9
1328	46.3	78	46.3	78	36	60	290	80~480	940	1.9
1329	54	78	54	78	43	62	280	60~420	840	1.7
1330	80	91	80	91	58	56	290	40~580	860	1.7
1331	110	85	110	85	80	51	210	40~440	700	1.7
1332	141	83	141	83	103	49	170	20~400	600	1.5
1333	175	83	175	83	129	48	140	20~340	520	1.5
1334	214	76	214	76	158	45	140	20~300	470	1.4

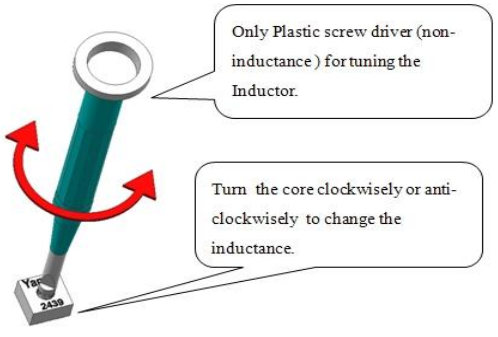
Φ2 Type Spec.

● Aluminum core ● Size:5×5×2.5(mm)●Operating Frequency is based on the half of the maximum Q value.

Part No.	No core		at L max		at L min		Freq at max Q (MHz)	Freq Range at 1/2 Qmax	No Core SRF min (MHz)	Irms (A)
	L (nH)	Q min	L (nH)	Q min	L (nH)	Q min				
2421	4.1	77	4.1	77	3.8	72	1480	170~2700	4600	3.5
2411	6.7	140	6.7	140	5.78	115	1500	200~2500	4600	3.5
2412	7.3	117	6.5	117	5.8	102	1500	180~2500	4500	3.5
2413	7.9	113	7.9	113	7.2	100	1200	180~2300	4000	3.5
2422	8.7	78	8.7	78	7.8	70	900	150~1700	2750	3.5
2414	9.4	135	9.4	135	8	115	1000	150~1800	3100	3.5
2415	10.6	124	10.6	124	9.5	111	900	130~1500	2900	3.5
2416	11.8	126	11.8	126	10.7	107	700	130~1500	2600	3.5
2423	12.6	86	12.6	86	10.7	69	650	120~1400	2240	3.5
2424	20.6	94	20.6	94	17	75	500	80~750	1650	3.5
2425	26.2	90	26.2	90	21.2	68	480	75~700	1500	3.5
2426	43	72	43	72	37.4	60	350	65~550	1050	3.5
2427	54	75	54	75	45	58	300	60~500	1000	3.5
2428	64	65	64	65	50	54	260	60~400	820	3.2
2429	75	68	75	68	62	52	200	50~340	720	3.0
2611	78	91	78	91	58	59	280	80~560	840	1.7
2612	110	85	110	85	82	56	200	30~430	640	1.4
2613	154	81	154	81	116	54	160	20~330	520	1.4
2614	205	78	205	78	154	54	140	20~290	460	1.3
2615	248	81	248	81	183	51	120	20~260	400	1.3
2616	296	78	96	78	221	49	100	10~230	360	1.2

Tape and Reel Drawing





If you are interested, we can provide samples for your evaluation.