HF Inductors & RF Devices Product Portfolios

RF product	Part Number	Dimension	Application (mm³)	Bandwidth	Gain (Typical)	VSWR (Typical)	Polarization	Impedance
ANT (Chip Antenna)	RFANT3216090A0T	3.20x1.60x0.95	2.4GHZ ISM Band	150 MHz	2 dBi	2.0	Linear	50 Ohm
	RFANT3216120AxT	3.20x1.60x1.20	2.4GHZ ISM Band	150 MHz	2 dBi	2.0		
	RFANT5200120ExT	5.20x2.00x1.15	2.4GHZ ISM Band	100 MHz	2 dBi	2.0		
	RFANT5830110E0T	5.80x3.00x1.10	GPS 1575 GHz	40 MHz	0~2 dBi	2.0		
	RFANT6050110L0T	5.90x5.10x1.10	2.4/4.9/5.2/5.8 GHz Multi Band	100/200/100 MHz	1.5 dBi/4 dBi/ 4 dBi/ 4 dBi	2.0		
	RFANT6050110L1T	5.90x5.10x1.10	2.4/4.9/5.2/5.8 GHz Multi Band	100/200/100 MHz	1.5 dBi/4 dBi/ 4 dBi/ 4 dBi	2.0		
	RFANT7635110A1T	7.60x3.50x1.10	2.4GHZ ISM Band	380 MHz	0~2dBi	2.0		
	RGFRA1903041A1T	19x3.8x1.10	2.4GHZ ISM Band	200 MHz	0~2 dBi	2.0		
	RGFRA9937380A3T	7.60x3.50x1.10	2.4GHZ ISM Band	120 MHz	0~2 dBi	2.0		

RFproduct	Part Number	Dimension (mm³)	Application	Impedanc		Return Loss (Max.)	Insertion Loss(S21)	Amplitude Difference	Phase Difference
				Unbalance	Balance				
BLN (Balun)	RGBLN1608070A1T	2.00x1.25x0.80	2.4GHz ISM Band	50 Ohm	100 Ohm	-10 dB	1.5 dB	2.0 dB	180°+/-10°
	RGBLN1608070A5T	2.00x1.25x0.80	2.4GHz ISM Band	50 Ohm	100 Ohm	-10 dB	1.2 dB		180°+/-10°
	RGBLN2012080A4T	2.00x1.25x0.80	2.4GHz ISM Band	50 Ohm	50 Ohm	-10 dB	1.5 dB		180°+/-10°
	RFBLN2012090A0T	2.00x1.25x0.95	2.4GHz ISM Band	50 Ohm	50 Ohm	-10 dB	1.2 dB		180°+/-10°
	RFBLN2012090A1T	2.00x1.25x0.95	2.4GHz ISM Band	50 Ohm	100 Ohm	-10 dB	1.0 dB		180°+/-10°
	RFBLN2012090A2T	2.00x1.25x0.95	2.4GHz ISM Band	50 Ohm	200 Ohm	-10 dB	1.0 dB		180°+/-10°
	RFBLN2012090K0T	2.00x1.25x0.95	ISM 4.9/5.2/5.8 Dual Band	50 Ohm	50 Ohm	-10 dB	1.1 dB		180°+/-10°
	RFBLN2012090K1T	2.00x1.25x0.95	ISM 4.9/5.2/5.8 Dual Band	50 Ohm	100 Ohm	-10 dB	1.2 dB		180°+/-10°

RF product	Part Number	Dimension (mm³)	Application	Impedanc		Return Loss (Max.)	Insertion Loss (S21)	Amplitude Difference	Phase Difference	Attenuation
BPB (Band Pass Filter + Balun)	RFBPB2012090A1T	2.00x1.20x0.90	2.4GHZ ISM Band	50 Ohm	Conjugate match to DC series of Bluetooth chipset	-10 dB	3.50	2.0 dB Max	180°+/-10°	35dB @ 880~960 MHz
	RFBPB2012090A3T	2.00x1.20x0.90	2.4GHZ ISM Band	50 Ohm		-10 dB	3.50	2.0 dB Max	180°+/-10°	30dB @ 1710~1880/4800~5000 MHz 20dB @ 1880~1990 MHz
	RFBPB2012090A9T	2.00x1.20x0.90	2.4GHZ ISM Band	50 Ohm		-10 dB	2.80	2.0 dB Max	180°+/-10°	30dB @ 880~960/1/10~1880/4800~5000 MHz 20dB @ 1880~1990 MHz
	RFBPB2012110A5T	2.00x1.20x1.10	ISM 4.9/5.2/5.8 Dual Band	50 Ohm		-10 dB	2.80	2.0 dB Max	180°+/-10°	35dB @ 880~960 MHz 25dB @ 1710~1880 MHz 30dB @ 4800~5000 MHz
	RFBPB2520120A3T	2.50x2.00x1.20	2.4GHZ ISM Band	50 Ohm	Match to DC seriesof Bluetooth chipset	-10 dB	3.50	1.5 dB Max	180°+/-10°	45 @ 900 MHz 25 @ 2170 MHz 35 @ 1900 MHz 30 @ 4800 MHz
	RFBPB2520090A5T	2.50x2.00x0.95	2.4GHZ ISM Band	50 Ohm		-10 dB	3.00	1.5 dB Max	180°+/-10°	40dB @ 880~960/1710~1880 MHz 20dB @ 1880~1990 MHz
	RFBPB2520090A6T	2.50x2.00x0.95	2.4GHZ ISM Band	50 Ohm		-10 dB	3.50	1.5 dB Max	180°+/-10°	30dB @ 4880~5000 MHz
	RFBPB2520090A7T	2.50x2.00x0.90	2.4GHZ ISM Band	50 Ohm		-10 dB	3.50	1.8 dB Max	180°+/-10°	35 @ 880~960 MHz 30 @ 1710~1880 MHz @ 1880~1990/4800~5000 MHz

RF	Part Number product	Dimension (mm^3)	Application	VSWR	Insertion Los	Impedance	Attenuation
BPF (Band Pass Filter)	RFBPF1608070A0T	1.60x0.80x0.70	2.4GHz ISM Band	2.0	2.5 dB	50 Ohm	30dB @960/4800 MHz 25dB @1910/7200 MHz 20dB @1990 MHz
	RFBPF2012090A1T	2.00x1.20x0.90	2.4GHz ISM Band	2.0	1.7 dB		30dB @960/4800 MHz 20dB @1850 MHz
	RFBPF2012080A7T	2.00x1.20x0.80	2.4GHz ISM Band	2.0	3.0 dB		40dB @DC~1600 MHz 18dB @1600~2000 MHz 30dB @3000~3100 MHz 35dB @4800~5000 MHz 20dB @7200~7500 MHz
	RFBPF2012100A0T	2.00x1.25x0.95	ISM 4.9 / 5.2/ 5.8 Dual Band	2.0	1.7 dB		-30dBi @3450 MHz -20dBi @11000 MHz
	RFBPF2520120A1T	2.50x2.00x1.20	2.4GHz ISM Band	2.0	1.7 dB		30dB @900/1850 MHz 20dB @2100 MHz 40dB @4800 MHz 25dB @7200 MHz
	RFBPF2520120A2T	2.50x2.00x1.20	2.4GHz ISM Band	2.0	2.1 dB		30dB @900/1850/4800 MHz
	RFBPF2520120A3T	2.50x2.00x1.20	2.4GHz ISM Band	2.0	1.2 dB		30dB @900 MHz 30dB @1850 MHz 25dB @4800 MHz
	RFBPF2520120A4T	2.50x2.00x1.20	2.4GHz ISM Band	2.0	1.7 dB		
	RFBPF2520100A5T	2.50x2.00x1.20	2.4GHz ISM Band	2.0	2.0 dB		40dB @DC~1600 MHz 18dB @1600~2000 MHz 35dB @4800~5000 MHz 20dB @7200~7500 MHz 30dB @3000~3100 MHz
	RFBPF2520100A6T	2.50x2.00x1.20	2.4GHz ISM Band	2.0	2.0 dB		30dB @900/1850/4800 MHz
	RFBPF3225150A4T	3.20x2.50x1.50	2.4GHz ISM Band	2.0	2.0 dB		30dB @900 MHz 30dB @1850 MHz
	RFBPF3225150A5T	3.20x2.50x1.50	2.4GHz ISM Band	2.0	2.0 dB		

RF product	Part Number	Dimension (mm³)	Application	Comon Mode Attenuation	Differential Mode Insertion Loss (S21)	DC Resistance	Rate Current	Differential Impedance
CMF (Common Mode Filter)	RFCMF1220100M3T	2.00x1.25x1.00	USB2.0/1394	9.0 dB@240 MHz~1GHz	0.6 dB@240 MHz	1.5 Ohm	300 mA	90 Ohm
	RFCMF1220100M4T	2.00x1.25x1.00	USB2.0/1394	9.0 dB@130 MHz~1GHz	1.0 dB@240 MHz	2.5 Ohm	200 mA	
	RFCMF1632140M2T	1.60x3.20x1.40	USB2.0/1394	9.0 dB@140 MHz~1GHz	0.8 dB@240 MHz	2.5 Ohm	300 mA	
	RFCMF1632090M3T	1.60x3.20x1.00	USB2.0/1394	9.0 dB@240 MHz~1GHz	0.6 dB@240 MHz	1.5 Ohm	300 mA	
	RFCMF3216090M1T	3.20x1.60x0.95	USB2.0/1394	8.0 dB@240 MHz~1GHz	0.8 dB@240 MHz	1.5 Ohm	200 mA	
	RFCMF3216090M2T	3.20x1.60x1.30	USB2.0/1394	9.0 dB@150 MHz~1GHz	1.1 dB@240 MHz	2.5 Ohm	200 mA	

RF product	Part Number	Dimension (mm³)	Application	VSWR	Insertion Loss (S21)		Insertion Loss (S21)				Ripple	Impedance
					Band1	Band2	Band 1			Band2		
							4.9GHz	5.2GHz	5.8GHz	2.45GHz		
DIP (Diplexer)	RFDIP 2012100L0T	2.00x1.25 x1.00	2.4/4.9/5.2/5.8 GHz Tri Band	2.0	0.7 dB	0.9 dB	-20.0 dB	-25.0 dB	-25.0 dB	-25.0 dB	0.5 dB	50 Ohm
	RFDIP 2012100L1T	2.00x1.25 x0.95	2.4/4.9 /5.2/5.8 GHz Tri Band	2.0	0.6 dB	0.9 dB	-20.0 dB	-20.0 dB	-20.0 dB	-20.0 dB		
	RFDIP 2012100L2T	2.00x1.25 x1.00	2.4/4.9/5.2/5.8 GHz Tri Band	2.0	0.7 dB	0.9 dB	-20.0 dB	-25.0 dB	-25.0 dB	-25.0 dB		

RF product	Part Number	Dimension (mm³)	Application	VSWR	Insertion Loss (S21)	Attenuation
LPF (Low Pass Filter)	RFLPF2012110A0T	2.00x1.25x1.05	2.4GHZ ISM Band	1.50	0.7 dB	30@2x(fo +/- BW/2) 25@3x fo +/- BW/2)

RF product	Dimension (mm)	Working Voltage Range (V)		Nominal Voltage Range at 1mA (DC) Current (V)		Capacitance(pF)
		Vm (DC)	Vm (AC)	Vn (DC) Min.	Vn (DC) Max.	Max. @ 1MHz
MLV (Chip Varistor)	1.00x0.50x0.50(0402)_VZ	5.5~24.0	4.0~18.0	6.0~22.0	9.6~30.0	1~100@ 1MHz
	1.00x0.50x0.50(0402)_VH	5.0~26.0	4.0~20.0	6.5~27.0	9.5~36.0	54~295@ 1MHz
	1.60x0.80x0.90(0603)_VZ	5.0~24.0	4.0~18.0	6.4~34.2	9.5~41.8	5~100@ 1MHz
	1.60x0.80x0.90(0603)_VZ	5.5~30.0	4.0~24.0	7.1~37.0	9.3~46.0	120~800@ 1MHz
	2.00x1.25x0.80(0805)_VZ	5.5~30.0	4.0~25.0	7.1~37.0	9.3~46.0	310~1600@ 1MHz
	3.20x1.60x0.80(1206)_VZ	5.5~38.0	4.0~30.0	6.4~60.0	9.3~74.0	400~3200@ 1MHz

Remark : "VH" series ar e available upon r equest for high speed application and low capacitance r equir ements; "VZ" series is for normal ESD / Surge protection.

RF product	Dimension (mm²)	L (nH)	Tolerance	SRF Typical (MHz)	RDC Max (Ohm)
WL (HF Inductor)	0.60x0.30x0.30 (0201)	1.0~39	+/-0.3nH ; +/-5%	1500~13000	0.12~2.3
	1.00x0.50x0.50 (0402)	1.0~100	+/-0.3nH ; +/-5%	930~13000	0.12~2.3
	1.60x0.80x0.90 (0603)	1.0~270	+/-0.3nH ; +/-5%	450~13000	0.10~2.5

Walsin's HF products ar e in accordance with RoHS compliance.