



电子元器件系列(中国.厦门) China.Xiamen
www.rf-china.com RF-Micom co.,Ltd

Email:sales@rf-china.com

Telephone:0086-592-5713956 Fax:5201617

WLAN Modules

Front-End Modules for WLAN

Part Number	802.11 WLAN Standard	Frequency (GHz)	Description	T _X Gain (dB)	T _X Linear Power (dBm)	R _X Gain (dB)	Package (mm)
SKY65200	b, g a	2.40–2.50 4.90–5.90	Transmit/Receive Dual-Band Front-End Module	29 30	20, 15 13	-4.0 10.0	15 x 15 x 1.7
SKY65201	b g	2.04–2.50	Transmit/Receive Single-Band Front-End Module	30 30	21 16	-3.7 -3.7	8 x 10 x 1.7 Laminate
SKY65202	a	4.90–6.00 Front-End Module	Transmit/Receive Single-Band	30	15	12	8 x 10 x 1.7 Laminate
SKY65203	b g	2.40–2.50	Transmit/Receive Single-Band Front-End Module	30 30	21 16	-3.7 -3.7	8 x 10 x 1.7 Laminate
SKY65205	b g	2.40–2.50	Transmit/Receive Single-Band Front-End Module	27 27	20 16	-3.0 -3.0	6 x 6 x 1.7 Laminate
SKY65208	b g	2.40–2.50	Transmit/Receive Single-Band Front-End Module	27 27	20 16	-2.0 -2.0	6 x 6 x 1.7 Laminate
SKY65209	b g	2.40–2.50	Transmit/Receive Single-Band Front-End Module	27 27	20 16	-2.0 -2.0	6 x 6 x 1.7 Laminate

WLAN Power Amplifiers

Part Number	802.11 WLAN Standard	Frequency (GHz)	Description	Gain (dB)	P _{OUT} (dBm)	Saturated P _{OUT} (dBm) Max.	Bias Voltage V _D (V)	Current Consumption (mA)	Package (mm)
-------------	----------------------	-----------------	-------------	-----------	------------------------	---------------------------------------	---------------------------------	--------------------------	--------------

Power Amplifiers for WLAN

AP178-321	b, g	1.80–2.50	WLAN PA	20	26	27	2.5–4.5	170	QFN-12 3 x 3 Surface Mount
AP172-317	b, g	1.80–2.50	WLAN PA	33	27	27	2.7–5.0	220	QFN-16 4 x 4 Surface Mount
AP163-317	b, g	1.80–2.50	WLAN PA	18	26	28	2.7–5.0	170	QFN-16 4 x 4 Surface Mount
AP157-317	b	1.80–2.50	WLAN PA	18	27	31	2.7–5.0	450	QFN-16 4 x 4 Surface Mount
SKY65132	b, g	2.40–2.48	WLAN PA	23	28	30	3.3	550	16-lead 4 x 4 MCM Surface Mount
SKY65131-11	b, g	2.40–2.48	WLAN PA	26	26	29	3.3	330	16-lead 4 x 4 MCM Surface Mount

Part Number	802.11 WLAN Standard	RF Frequency (MHz)	P ₁ dB (dBm)	Gain (dB)	Output IP3 (dBm)	Supply Voltage (V)	Power Added Efficiency (%)	Quiescent Current (mA)	Noise Figure (dB)	Test Frequency (MHz)	Package (mm)
-------------	----------------------	--------------------	-------------------------	-----------	------------------	--------------------	----------------------------	------------------------	-------------------	----------------------	--------------

Ultra-Linear PA Drivers

CX65003-12	b, g	1400–2500	24.5	11.5	48	+5	38	120	5.0	1960 5.994 x 4.928	8-pin SOIC
SKY65004-11	b, g	250–2500	24.0	14.0	42	+5	48	110	4.5	1960	SOT-89

Switches

Part Number	802.11 WLAN Standard	Frequency (GHz)	Description	Insertion Loss Range (dB) Typ.	Isolation Range (dB) Typ.	IP3 > 0.5 GHz (dBm) Typ.	Package
-------------	----------------------	-----------------	-------------	--------------------------------	---------------------------	--------------------------	---------

Typical Power Rating 27 dBm — General Purpose

AS213-92	b	0.15–3.0	PHEMT Dual +3 V CTL	0.25–0.50	35–19	40	SC-70 6-lead
AS214-92	b	0.10–3.0	PHEMT Dual +3 V CTL	0.25–0.40	33–25	40	SC-70 6-lead
AS215-92	b	0.10–3.0	PHEMT Single +3 V CTL	0.90–0.50	35–20	40	SC-70 6-lead
AS222-92	b	0.10–3.0	PHEMT Dual +3 V CTL (AS213-92 with AS179-92 Logic)	0.25–0.50	35–19	40	SC-70 6-lead

Typical Power Rating 30 dBm

AS169-73	b, g	DC–2.5	PHEMT Dual +3 V CTL	0.30–0.50	30–24	43	SOT-6
AS179-92	b, g	DC–3.0	PHEMT Dual +3 V CTL (AS169-73 in -92)	0.30–0.55	30–24	43	SC-70 6-lead
AS179-92LF	b, g	DC–3.0	PHEMT Dual +3 V CTL (AS169-73 in -92)	0.30–0.55	30–24	43	SC-70 6-lead
AS179-000	b, g	DC–3.0	PHEMT Dual +3 V CTL	0.30–0.55	30–24	43	Chip
AS211-334	b, g	DC–4.0	PHEMT Dual +3 V CTL	0.30–0.50	27–22	43	LGA-6 1.5 x 1.2 mm
AS200-313	a	5.0–6.0	PHEMT (WLAN) Dual +3 V CTL	1.20	25	50	QFN-6
AS225-313	a, b, g	0.1–6.0	PHEMT (WLAN) Dual +3 V CTL	0.55	23	48	QFN-6

DC–6 GHz Plastic Packaged and Chip — Multiport

Part Number	802.11 WLAN Standard	Frequency (GHz)	Description	Insertion Loss Range (dB) Typ.	Isolation Range (dB) Typ.	IP3 > 0.5 GHz (dBm) Typ.	Package
-------------	----------------------	-----------------	-------------	--------------------------------	---------------------------	--------------------------	---------

Typical Power Rating 27 dBm

AS218-321	b, g	DC–6.0	PHEMT Transfer Switch	1.00–1.25	45–24	50	QFN-12
AS218-000	b, g	DC–6.0	PHEMT Transfer Switch	1.00–1.25	40–24	50	Chip
AS224-340	a, b, g	2.0–3.0	PHEMT WLAN Dual-Band T/R Transfer Switch	1.30–1.60 1.80–2.00	28–18 28–18	50 50	QFN-20

RF Subsystems

Wireless Infrastructure RF/IF ICs

Dual Fractional-N Synthesizers/PLLs

Part Number	WLAN Standards	Frequency (MHz)	Main/RF Frequency (MHz)	Aux./IF @ 10 kHz Offset (dBc/Hz)	Phase Noise Step Set Time (μ s)	Large Freq. Boundary Spur (dBc)	Integer-N Supply Voltage (V)	Charge Pump Voltage (V)	Supply Package (mm)
CX72302	a, b, g	100–6100	1000	-80 @ 6 GHz Inband	10/Loop BW	-55 to -65	2.7–5.0	2.7–3.3	28-pin EP TSSOP 9.7 x 6.4
CX74038-12, CX74038-71	b, g	100–2600	800	-85 @ 2.4 GHz Inband	10/Loop BW	-30	2.6–3.6	2.6–3.6	20-pin TSSOP 9.7 x 6.4 and 24-pin CSP 3.5 x 4.5

Discrete and Passive Components

Varactor Diodes

Part Number	WLAN Standards	V_B $I_R = 10 \mu A$ (V) Min.	I_R $V_R (20 \text{ nA})$	C_T $V_R = 0.5 \text{ V}$ (pF) Typ.	C_T $V_R = 2.5 \text{ V}$ (pF)	C_R $0.5 \text{ V} / 2.5 \text{ V}$ Min.	R_S 900 MHz (Ω) Max.
-------------	----------------	---------------------------------------	--------------------------------	---	--	--	---------------------------------------

Plastic Packaged Hyperabrupt Junction Silicon Varactors

SMV1763-079	a, b, g	10	8 V	6.2-7.2	2.3-2.9	2.3	0.7
-------------	---------	----	-----	---------	---------	-----	-----

PIN Diodes

Part Number	WLAN Standards	V_B $I_R = 10 \mu A$ (V) Min.	C_T $V_R = 30 \text{ V}$ $F = 1 \text{ MHz}$ (pF) Max.	V_F @ $I_F = 10 \text{ mA}$ (V) Typ.	R_S $I_F = 1 \text{ mA}$ $F = 100 \text{ MHz}$ (Ω) Max.	R_S $I_F = 10 \text{ mA}$ $F = 100 \text{ MHz}$ (Ω) Max.	Typical Carrier Lifetime $I_F = 10 \text{ mA}$ (nsec)
-------------	----------------	---------------------------------------	---	--	---	--	---

Plastic Packaged Switching Silicon PIN Diodes

SMP1345 Series	a, b, g	50	0.20 ($V_R = 5 \text{ V}$)	0.89	3.5 Typ.	2	100
SMP1321 Series	a, b, g	100	0.25	0.85	3.0 Typ.	2	400
SMP1340 Series	a, b, g	50	0.30 ($V_R = 5 \text{ V}$)	0.88	1.7 Typ.	1.2	100

Discrete and Passive Components

Schottky Diodes

Part Number	WLAN Standards	$V_B I_R = 10\ \mu\text{A}$ (V) Min.	$I_R V_R = 1\ \text{V}$ (nA) Typ.	$V_F I_F = 1\ \text{mA}$ (mV) Max.	$C_T V_R = 0\ \text{V}$ (pF) Max.	$R_T I_F = 10\ \text{mA}$ (Ω) Max.
-------------	----------------	---	--------------------------------------	---------------------------------------	--------------------------------------	--

Plastic Packaged Silicon Mixer and Detector Diodes

SMS7621 Series	a, b, g	2	80	320	0.28	18
----------------	---------	---	----	-----	------	----

Part Number	WLAN Standards	$V_B I_R = 100\ \mu\text{A}$ (V) Min.	$V_F I_F = 1\ \text{mA}$ (mV) Max.	$C_T V_R = 0\ \text{V}$ (pF) Max.	$R_T I_F = 10\ \text{mA}$ (Ω) Max.
SMS7630 Series	a, b, g	1	240	0.35	22 Typ.

Attenuators

Part Number	WLAN Standards	Frequency (GHz)	Description	Insertion Loss Range (dB) Typ.	Attenuation Range (dB) Typ.	IP3 > 0.5 GHz (dBm) Typ.	Package
-------------	----------------	-----------------	-------------	--------------------------------	-----------------------------	--------------------------	---------

IC Voltage Variable — FET Based

AV110-73	b, g	1.7–2.5	Single, +3 V CTL Rev. Transfer	3.5–3.8	32–27	12	–
----------	------	---------	--------------------------------	---------	-------	----	---

Semiconductor Plastic Package Selection Guide

Part Number Suffix	Package Type	Actual Size	Package Dimensions (mm) (Lead Inclusive)*
-508, 518	LGA		1.47 x 1.23 x 0.70
-334	LGA-6		1.50 x 1.20 x 0.80
-079	SC-79		1.60 x 0.80 x 0.60
-335	QFN-6 (2 x 2)		2.00 x 2.00 x 0.90
-313	QFN-6		2.00 x 3.00 x 1.00
-92	SC-88		2.10 x 2.00 x 0.95
-015, -016, -017, -019, -020, -021, -022, -023, -026, -32	SOT-143		2.37 x 2.92 x 1.00
-72	SOT-23 5L		2.80 x 2.90 x 1.18
-73	SOT-23 (6-lead)		2.80 x 2.90 x 1.18
-321	QFN (3 x 3)		3.00 x 3.00 x 0.75
-317	QFN-16 (4 x 4) 1.47 mm Paddle		4.00 x 4.00 x 1.00
-340	QFN-20 (4 x 4) 2.1 mm Paddle		4.00 x 4.00 x 0.75
-307	QFN-16 (4 x 4) 1.7 mm Paddle		4.00 x 4.00 x 0.90
-86	MSOP-10		4.90 x 3.00 x 0.96
-310	QFN-32 (5 x 5) 3.3 mm Paddle		5.00 x 5.00 x 0.90
-80	SSOP-16		6.00 x 4.90 x 1.60
-87	TSSOP-16		6.40 x 5.00 x 1.00
-85	SSOP-20		7.80 x 7.20 x 1.90
-25	SOIC-16		10.00 x 6.00 x 1.70
N/A	WLAN RF Module		15.00 x 15.00 x 1.7

Part Number Suffix	Package Type	Actual Size	Package Dimensions (mm) (Lead Inclusive)*
N/A	CSP		3.50 x 4.50
CX74038-71	24-Pin CSP		4.50 x 3.50 x 1.04
N/A	LGA		5.00 x 5.00
N/A	RF-LGA		5.00 x 5.00
CX65003-12	8-lead SOIC		5.99 x 4.93 x 1.57
N/A	RF-LGA		6.00 x 6.00
N/A	EP-SSOP 28L		6.40 x 9.70
CX74038-12	20-lead TSSOP		6.50 x 6.40 x 1.20
N/A	RF-LGA		7.00 x 7.00
N/A	TQFP		7.00 x 7.00
N/A	RF-LGA		8.00 x 8.00
N/A	RF-LGA		9.00 x 9.00
CX72302-11	28-lead TSSOP		9.70 x 6.40 x 1.10
N/A	FPBGA, FPBGA 100L, RF-LGA		10.00 x 10.00