

UP/Down Converter

UP/Down Converter Module



Feature

BPF, Mixer, PLL and IF Amp into one Module
High Linearity, Low Power Consumption
Compact Size & Low Price

Application

TRS, AMPS, CDMA, GSM
IMT-2000, WLL
Repeaters, Basestation
Over-the-air, Fiber-Linked
Channel Conversion



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Specification

Part Number	Frequency Range (MHz)	Gain (dB) (max)	Noise Figure (max)	IMD3 (@10dBm) (2 tones)	Input Signal Level (max)	IF BPF BW (MHz)	IF BPF Rejection	Phase Noise (dBc)	LO Leakage (max)	Supply Voltage (max)
RFM-F814G50IF0.125MT RFM-F859G50IF0.125MR	806 ~ 821 851 ~ 866	50±2.0	2.5dB	-50dBc	-40dBm	0.015	0.30@3dB 0.10@30dB	-85@10KHz -105@100KHz	-30dBm	10~24V (@1.2A)
RFM-F814G30IF10MT RFM-F859G30IF10MR	806 ~ 821 851 ~ 866	30±2.0	2.5dB	-60dBc	-40dBm	10.00	9.52@3dB 10.33@40dB	-85@10KHz -105@100KHz	-36dBm	10~24V (@1.2A)
RFM-F815G50IF15.0MT RFM-F860G50IF15.0MR	806~824 851~869	50±1.0	2.5dB	-50dBc	-100dBm ~ -40dBm	15.0	-	-80@10KHz -90@100KHz	-60dBm	10~24V (@1.2A)
RFM-F815G50IF2.0MT RFM-F860G50IF2.0MR	806~824 851~869	50±1.0	2.5dB	-50dBc	-100dBm ~ -40dBm	2.0	-	-80@10KHz -90@100KHz	-60dBm	10~24V (@1.2A)
RFM-F815G50IF15.0MT RFM-F860G50IF15.0MR	806~824 851~869	50±1.0	2.5dB	-50dBc	-100dBm ~ -40dBm	15.0	1.82@2dB 15.89@16dB	-80@10KHz -90@100KHz	-20dBm	10~24V (@1.2A)
RFM-F822G50IF2MR RFM-F867G50IF2MT	821 ~ 823 866 ~ 868	50±2.0	2.5dB	-50dBc	-40dBm	2.00	2.22@3dB 3.80@40dB	-85@10KHz -105@100KHz	-50dBm	10~24V (@1.2A)
RFM-F828.9G50IF1.25M	828.175 ~829.525	50±0.5	2.5dB	-55dBc	-100dBm ~ -40dBm	1.25	1.3@3dB 2.15@40dB	-105@10KHz -120@100KHz	-34dBm	12V (@1.2A)
RFM-F836G50IF5.0MT	824~849	50±2.0	2.5dB	-30dBm, -60dBc@0dBm	-100dBm ~ -40dBm	5.0	5.17@3dB 6.42@40dB	-80 @10KHz -90@100KHz	-40dBm	9~15V (@1.2A)
RFM-F836.25G50IF1.25M	835.625 ~836.875	50±0.5	2.5dB	-55dB	-100dBm ~ -40dBm	1.25	1.3@3dB 2.15@40dB	-105@10KHz -120@100KHz	-34dBm	12V (@1.2A)
RFM-F837G70IF1.23MT RFM-F882G70IF1.23MR	824 ~ 849 869 ~ 894	70±2.0	2.5dB	-60dBc	-40dBm	1.23	1.68@3dB 2.51@40dB	-85@10KHz -105@100KHz	-34dBm	10~24V (@1.2A)
RFM-F837G70IF10MT RFM-F882G70IF10MR	824 ~ 849 869 ~ 894	70±2.0	2.5 dB	-50dBc	-40dBm	10.00	9.52@3dB 10.33@40dB	-85@10KHz -105@100KHz	-40dBm	10~24V (@1.2A)
RFM-F838G50IF1.5MT RFM-F883G50IF1.5MR	824~851 869~896	50±1.0	2.5dB	-50dBc	-100dBm ~ -40dBm	1.5	1.5@3dB 3.0@40dB	-80@10KHz -90dB@100KHz	-20dBm	10~24V (@1.2A)
RFM-F838G50IF2.5MT RFM-F838G50IF2.5MR	824~851 869~896	50±1.0	2.5dB	-50dBc	-100dBm ~ -40dBm	2.5	1.85@2dB 15.85@16dB	-80@10KHz -90dB@100KHz	-20dBm	10~24V (@1.2A)
RFM-F838G50IF10.0MT RFM-F838G50IF10.0MR	824~851 869~896	50±1.0	2.5dB	-50dBc	-100dBm ~ -40dBm	10.0	1.83@2dB 15.85@16dB	-80@10KHz -90dB@100KHz	-20dBm	10~24V (@1.2A)
RFM-F838G50IF11.0MT RFM-F883G50IF11.0MR	824~851 869~896	50±1.0	2.5 dB	-50dBc	-100dBm ~ -40dBm	11.00	11.15@3dB 12.65@40dB	-80@10KHz -90@100KHz	-60dBm	10~24V (@1.2A)
RFM-F902G70IF0.2MT RFM-F947G70IF0.2MR	890 ~ 915 935 ~ 960	70±2.0	2.5 dB	-60dBc	-40dBm	0.20	0.3@3dB 0.772@40dB	-85@10KHz -105@100KHz	-36dBm	10~24V (@1.2A)
RFM-F1748G81IF0.2MT RFM-F1842G81IF0.2MR	1710 ~ 1785 1805 ~ 1880	81±2.0	2.5 dB	-50dBc	-40dBm	0.20	0.3@3dB 0.772@40dB	-85@10KHz -105@100KHz	-36dBm	10~24V (@1.2A)
RFM-F1748G70IF10MT RFM-F1843G70IF10MR	1710 ~ 1785 1805 ~ 1880	70±2.0	2.5 dB	-50dBc	-40dBm	10.00	9.52@3dB 10.33@40dB	-85@10KHz -105@100KHz	-60dBm	10~24V (@1.2A)
RFM-F1765G80IF1.23MT RFM-F1855G80IF1.23MR	1750 ~ 1780 1840 ~ 1870	80±2.0	2.5 dB	-60dBc	-40dBm	1.23	1.32@3dB 2.0@40dB	-85@10KHz -105@100KHz	-40dBm	10~24V (@1.2A)
RFM-F1765G80IF10MT RFM-F1855G80IF10MR	1750 ~ 1780 1840 ~ 1870	80±2.0	2.5 dB	-60dBc	-40dBm	10.00	9.3@3dB 10.6@40dB	-85@10KHz -105@100KHz	-40dBm	10~24V (@1.2A)
RFM-F1766G70IF14.5MT RFM-F1861G70IF14.5MR	1758 ~ 1773 1853 ~ 1868	70±2.0	2.5 dB	-40dBc	-40dBm	14.50	14.5@3dB 15.75@40dB	-85@10KHz -105@100KHz	-40dBm	10~24V (@1.2A)

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Part Number	Frequency Range (MHz)	Gain (dB) (max)	Noise Figure (max)	IMD3 (@10dBm) (2 tones)	Input Signal Level (max)	IF BPF BW (MHz)	IF BPF Rejection	Phase Noise (dBc)	LO Leakage (max)	Supply Voltage (max)
RFM-F1880G50IF5MT RFM-F1960G50IF5MR	1850~1910 1930~1990	50±1.0	2.5dB	-40dBc	-100dBm ~-40dBm	5.00	5.0 @ 3dB 7.0@40dB	-80@10KHz -90@100KHz	-60dBm	10~24 (@1.2A)
RFM-F1880G50IF0.2MT RFM-F1960G50IF0.2MR	1850 ~ 1910 1930 ~ 1990	50±2.0	2.5dB	-50dBc	-40dBm	0.20	0.3@3dB 0.772@40dB	-85@10KHz -105@100KHz	-36dBm	10~24V (@1.2A)
RFM-F1880G50IF1.23MT RFM-F1960G50IF1.23MR	1850 ~ 1910 1930 ~ 1990	50±2.0	2.5dB	-50dBc	-40dBm	1.23	1.32@3dB 2.0@40dB	-85@10KHz -105@100KHz	-30dBm	10~24V (@1.2A)
RFM-F1880G50IF5MT RFM-F1960G50IF5MR	1850~1910 1930~1990	50±2.0	2.5dB	-40dBc	-100~ -40dBm	5	-	-80@10KHz -90@100KHz	-60dBm	10~24V (@1.2A)
RFM-F1880G50IF10MT RFM-F1960G50IF10MR	1850 ~ 1910 1930 ~ 1990	50±2.0	2.5dB	-50dBc	-40dBm	10.00	9.52@3dB 10.33@40dB	-85@10KHz -105@100KHz	-30dBm	10~24V (@1.2A)
RFM-F1868G50IF3.75MT RFM-F1948G50IF3.75MR	1865.5 ~1869.5 1945.5 ~1949.5	50±2.0	2.5dB	-50dBc	-40dBm	3.75	4.25@3dB 6.1@40dB	-85@10KHz -105@100KHz	-35dBm	10~24V (@1.2A)
RFM-F1880G50IF10MT RFM-F1960G50IF10MR	1850~1910 1930~1990	50±1.0	2.5dB	-40dBc	-100dBm ~-40dBm	10	-	-80@10KHz -90@100khZ	-20dBm	10~24V (@1.2A)
RFM-F1880G50IF15T RFM-F1960G50IF15R	1850~1910 1930~1990	50±1.0	2.5dB	-40dBc	-100dBm ~-40dBm	15.0	1.89@2dB 16.31@dB	-80@10KHz -90@100khZ	-20dBm	10~24V (@1.2A)