

## **WLAN Solutions**

## Skyworks Solutions

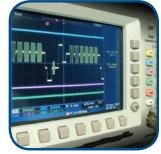
Skyworks Solutions, Inc. is an innovator of high reliability analog and mixed signal semiconductors. Leveraging core technologies, Skyworks offers diverse standard and custom linear products supporting automotive, broadband, cellular infrastructure, energy management, industrial, medical, military and mobile handset applications. The Company's portfolio includes amplifiers, attenuators, detectors, diodes, directional couplers, front-end modules, hybrids, infrastructure RF subsystems, mixers / demodulators, phase shifters, PLLs / synthesizers / VCOs, power dividers / combiners, receivers, switches and technical ceramics.

Headquartered in Woburn, Massachusetts, USA, Skyworks is worldwide with engineering, manufacturing, sales and service facilities throughout Asia, Europe and North America.

New products are continually being introduced at Skyworks. For the latest information, visit our Web site at [www.skyworksinc.com](http://www.skyworksinc.com). For additional information, please contact your local sales office or email us at [sales@skyworksinc.com](mailto:sales@skyworksinc.com).

## The Skyworks Advantage

- Broad front-end module and precision analog product portfolio
- Market leadership in key product segments
- Solutions for all air interface standards, including CDMA2000, GSM / GPRS / EDGE, LTE, WCDMA and WLAN
- Engagements with a diverse set of top-tier customers
- Analog, RF and mixed signal design capabilities
- Access to all key process technologies: GaAs HBT, PHEMT, BiCMOS, SiGe, CMOS, RF CMOS and Silicon
- World-class manufacturing capabilities and scale
- Unparalleled level of customer service and technical support
- Commitment to technology innovation



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# Solutions for WLAN

Skyworks Solutions' broad product portfolio includes key components within the radio chain for your demanding WiFi / WiMAX design applications (802.11, 802.16). This brochure features our suite of application block diagrams and includes specifications to assist in product selection.

Skyworks' front-end modules and high-performance RF components for WLAN applications enable customers to achieve cost-effective, small form-factor solutions for end products ranging from base stations and enterprise consumer premises equipment (CPEs) to low-cost mobile / portable subscriber equipment.

Our portfolio of high-performance RF components for fixed and mobile WiMAX applications are suitable for use in base stations, enterprise CPE, and low-cost mobile / portable subscriber equipment targeting the 2.5 and 3.5 GHz licensed WiMAX bands.

New products are continually being introduced at Skyworks. For the latest information, visit our Web site at [www.skyworksinc.com](http://www.skyworksinc.com). For additional information, please contact your local sales office or email us at [sales@skyworksinc.com](mailto:sales@skyworksinc.com).



### Innovation to Go™

Select products and sample/designer kits available for purchase online. [www.skyworksinc.com](http://www.skyworksinc.com)



Skyworks lead (Pb)-free products are compliant to all applicable materials legislation. For additional information, refer to *Skyworks Definition of Lead (Pb)-Free*, document number SQ04-0073. Tin/lead (SnPb) packaging is not recommended for new designs.



Skyworks Green™ products are compliant to all applicable materials legislation and are halogen-free. For additional information, refer to *Skyworks Definition of Green™*, document number SQ04-0074.



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BRO370-10A 9/10

# WiFi Product Overview

Skyworks' GaAs and silicon switches, power amplifiers, low noise amplifiers, PIN, Schottky and varactor diodes and other discrete components are market leaders. Our diverse portfolio of WiFi products enables high-performance RF solutions for all 802.11a,b,g,n applications. By leveraging integration and packaging capabilities, Skyworks also offers a product line of front-end module (FEM) solutions which help customers reduce total PCB footprint for mobile and portable applications by combining switches, filters, diplexers, power amplifiers, low noise amplifiers, power detectors and all biasing and matching circuitry into a single package. Our fully matched FEMs typically require minimal external components, resulting in industry-leading advantages in terms of size, cost, performance, yield and time-to-market.

For WiFi-enabled mobile and portable applications such as smartphones, e-book readers, tablets and netbooks, Skyworks offers products optimized for low-current, small form-factor, battery-operated applications.

For extended-range, high-performance access points, routers, gateways and home multimedia centers, Skyworks offers a portfolio of high-power amplifiers, switches and ultra low noise amplifiers, offering industry-leading performance.

## WiFi Mobile and Portable Applications

- 2.4 GHz solutions
  - 2.4 GHz front-end modules
  - 2.4 GHz SPDT and SP3T switches
  - 2.4 GHz ultra low noise amplifiers
  - 2.4 GHz receive modules
  - PIN diodes
- 5 GHz solutions
  - 5 GHz front-end modules
  - 5 GHz SPDT switches
  - 5 GHz ultra low noise amplifiers
  - 5 GHz receive modules
  - PIN diodes

## WiFi PC Applications

- Dual-band solutions
  - Dual-band front-end modules
  - SPDT and DPDT switches
  - 2.4 GHz and 5 GHz ultra low noise amplifiers
  - PIN diodes

## WiFi Access Point / Router / Gateway Applications

- SISO solutions
  - Power amplifiers
  - Switches
  - Ultra low noise amplifiers
  - PIN diodes
- MIMO solutions
  - Power amplifiers
  - Switches
  - Ultra low noise amplifiers
  - PIN diodes

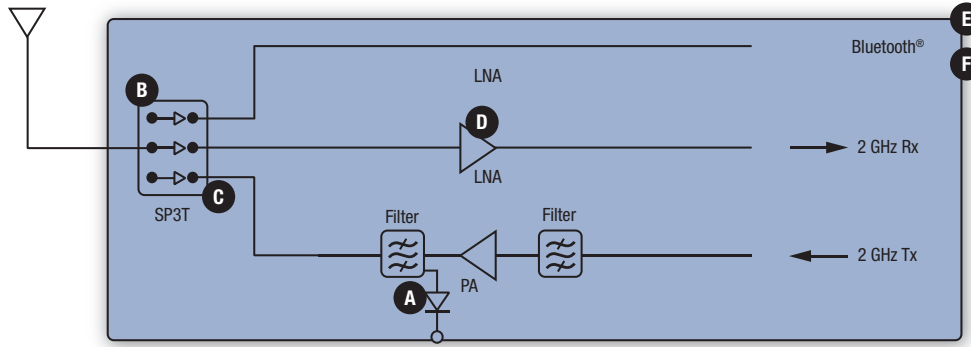
# Discrete and Integrated RF Solutions for Your WiFi / WiMAX Application Designs

Market	Front-End Module	Receive Front-End Module	Power Amplifier	Low Noise Amplifier	Switch	Diode
<b>WiFi</b>						
Mobile and Portable Applications						
2.4 GHz	•	•		•	•	•
5 GHz	•	•		•	•	•
PC Applications - Dual band	•			•	•	•
Access Point / Router / Gateway Applications						
SISO			•	•	•	•
MIMO			•	•	•	•
<b>WiMAX</b>						
Mobile Applications						
2.4 GHz				•	•	•
3.5 GHz				•	•	•
High-Power Fixed CPE Applications						
2.4 GHz			•	•	•	•
3.5 GHz			•	•	•	•

## BLOCK DIAGRAMS

### WiFi / Bluetooth®

Wireless LAN Front-End for 802.11b,g,n Single-Band Mobile and Portable Applications



#### Detectors

- A** DD02-999LF  
SMS7621-079LF  
SMS7630-061  
SMS7630-079LF  
SMS7621-040LF  
SMS7630-040LF

#### Switches

- B** SKY13309-370LF  
SKY13317-373LF

#### PIN Diodes

- C** SMP1340-079LF  
SMP1345-040LF  
SMP1345-518

#### Ultra Low Noise Amplifiers

- D** SKY65405  
SKY65047  
SKY65050

#### Front-End Module

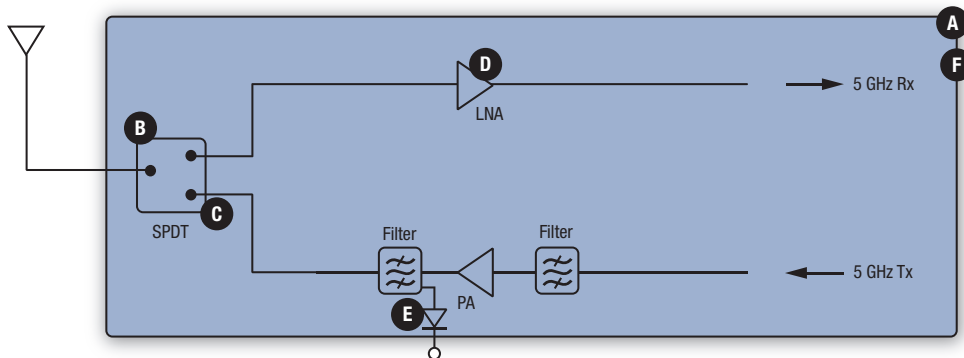
- E** SKY65298

#### Receive Module

- F** SKY65523

### WiFi

Wireless LAN Front-End for 802.11a,n Single-Band Mobile and Portable Applications



#### Front-End Modules

- A** SKY65550-11  
SKY65551

#### Receive Module

- F** SKY65507-11

#### Switches

- B** SKY13276-334  
SKY13351-378LF  
SKY13350-385LF  
AS225-313LF  
SKY13314-374LF  
SKY13335-381LF

#### PIN Diodes

- C** SMP1340-079LF  
SMP1345-040LF

#### Ultra Low Noise Amplifiers

- D** SKY13335-381LF  
SKY65404-21

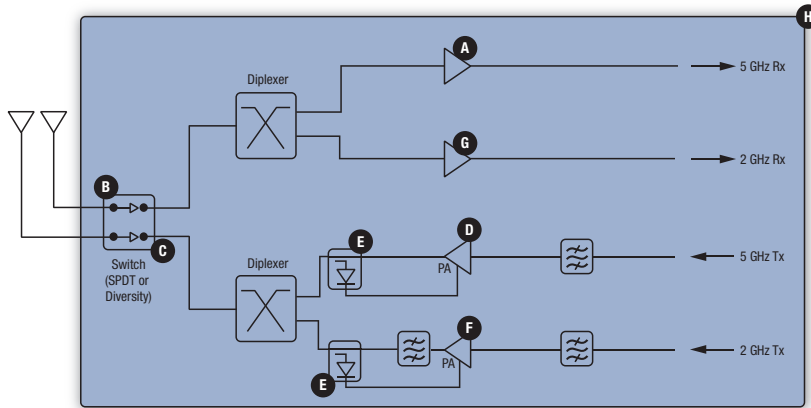
#### Detectors

- E** DD02-999LF  
SMS7621-079LF  
SMS7630-061  
SMS7630-079LF  
SMS7621-040LF  
SMS7630-040LF

# BLOCK DIAGRAMS

## WiFi

Wireless LAN Front-End for 802.11a,b,g,n Dual-Band Applications, Multiple Antenna Configurations



**Ultra Low Noise Amplifiers**

- A** SKY65404-21
- G** SKY65405-11  
SKY65047

**Switches**

- B** SKY13267-321LF  
SKY13276-334  
SKY13306-313LF  
SKY13314-374LF  
SKY13318-321LF  
SKY13335-381LF  
SKY13350-385LF  
SKY13351-378LF  
SKY13348-374LF

**PIN Diodes**

- C** SMP1340-079LF  
SMP1345-518  
SMP1345-040LF

**Power Amplifiers**

- D** SKY65132  
SKY65135  
SKY65165  
SKY65152  
SKY65006  
SKY65174

**F**

- SKY65137  
SKY65157  
SKY65168

**Detectors**

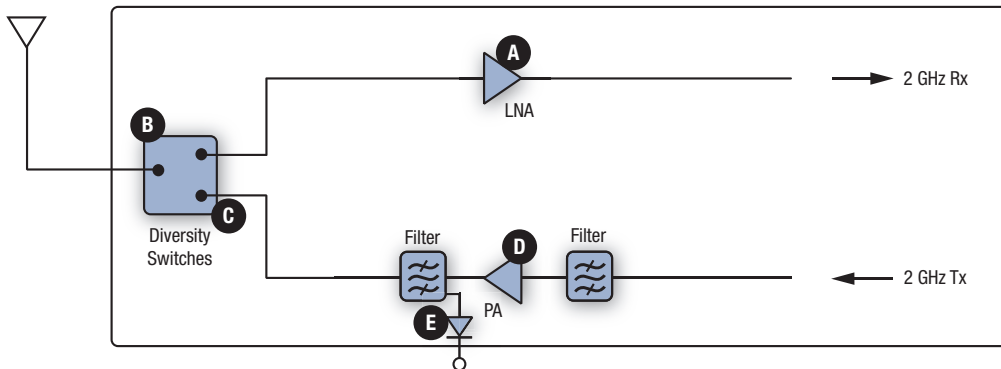
- E** DD02-999LF  
SMS7621-079LF  
SMS7621-060  
SMS7630-079LF  
SMS7630-061  
SMS7621-040LF  
SMS7630-040LF

**Front-End Modules**

- H** SKY65225  
SKY65249  
SKY65296  
SKY65510

## WiFi

Wireless LAN Front-End for 802.11b,g,n Single-Band Access Point Applications, Single Antenna Configurations



**Ultra Low Noise Amplifiers**

- A** SKY65405-11  
SKY65047

**Switches**

- B** SKY13268-344LF  
SKY13276-334  
SKY13306-313LF  
SKY13314-374LF  
SKY13323-378LF  
SKY13350-385LF  
SKY13351-378LF  
AS179-92LF  
SKY13348-374LF

**PIN Diodes**

- C** SMP1340-079LF  
SMP1345-040LF

**Power Amplifiers**

- D** SKY65006  
SKY65132  
SKY65135  
SKY65152  
SKY65165  
SKY65137  
SKY65157  
SKY65168  
SKY65174

**Detectors**

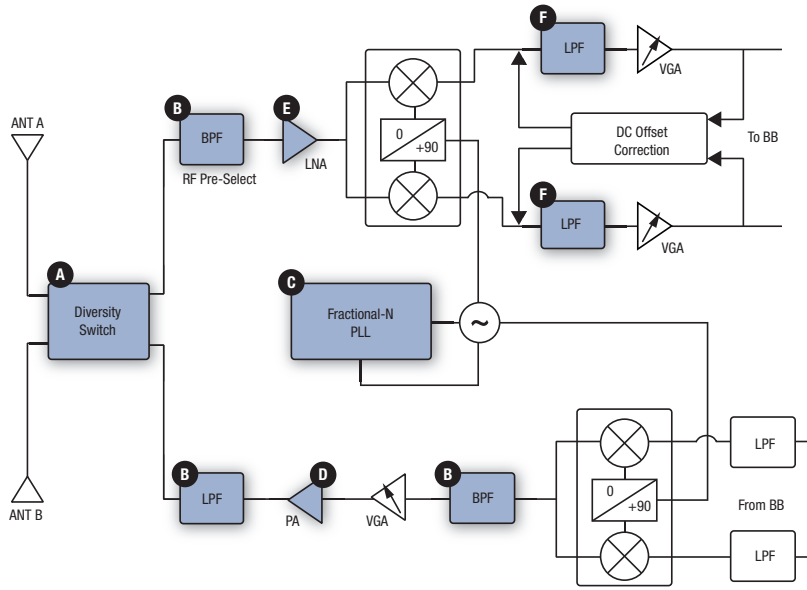
- E** DD02-999LF  
SMS7621-079LF  
SMS7630-061  
SMS7630-079LF  
SMS7621-040LF  
SMS7630-040LF



# BLOCK DIAGRAMS

## WiFi

### 5.8 GHz Direct Conversion Architecture



#### Switches

- A** SKY13306-313LF  
SKY13314-374LF  
SKY13351-378LF  
SKY13350-385LF

#### Filters

- B** Ceramic Band Pass Filter

#### Synthesizer

- C** SKY72302

#### Power Amplifiers

- D** SKY65013  
SKY65014  
SKY65015  
SKY65017  
SKY65137  
SKY65157

#### Low Noise Amplifier

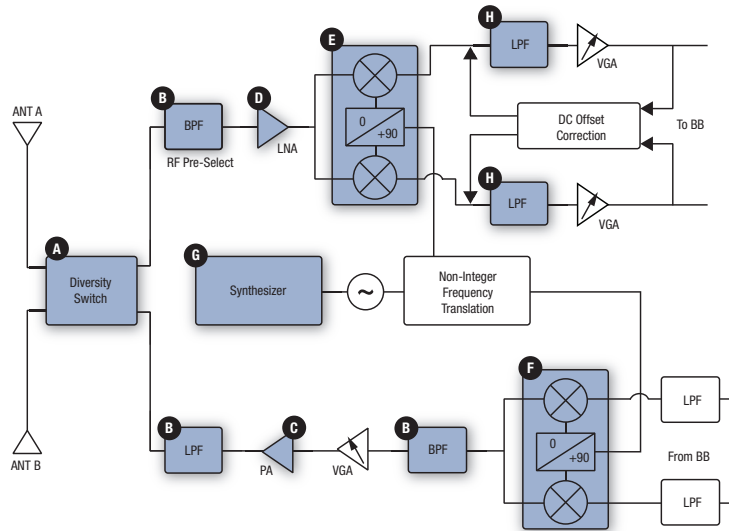
- E** SKY65404-21

#### Programmable Low Pass Filters

- F** SKY73201-364LF  
SKY73202-364LF

## WiFi and ISM-Band Applications

### 2.4 GHz Direct Conversion Architecture



#### Switches

- A** AS179-92LF  
AS218-321LF  
SKY13267-321LF  
SMP1340 Series  
SMP1345 Series  
SMP1320 Series  
SMP1352 Series  
SKY13314-374LF  
SKY13318-321LF

#### Filters

- B** Ceramic Band Pass Filter

#### Power Amplifiers

- C** SKY65013 SKY65131  
SKY65014 SKY65132  
SKY65015 SKY65135  
SKY65016 SKY65152  
SKY65017 SKY65162  
SKY65174 SKY65165

#### Low Noise Amplifiers

- D** SKY65405  
SKY65047

#### Demodulators

- E** SKY73009  
SKY73012

#### Modulator

- F** SKY73010

#### Synthesizers

- G** SKY72302  
SKY73101

#### Programmable Low Pass Filters

- H** SKY73201-364LF  
SKY73202-364LF



# WiMAX Product Overview

Skyworks Solutions offers a comprehensive portfolio of high-performance RF components for fixed and mobile WiMAX applications. These components are suitable for use in base stations, enterprise CPE, and low-cost mobile / portable subscriber equipment targeting the licensed WiMAX bands:

- 2.5 GHz
- 3.5 GHz

The portfolio includes key components within the radio chain such as:

- IQ modulators
- IQ demodulators
- Synthesizers
- Power amplifiers
- Drivers
- Switches
- Attenuators
- Ultra low noise amplifiers
- Diodes

## WiMAX Mobile Applications

- 2.4 GHz solutions
  - Switches
  - Ultra low noise amplifiers
  - PIN diodes
- 3.5 GHz solutions
  - Switches
  - Ultra low noise amplifiers
  - PIN diodes

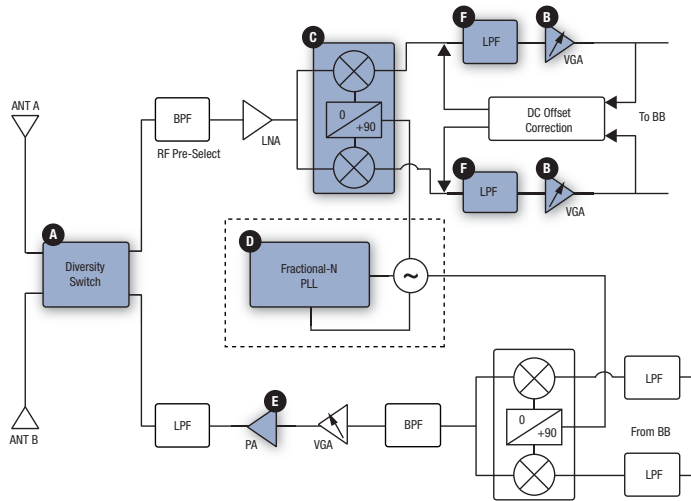
## WiMAX High-Power Fixed CPE Applications

- 2.4 GHz solutions
  - Power amplifiers
  - Switches
  - Ultra low noise amplifiers
  - PIN diodes
- 3.5 GHz solutions
  - Power amplifiers
  - Switches
  - Ultra low noise amplifiers
  - PIN diodes

# BLOCK DIAGRAMS

## WiMAX

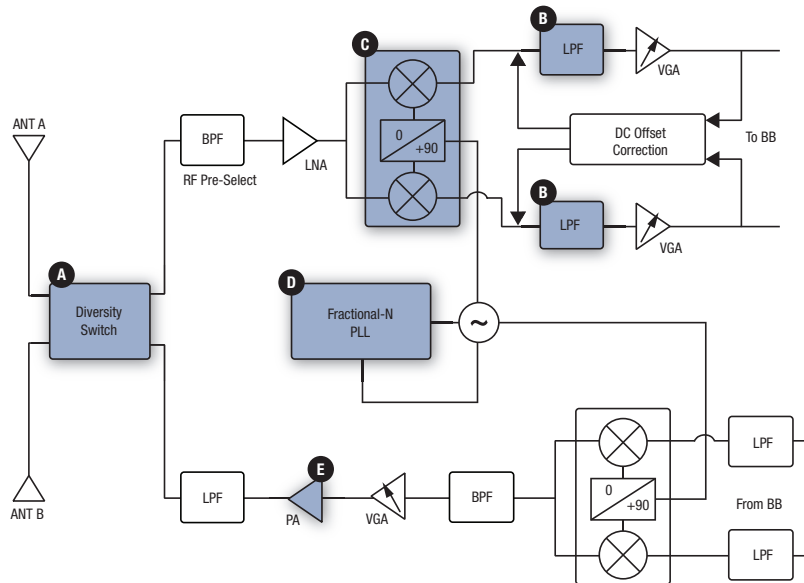
### 2.5 GHz Direct Conversion Architecture



- |   |                               |                     |                               |   |   |
|---|-------------------------------|---------------------|-------------------------------|---|---|
| <b>Switches</b>   | <b>Low Noise Amplifiers</b>   | <b>Demodulators</b> | <b>Synthesizers</b>           | <b>Power Amplifiers</b>   | <b>Programmable Low Pass Filters</b>      |
| <b>A</b> SKY13267-321LF<br>SMP1340 Series<br>SMP1345 Series<br>SMP1320 Series<br>SMP1352 Series<br>SKY13318-321LF<br>SKY13348-374LF<br>SKY13320-374LF<br>SKY13321-360LF<br>SKY13290-313LF<br>SKY13306-313LF | <b>B</b> SKY65047<br>SKY65081 | <b>C</b> SKY73012   | <b>D</b> SKY72302<br>SKY73134 | <b>E</b> SKY65013<br>SKY65014<br>SKY65015<br>SKY65017<br>SKY65081<br>SKY65162<br>SKY65028<br>SKY65005 | <b>F</b> SKY73201-364LF<br>SKY73202-364LF |

## WiMAX

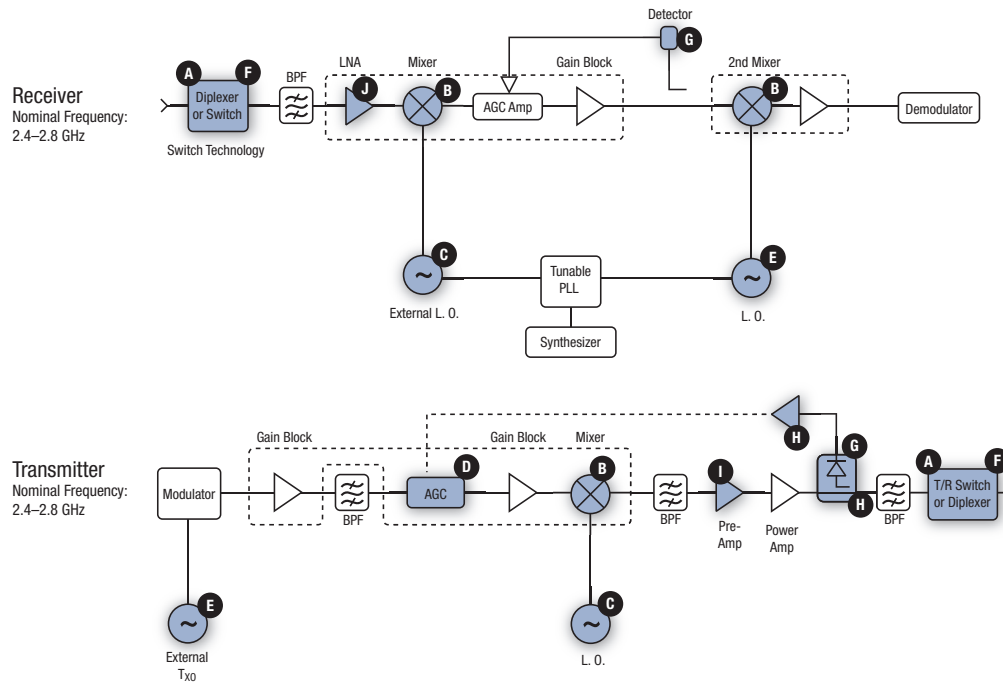
### 3.5 GHz Direct Conversion Architecture



- |  |   |                     |                               |   |
|--|---|---------------------|-------------------------------|---|
| <b>Switches</b>  | <b>Programmable Low Pass Filters</b>      | <b>Demodulators</b> | <b>Synthesizer</b>            | <b>Power Amplifiers</b>                               |
| <b>A</b> AS179-92LF<br>AS218-321LF<br>SKY13267-321LF<br>SMP1340 Series<br>SMP1345 Series<br>SMP1320 Series<br>SMP1352 Series<br>SKY13314-314LF<br>SKY13348-374LF | <b>B</b> SKY73201-364LF<br>SKY73202-364LF | <b>C</b> SKY73012   | <b>D</b> SKY72302<br>SKY73134 | <b>E</b> SKY65013<br>SKY65014<br>SKY65015<br>SKY65017 |

# BLOCK DIAGRAMS

WiMAX  
MMDS Link



## PIN Diodes/Switches

- A** AS191-73LF
- SKY13276-334
- SMP1340-079LF

## Mixers

- B** SMS3926-023LF
- SKY73025
- SKY73035
- SKY73032
- SKY42068
- SKY73048

## Amplifiers

- D** SMP1302 Series

## Diodes

- H** SMS7621 Series

## Varactor Diodes/Oscillators

- C** SMV1763-079LF
- SKY73134

- E** SMV1213-079LF
- SKY73134

## Ceramic Diplexer

- F** Ceramic Diplexer

## Directional Detector

- G** DD02-999LF

## Amplifiers

- I** SKY65013
- SKY65014
- SKY65015
- SKY65016
- SKY65017
- SKY65081
- SKY65028
- SKY65162

## Programmable Low Pass Filter

- J** SKY65081

# Product Specifications

The following pages include a listing of Skyworks' WLAN product specifications by product type.

## AMPLIFIERS

### Power Amplifiers for WiFi and ISM

Part Number	Frequency Range (GHz)	Test Frequency (GHz)	Gain Typ. (dB)	OIP3 (dBm)	P <sub>1dB</sub> (dBm)	PAE (%)	V <sub>CC</sub> (V)	Quiescent Current Typ. (mA)	Noise Figure Typ. (dB)	Package (mm)
SKY65006-348LF	2.4–2.5	2.45	27.0	–	24.0	29	3.3	53	–	16-pin QFN 3 x 3
SKY65008	0.25–2.7	2.45	18.5	33	20.0	–	3.3 or 5	76	–	3-pin MCM 4 x 4
SKY65111-348LF	0.6–1.1	0.915	40.0	36	29.5	50	3.5	250	6.5	16-pin QFN 3 x 3
SKY65116	0.39–0.50	0.445	35.0	43	32.5	42	3.6	330	6.0	12-pin MCM 8 x 8
SKY65131	2.4–2.5	2.442	26.0	–	28.0	38	3.3	150	–	16-pin MCM 4 x 4
SKY65132	2.4–2.5	2.442	33.0	–	30.0	29	3.3	330	–	20-pin MCM 6 x 6
SKY65135-21	2.4–2.5	2.442	33.5	44	33.5	36	5.0	405	5.0	20-pin MCM 6 x 6
SKY65135-31	2.4–2.5	2.442	32.0	–	32.5	–	5.0	465	5.0	20-pin MCM 6 x 6
SKY65146-21	0.806–0.849	0.815	38.7	37	35.6	51	3.5	329	–	28-pin MCM 10 x 14
SKY65152-11	2.4–2.5	2.442	32.0	42	33.0	33	5.0	490	5.0	20-pin MCM 6 x 6
SKY65137-11	4.9–5.9	5.75	26.0	–	32.0	29	5.0	420	6.0	20-pin MCM 6 x 6
SKY65505	2.5–2.7	2.60	34.0	–	34.0	–	–	26.5	7.0	10-pin MCM 4 x 4
SKY65165-11	2.4–2.5	2.442	32.5	–	31.0	–	5.0	220	5.0	16-pin QFN 3 x 3
SKY65168-11	5.0–5.9	5.250	26.3	–	27.0	–	5.0	245	–	16-pin QFN 3 x 3
SKY65157-11	4.9–5.9	5.75	25.0	–	31.0	29	5.0	400	–	24-pin MCM 4 x 4
SKY65174	2.4–2.5	2.45	35.0	–	34.0	–	3.3 or 5	285	–	10-pin MCM 4 x 4

### Low Noise Amplifiers (LNAs) for WiFi / ISM / WiMAX

Part Number	Frequency Range (GHz)	Test Frequency (GHz)	Gain Typ. (dB)	V <sub>DD</sub> (V)	Supply Current Typ. (mA)	Noise Figure Typ. (dB)	Package (mm)
SKY65404-21	4.9–5.9	5.4	13	2.8–5.0	–	1	6-pin QFN 1.5 x 1.5
SKY65405-11	2.4–2.5	2.45	14	2.8–5.0	12	1	6-pin QFN 1.5 x 1.5

## AMPLIFIERS

### Receive Module for WiFi / ISM / WiMAX


Part Number	Frequency Range (GHz)	Test Frequency (GHz)	Rx Gain (dB)	Rx NF (dB)	Rx OIP3 (dB)	Tx IL (dB)	Tx P <sub>1dB</sub>	V <sub>CC</sub> (V)	Current Typ. (mA)	Package (mm)
SKY65507-11	4.9–5.9	5.4	13	2	20	0.8	31	2.8–5	12	8-pin QFN 2 x 2
SKY65523	2.4–2.5	2.45	12	1.8	11	0.7	29	2.8–5	7	12-pin QFN 1.6 x 1.6

## Wireless Infrastructure Power Amplifiers

### High Gain Linear PA Modules






Part Number	Frequency Range (GHz)	Gain Typ. (dB)	OIP3 (dBm)	P <sub>1dB</sub> (dBm)	V <sub>CC</sub> (V)	Quiescent Current Typ. (mA)	Noise Figure Typ. (dB)	Package (mm)
SKY65124	1.930–1.990	24.0	45.0	33.0	5	550	6.3	20-pin MCM 6 x 6

### Ultralinear PA Drivers

Part Number	Frequency Range (GHz)	Test Frequency (GHz)	Gain Typ. (dB)	OIP3 (dBm)	OP <sub>1dB</sub> (dBm)	V <sub>CC</sub> (V)	Quiescent Current Typ. (mA)	Supply Current Typ. (mA)	Noise Figure Typ. (dB)	Package (mm)
 SKY65028-70LF	0.25–2.7	1.96	16.0	42.0	25.0	3.3 or 5	125	–	5.5	4-pin SOT-89 2.4 x 4.5
SKY65081-70LF	2.0–3.0	2.60	14.3	43.9	22.3	5	55	75	2.0	4-pin SOT-89 2.4 x 4.5
SKY65162-70LF	0.4–2.7	0.915 1.960 2.400 2.600	20.0 15.0 13.2 12.5	46.5 47.0 43.6 44.3	28.5 28.3 28.2 28.8	5 5 5 5	180 179 182 180	400 400 400 400	3.9 3.8 3.6 5.4	4-pin SOT-89 2.4 x 4.5

# AMPLIFIERS

## General-Purpose Amplifiers


Part Number	Frequency Range (GHz)	Test Frequency (GHz)	Gain Typ. (dB)	OIP3 (dBm)	P <sub>1dB</sub> (dBm)	Quiescent Current Typ. (mA)	Noise Figure Typ. (dB)	Package (mm)
 SKY65013-70LF	LF-7	2	12.5	29	12.5	40	5.5	4-pin SOT-89 2.4 x 4.5
SKY65013-92LF	LF-12	2	12.5	29	12.5	40	5.8	6-pin SC-88 2.1 x 2.0
 SKY65014-70LF	LF-6	2	16.0	36	18.0	70	4.8	4-pin SOT-89 2.4 x 4.5
SKY65014-92LF	LF-9	2	15.0	36	18.0	70	5.4	6-pin SC-88 2.1 x 2.0
 SKY65015-70LF	LF-6	2	18.0	35	17.0	70	4.2	4-pin SOT-89 2.4 x 4.5
SKY65015-92LF	LF-6	2	18.0	35	18.0	70	4.8	6-pin SC-88 2.1 x 2.0
 SKY65016-70LF	LF-3	2	20.0	27	14.0	40	4.8	4-pin SOT-89 2.4 x 4.5
SKY65016-92LF	LF-3	2	20.0	27	14.0	40	5.4	6-pin SC-88 2.1 x 2.0
 SKY65017-70LF	LF-6	2	20.0	35	20.0	100	4.5	4-pin SOT-89 2.4 x 4.5

## Low Noise Amplifiers (LNAs) and Discretes

### Low Noise Amplifiers

Part Number	Frequency Range (GHz)	Test Frequency (GHz)	Gain Typ. (dB)	V <sub>DD</sub> (V)	Supply Current Typ. (mA)	Noise Figure Typ. (dB)	Package (mm)
SKY65047-360LF	0.40–3.0	–	16.5 dB @ 1575 MHz	4	–	0.75	8-pin QFN 2 x 2
SKY65404-21	4.90–5.9	5.400	13.0	2.8–5.0	–	1.00	6-pin QFN 1.5 x 1.5
SKY65405-11	2.40–2.5	2.450	14.0	2.8–5.0	12	1.00	6-pin QFN 1.5 x 1.5

### Low Noise Discrete Transistors

Part Number	Frequency Range (GHz)	Test Frequency (GHz)	Gain Typ. (dB)	OIP3 Typ. (dBm)	P <sub>1dB</sub> (dBm)	V <sub>OC</sub> (V)	NF (dB) <sup>(1)</sup>	Quiescent Current Typ. (mA)	Package (mm)
 SKY65050-372LF	0.45–6	2.4	15.5	23.5	10.5	3	0.65	20	4-pin SC-70 2.2 x 1.35

## DETECTORS

### Directional Detectors










Part Number	Frequency (GHz)	Insertion Loss (dB) Typ.	Directivity (dB)	Input VSWR Typ.	Output VSWR Typ.	Directed Output Voltage (dBm)	Package (mm)
DD02-999LF	0.65–3.0	0.2	2	1.1:1	1.1:1	80 mV @ 900 MHz 160 mV @ 1800 MHz	SC-88 2.1 x 2.0 x 0.95

## PIN DIODES

### Plastic Surface Mount (SMT) PIN Diodes—Low Frequency to 6 GHz

Part Number	Min. $V_B$ $I_r = 10 \mu\text{A}$ (V)	Max. $C_T$ $V_R = 30 \text{ V}$ $F = 1 \text{ MHz}$ (pF)	Typ. $V_F$ @ $I_F = 10 \text{ mA}$ (V)	Typ. $R_S$ $I_F = 1 \text{ mA}$ $F = 100 \text{ MHz}$ ( $\Omega$ )	Max. $R_S$ $I_F = 10 \text{ mA}$ $F = 100 \text{ MHz}$ ( $\Omega$ )	Typ. $T_L$ $I_F = 10 \text{ mA}$ (ns)	Nominal I-Region Thickness ( $\mu\text{m}$ )
SMP1320 Series	50	0.3	0.85	2	0.9	400	8










### Packaging Options

								
<b>Single SOT-23 Green™</b>	<b>Common Anode SOT-23 Green™</b>	<b>Common Cathode SOT-23 Green™</b>	<b>Series Pair SOT-23 Green™</b>	<b>Low Inductance SOT-23 Green™</b>	<b>Single SOD-323 Green™</b>	<b>Ultralow Inductance SOT-143</b>	<b>Single SC-79 Green™</b>	<b>Single 0402 Green™</b>
SMP1320-001LF Marking: RL1	SMP1320-003LF Marking: RL9	SMP1320-004LF Marking: RL3	SMP1320-005LF Marking: RL2	SMP1320-007LF Marking: RLB	SMP1320-011LF Marking: RL	SMP1320-017LF Marking: RLF	SMP1320-079LF Marking: Cathode	SMP1320-040LF Marking: N
		<b>SC-70</b>	<b>SC-70</b>	<b>SC-70</b>				
		SMP1320-074LF Marking: RL3	SMP1320-075LF Marking: RL2	SMP1320-077LF Marking: RL8				

### Low Capacitance Switching PIN Diodes

Part Number	Min. $V_B$ $I_r = 10 \mu\text{A}$ (V)	Max. $C_T$ $V_R = 30 \text{ V}$ $F = 1 \text{ MHz}$ (pF)	Typ. $V_F$ @ $I_F = 10 \text{ mA}$ (V)	Typ. $R_S$ $I_F = 1 \text{ mA}$ $F = 100 \text{ MHz}$ ( $\Omega$ )	Max. $R_S$ $I_F = 10 \text{ mA}$ $F = 100 \text{ MHz}$ ( $\Omega$ )	Typ. $T_L$ $I_F = 10 \text{ mA}$ (ns)	Nominal I-Region Thickness ( $\mu\text{m}$ )
SMP1321 Series	100	0.25	0.85	3	2	400	15

### Packaging Options

								
<b>Single SOT-23 Green™</b>	<b>Common Anode SOT-23 Green™</b>	<b>Common Cathode SOT-23 Green™</b>	<b>Series Pair SOT-23 Green™</b>	<b>Low Inductance SOT-23 Green™</b>	<b>Single SOD-323 Green™</b>	<b>Single SC-79 Green™</b>	<b>Antiparallel LGA Green™</b>	<b>Single 0402 Green™</b>
SMP1321-001LF Marking: RM1	SMP1321-003LF Marking: RM9	SMP1321-004LF Marking: RM3	SMP1321-005LF Marking: RM2	SMP1321-007LF Marking: RMB	SMP1321-011LF Marking: RM	SMP1321-079LF Marking: Cathode	SMP1321-508 Marking: H	SMP1321-040LF Marking: C
		<b>SC-70</b>	<b>SC-70</b>	<b>SC-70</b>				
		SMP1321-073LF Marking: RM9	SMP1321-074LF Marking: RM3	SMP1321-075LF Marking: RM2				











## PIN DIODES

### Low Capacitance, Fast Switching PIN Diodes

Part Number	Min. $V_B$ $I_R = 10 \mu A$ (V)	Max. $C_T$ $V_R = 5 V$ $F = 1 MHz$ (pF)	Typ. $V_F$ @ $I_F = 10 mA$ (V)	Typ. $R_S$ $I_F = 1 mA$ $F = 100 MHz$ ( $\Omega$ )	Max. $R_S$ $I_F = 10 mA$ $F = 100 MHz$ ( $\Omega$ )	Typ. $T_L$ $I_F = 10 mA$ (ns)	Nominal I-Region Thickness ( $\mu m$ )
SMP1340 Series	50	0.3	0.88	1.7	1.2	100	7







### Packaging Options

							
<b>Common Anode SOT-23 Green™</b>	<b>Common Cathode SOT-23 Green™</b>	<b>Series Pair SOT-23 Green™</b>	<b>Low Inductance SOT-23 Green™</b>	<b>Single SOD-323 Green™</b>	<b>Single SC-79 Green™</b>	<b>LGA Green™</b>	<b>Single 0402 Green™</b>
SMP1340-003LF Marking: RS9	SMP1340-004LF Marking: RS3	SMP1340-005LF Marking: RS2	SMP1340-007LF Marking: RSB	SMP1340-011LF Marking: RS	SMP1340-079LF Marking: Cathode	SMP1340-508 Marking: X	SMP1340-040LF Marking: D
	<b>SC-70</b> SMP1340-074LF Marking: RS3	<b>SC-70</b> SMP1340-075LF Marking: RS2					

### Lowest Capacitance Switching PIN Diodes for High Isolation

Part Number	Min. $V_B$ $I_R = 10 \mu A$ (V)	Max. $C_T$ $V_R = 20 V$ $F = 1 MHz$ (pF)	Typ. $V_F$ @ $I_F = 10 mA$ (V)	Typ. $R_S$ $I_F = 1 mA$ $F = 100 MHz$ ( $\Omega$ )	Max. $R_S$ $I_F = 10 mA$ $F = 100 MHz$ ( $\Omega$ )	Typ. $T_L$ $I_F = 10 mA$ (ns)	Nominal I-Region Thickness ( $\mu m$ )
SMP1345 Series	50	0.2	0.89	3.5	2	100	10

### Packaging Options




					
<b>Common Anode SOT-23 Green™</b>	<b>Common Cathode SOT-23 Green™</b>	<b>Series Pair SOT-23 Green™</b>	<b>Single SC-79 Green™</b>	<b>Ring LGA Green™</b>	<b>Single 0402 Green™</b>
SMP1345-003LF Marking: RU9	SMP1345-004LF Marking: RU3	SMP1345-005LF Marking: RU2	SMP1345-079LF Marking: Cathode	SMP1345-518 Marking: 0	SMP1345-040LF Marking: U
	<b>SC-70</b> SMP1345-075LF Marking: RU2				

## PIN DIODES

### Large Signal Switching PIN Diodes

Part Number	Min. $V_B$ $I_R = 10 \mu\text{A}$ (V)	Max. $C_T$ $V_R = 20 \text{ V}$ $F = 1 \text{ MHz}$ (pF)	Typ. $V_F$ @ $I_F = 10 \text{ mA}$ (V)	Max. $R_S$ $I_F = 1 \text{ mA}$ $F = 100 \text{ MHz}$ ( $\Omega$ )	Max. $R_S$ $I_F = 10 \text{ mA}$ $F = 100 \text{ MHz}$ ( $\Omega$ )	Typ. $T_L$ $I_F = 10 \text{ mA}$ (ns)	Nominal I-Region Thickness ( $\mu\text{m}$ )
SMP1352 Series	200	0.35	0.8	15	2.8	1000	50

### Packaging Options






		
<b>Single SOD-323</b> <i>Green™</i>	<b>Single SC-79</b> <i>Green™</i>	<b>Single 0402</b> <i>Green™</i>
SMP1352-011LF Marking: RR	SMP1352-079LF Marking: Cathode	SMP1352-040LF Marking: S






### Attenuator PIN Diodes

#### Plastic Surface Mount (SMT) PIN Diodes—Low Frequency to 6 GHz

Part Number	Min. $V_B$ $I_R = 10 \mu\text{A}$ (V)	Max. $C_T$ $V_R = 30 \text{ V}$ $F = 1 \text{ MHz}$ (pF)	Typ. $V_F$ @ $I_F = 10 \text{ mA}$ (V)	Max. $R_S$ $I_F = 1 \text{ mA}$ $F = 100 \text{ MHz}$ ( $\Omega$ )	Max. $R_S$ $I_F = 10 \text{ mA}$ $F = 100 \text{ MHz}$ ( $\Omega$ )	Max. $R_S$ $I_F = 100 \text{ mA}$ $F = 100 \text{ MHz}$ ( $\Omega$ )	Typ. $T_L$ $I_F = 10 \text{ mA}$ (ns)	Nominal I-Region Thickness ( $\mu\text{m}$ )
SMP1302 Series	200	0.3	0.8	20	3	1.5	700	50

### Packaging Options

				
<b>Single SOT-23</b> <i>Green™</i>	<b>Common Anode SOT-23</b> <i>Green™</i>	<b>Common Cathode SOT-23</b> <i>Green™</i>	<b>Series Pair SOT-23</b> <i>Green™</i>	<b>Reverse Series Pair SOT-23</b> <i>Green™</i>
SMP1302-001LF Marking: RF1	SMP1302-003LF Marking: RF9	SMP1302-004LF Marking: RF3	SMP1302-005LF Marking: RF2	SMP1302-006LF Marking: RF8
		<b>SC-70</b>	<b>SC-70</b>	
		SMP1302-074LF Marking: RF3	SMP1302-075LF Marking: RF2	

				
<b>Single SOD-323</b> <i>Green™</i>	<b>Ultralow Inductance SOT-143</b>	<b>PI SOT-5</b>	<b>Single SC-79</b> <i>Green™</i>	<b>Single QFN 2 x 2</b> <i>Green™</i>
SMP1302-011LF Marking: RF	SMP1302-017LF Marking: RFF	SMP1302-027LF Marking: RFM	SMP1302-079LF Marking: Cathode	SMP1302-085LF Marking: RF1

## SCHOTTKY DIODES










### Schottky Diodes—Designed for High-Performance, High-Volume and Cost-Sensitive Mixer and Detector Applications

#### Plastic Surface Mount (SMT) Schottky Diodes—Low Frequency to 24 GHz

Part Number	Min. $V_B$ $I_R = 10 \mu\text{A}$ (V)	Typ. $I_R$ $V_R = 1 \text{ V}$ (nA)	Max. $V_F$ $I_F = 1 \text{ mA}$ (mV)	Max. $C_T$ $V_R = 0 \text{ V}$ (pF)	Max. $R_T$ $I_F = 10 \text{ mA}$ ( $\Omega$ )
SMS1546-005LF	2	300	270	0.63	8
SMS7621 Series	2	80	320	0.25	18

Delta  $V_F$  for pairs and quads is 10 mV maximum at 1 mA.  
Breakdown voltage and reverse leakage cannot be measured directly on ring configurations.

#### Packaging Options









								
Single SC-79 <i>Green™</i>	Single SOT-23 <i>Green™</i>	Common Cathode SOT-23 <i>Green™</i>	Series Pair SOT-23 <i>Green™</i>	Reverse Series Pair SOT-23 <i>Green™</i>	Unconnected Pair SOT-143	Dual Series Pair SC-88	Unconnected Pair LGA <i>Green™</i>	Single 0402 <i>Green™</i>
			SMS1546-005LF Marking: SG2					
SMS7621-079LF Marking: Cathode	SMS7621-001LF Marking: XH1		SMS7621-005LF Marking: XH2	SMS7621-006LF Marking: XH8	SMS7621-015LF Marking: XH7	SMS7621-081LF Marking: XHQ	SMS7621-517 Marking: H	SMS7621-040LF Marking: E
		SC-70	SC-70					
		SMS7621-074LF Marking: XH3	SMS7621-075LF Marking: XH2					

#### Plastic Surface Mount (SMT) Schottky Diodes—Low Frequency to 24 GHz

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

$V_B$  is measured at 100  $\mu\text{A}$  (avalanche breakdown is typically 6 V).  
Delta  $V_F$  for pairs and quads is 10 mV maximum at 1 mA.  
Breakdown voltage and reverse leakage cannot be measured directly on ring configurations.

#### Packaging Options

							
Single SC-79 <i>Green™</i>	Single SOT-323 <i>Green™</i>	Single SOT-23 <i>Green™</i>	Series Pair SOT-23 <i>Green™</i>	Reverse Series Pair SOT-23 <i>Green™</i>	Reverse Unconnected Pair SOT-143	Unconnected Pair LGA <i>Green™</i>	Single 0402 <i>Green™</i>
SMS7630-079LF Marking: Anode	SMS7630-011LF Marking: XD	SMS7630-001LF Marking: XD1	SMS7630-005LF Marking: XD2	SMS7630-006LF Marking: XD8	SMS7630-020LF Marking: XD0	SMS7630-517 Marking: D	SMS7630-040LF Marking: P






# SCHOTTKY DIODES

## Silicon Schottky Mixer Quads—Low Frequency to 12 GHz

Part Number	Min. $V_B$ $I_r = 10 \mu A$ (V)	Typ. $I_R$ $V_R = 1 V$ (nA)	Max. $V_F$ $I_F = 1 mA$ (mV)	Max. $C_T$ $V_R = 0 V$ (pF)	Max. $R_T$ $I_F = 10 mA$ ( $\Omega$ )
SMS3926 Series / SMS3929-021LF	2	300	270	0.5	8
SMS3927 Series / SMS3930-021LF	2	50	370	0.5	8
SMS3928-023LF / SMS3931-021LF	4	5	580	0.5	8
SMS3940-026LF*	8	10	1160	0.3	16

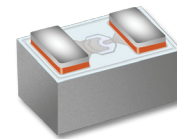
\* SMS3940-026 and DMJ3952-020 consist of two diodes in series in each leg.  
Delta  $V_F$  for pairs and quads is 10 mV maximum at 1 mA.  
Breakdown voltage and reverse leakage can not be measured directly on ring configurations.

## Packaging Options



				
Ring Quad SOT-143	Crossover Quad SOT-143	Bridge Quad SOT-143	Octoquad SOT-143	Crossover Octoquad SOT-143
SMS3926-022LF Marking: XE4	SMS3926-023LF Marking: XE5	SMS3929-021LF Marking: XQE		
	SMS3927-023LF Marking: XJ5	SMS3930-021LF Marking: XRE		
	SMS3928-023LF Marking: XK5	SMS3931-021LF Marking: XSE	SMS3940-026LF Marking: XTG	SMS3940-029LF Marking: XTN

## NEW! 0201 Surface Mount Device Package

### Surface Mount Silicon Schottky Mixer and Detector Diodes— Low Frequency to 100 GHz



0.60 x 0.30 x 0.27 mm






Part Number	Min. $V_B$ @ 10 $\mu A$ (V)	Max. $C_T$ @ 0 V (pF)	Typ. $C_T$ @ 0.15 V (pF)	$V_F$ @ 0.1 mA (mV)	$V_F$ @ 1.0 mA (mV)	Series Resistance ( $\Omega$ )	Video Resistance @ 0 V ( $\Omega$ )	Package
 SMS7621-060	2	0.18	—	—	260–320	12	—	0201
 SMS7630-061	1	—	0.3	60–120	135–240	—	3000–7000	0201

# VARACTOR DIODES

## Large Bandwidth Silicon Hyperabrupt Varactor Diodes




Part Number	Min. $V_R$ $I_R = 10 \mu A$ (V)	Typ. $C_T$ $V_R = 1 V$ (pF)	Typ. $C_T$ $V_R = 4 V$ (pF)	Typ. $C_T$ $V_R = 8 V$ (pF)	Min. $C_T$ (Ratio)	Capacitance Ratio Range (V)	Max. $R_s$ ( $\Omega$ )
SMV1211 Series	12	98.6	19.4	10.5	5	1 to 4	0.4
SMV1212 Series	12	44.9	9.3	5.1	5	1 to 4	0.8
SMV1213 Series	12	18.1	3.5	1.9	5	1 to 4	1.4
SMV1214 Series	12	15.6	2.9	1.7	5	1 to 4	1.7
SMV1215 Series	12	9.1	1.9	1.2	5	1 to 4	2.8
SMV1263 Series	20	5.11	1.54	–	2.3	0.5 to 2.5	1.2
SMV1269 Series	10	16.20	3.90	–	2.5	0.5 to 2.5	0.8
SMV1270-079LF	20	17.81	5.00	–	2.3	0.5 to 2.5	0.7
SMV1705 Series	12	18.30	6.10	–	2.8	1 to 4	0.32
SMV1763-079LF	10	5.20	1.90	–	2.3	0.5 to 2.5	0.7
SMV1770-079LF	12	17.80	5.50	–	2.3	0.5 to 2.5	0.5
SMV1771-079LF	12	22.90	6.90	–	2.3	0.5 to 2.5	0.5

### Packaging Options

				
Single SOT-23 <i>Green™</i>	Common Anode SOT-23 <i>Green™</i>	Common Cathode SC-70 <i>Green™</i>	Single SOD-323 <i>Green™</i>	Single SC-79 <i>Green™</i>
SMV1211-001LF Marking: EA1				
SMV1212-001LF Marking: EB1	SMV1212-004LF Marking: EB3	SMV1212-074LF Marking: EB3		SMV1212-079LF Marking: Cathode
SMV1213-001LF Marking: D86	SMV1213-004LF Marking: GD3	SMV1213-074LF Marking: GD3	SMV1213-011LF Marking: GD	SMV1213-079LF Marking: Cathode
SMV1214-001LF Marking: DL1				
SMV1215-001LF Marking: DM1			SMV1215-011LF Marking: DM	

## VARACTOR DIODES

### Packaging Options

		
<b>Common Cathode SOT-23 Green™</b>	<b>Common Cathode SC-70 Green™</b>	<b>Single SC-79 Green™</b>
	SMV1263-074LF Marking: EN3	SMV1263-079LF Marking: Cathode
	SMV1269-074LF Marking: EE3	
		SMV1270-079LF Marking: Cathode
SMV1705-004LF Marking: HY3	SMV1705-074LF Marking: HY3	SMV1705-079LF Marking: Cathode
		SMV1763-079LF Marking: Cathode
		SMV1770-079LF Marking: Cathode
		SMV1771-079LF Marking: Cathode

## FILTERS

### Programmable Filters

Part Number	Lowest Cutoff Frequency (MHz)	Highest Cutoff Frequency (MHz)	Program Method	Corner Accuracy (%)	Max. Pass Band Ripple (dB)	Max. Group Delay Variation (ns)	Gain (dBv)	Supply Current (mA)	Supply Voltage (V)	Package (mm)
SKY73201-364LF	1	28	SPI	1	0.5	35	0 or 6	32	3.3	QFN 32L 5 x 5
SKY73202-364LF	1	28	SPI	1	0.5	35	0 or 6	60	3.3	QFN 32L 5 x 5

## FRONT-END MODULES

### WiFi / WiMAX Front-End Modules

Part Number	Frequency (GHz)	802.11 WLAN Standard	Antenna Ports	Architecture	Typ. Current @ $V_{cc} = 3.3$ V (mA)	Typ. $P_{OUT}$ @ 2.5% EVM (dBm)	Typ. Tx Gain (dB)	Package (mm)
SKY65206-13	2.4–2.5	g b	2	One Single-Band Tx / Rx Chain	230 170	– 16.4	27 –	Laminate 8 x 7 x 1.4
SKY65225-11	2.4–2.5 4.9–5.85	b,g,n a,n	2	Two Full Dual-Band Tx / Rx Chains	190 180	19.0 16.0	24 25	MCM 10 x 14 x 0.9
SKY65249-11	2.4–2.5	b g	2	One Single-Band Tx / Rx Chain	210 180	21.0 18.0	26 26	Laminate 4 x 4 x 0.9
SKY65296-11	2.4–2.5	b g	2	One Single-Band Tx / Rx Chain	210 180	21.0 18.0	26 26	Laminate 4 x 4 x 0.9
SKY65298-11	2.4–2.5	b g	1	One Single-Band Tx / Rx Chain	170 175	20.5 16.0	31 13	16-pin 3 x 3 x 0.6
SKY65550-11	4.9–5.9	a n	1	One Single-Band Tx / Rx Chain	170 –	15.5 –	28 –	MCM 10-pin 3 x 3 x 0.9
SKY65551-11	4.9–5.9	a,n	1	One Single-Band Tx / Rx Chain	190	18	26	MCM 16-pin 3 x 3 x 0.6

## MIXERS / DEMODULATOR / MODULATORS

### Front-End Modules for ISM / ZigBee® / 802.15.4

Part Number	RF Frequency (MHz)	Typ. Rx Insertion Loss (dB)	Typ. Rx Gain (dB)	Typ. Rx NF (dB)	Tx Gain (dB)	Typ. Saturated Output Power (dBm)	Supply Voltage (V)	Package (mm)
SKY65266	2400–2500	–	2	2	24	32	3.3	24-pin MCM 7 x 8

### Direct Quadrature Demodulator and Direct Conversion Mixer

Part Number	RF Input Frequency Range (MHz)	IF Input Frequency Range (MHz)	Voltage (V)	IIP2 (dBm)	IIP3 (dBm)	Voltage Conversion Gain (dB)	Package (mm)
SKY73009	400–3000	DC–250	3.0	60 @ 900 MHz	27 @ 900 MHz	2 @ 900 MHz	32-pin RFLGA 5 x 5
SKY73012	400–3900	DC–250	3.0	60 @ 900 MHz	29 @ 900 MHz	1 @ 900 MHz	32-pin RFLGA 5 x 5

### Direct Quadrature Modulators

Part Number	RF Output Frequency Range (MHz)	Broadband Noise Floor (dBm / Hz)	ACPR (dBc)	Package (mm)
SKY73010-21	300–2500	<-153	72	16-pin RFLGA 4 x 4

### Diversity Mixers / Downconverters

Part Number	RF Frequency (MHz)	IF Frequency (MHz)	Gain (dB)	IIP3 (dBm)	OIP3 (dBm)	IP <sub>1</sub> (dBm)	NF (dB)	Package (mm)
SKY73025-11	2300–2700	40–300	9.4	25.3	34.7	13.3	9.0	36-pin MCM 6 x 6

### Single-Channel Mixers

Part Number	RF Frequency (MHz)	IF Frequency (MHz)	Gain (dB)	IIP3 (dBm)	OIP3 (dBm)	IP <sub>1</sub> (dBm)	NF (dB)	Package (mm)
SKY42068	400–1000	50–250	2.5	36.0	38.5	17.0	9.5	20-pin QFN 5 x 5
SKY73032	700–1000	40–300	9.5	27.0	36.5	13.3	8.3	20-pin MCM 5 x 5
SKY73035-11	2300–2700	50–500	7.6	25.0	32.6	13.5	9.8	20-pin MCM 5 x 5



## PLLS / SYNTHESIZERS / VCOs

### High-Performance VCOs / Synthesizers

Part Number	RF Output Frequency Range (MHz)	Output Power (dBm)	Phase Noise @ 200 kHz (dBc / Hz)	Phase Noise @ 800 kHz (dBc / Hz)	Phase Settling Time ( $\mu$ S)	Current Consumption (mA)	Supply Voltage (V)	Package (mm)
SKY73101	1930–1990	-10	-112	-139	300	120	5	38-pin MCM 9 x 12











Part Number	RF Output Frequency Range (MHz)	Output Power (dBm)	Phase Noise @ 100 kHz (dBc / Hz)	Phase Noise @ 1 MHz (dBc / Hz)	Max. Phase Settling Time ( $\mu$ S)	Current Consumption (mA)	Supply Voltage (V)	Package (mm)
SKY73134	370–5600	-2 to 4	-115.0	-143.0	1000	120	3.3	32-pin RFLGA 5 x 5

### Dual Fractional-N Synthesizers


Part Number	Main Synthesizer Frequency (MHz)	Auxiliary Synthesizer Frequency (MHz)	Main Synthesizer Phase Noise (dBc / Hz)	Supply Voltage (V)	Package (mm)
SKY72302-21	400–6100	100–1000	-80 @ 6100 MHz	2.7–3.3	28-pin EP-TSSOP 9.7 x 6.4

## SWITCHES

### SPDT RF Switches

Part Number	Description (Absorptive / Reflective)	Frequency (GHz)	Typ. IL (dB)	Typ. Isol. (dB)	Typ. IIP3 (dBm)	Typ. IP <sub>1dB</sub> (dBm)	Package (mm)
AS179-92LF	SPDT (R)	LF-3.0	0.3-0.4	25-23	48	30	SC-88 2.1 x 2.0 x 0.95
AS191-73LF	SPDT (R)	0.1-4.0	0.5-0.70	27-18	53	35	SOT-6 2.8 x 2.9 x 1.18
AS225-313LF	SPDT (R)	0.1-6.0	0.5-0.60	21-20	52	30	QFN-6 2 x 3 x 1
 SKY13268-344LF	SPDT (R)	0.3-3.0	0.3-0.40	25-23	43	30	SOT-666 1.65 x 1.65 x 0.60
SKY13276-334	SPDT (R)	0.1-6.0	0.6-0.70	21-20	53	30	LGA-6 1.5 x 1.2
SKY13290-313LF	SPDT (R)	0.5-2.5	0.4-0.55	26-18	63	40.5 @ 0.1 dB	QFN-6 2 x 3
SKY13306-313LF	SPDT (R)	0.1-6.0	0.4-0.55	26-18	53	35 @ 0.1 dB	QFN-6 2 x 3
 SKY13314-374LF	SPDT (R)	0.1-6.0	0.45-0.60	22-21	47	31	MLPD-6 1.5 x 1.5
 SKY13320-374LF	SPDT (R)	0.1-6.0	0.4-0.6	28-24	52	33 @ 0.1 dB	MLPD-6 1.5 x 1.5
 SKY13321-360LF	SPDT (R)	0.1-3.0	0.4-0.6	26-16	62	39 @ 0.1 dB	QFN-8 2 x 2
 SKY13323-378LF	SPDT (R)	0.1-3.0	0.2-0.50	27-24	37	27	MLPD-6 1 x 1
 SKY13335-381LF	SPDT (R)	0.1-6.0	0.20-0.60	24-27	37-48	15-29	MLPD-6 1.5 x 2
 SKY13350-385LF	SPDT (R)	0.8-6.0	0.35-0.60	18-20	50	33	MLPD-6 1 x 1
 SKY13351-378LF	SPDT (R)	2.0-6.0	0.35-0.50	24-26	50	30 @ 0.5 dB	MLPD-6 1 x 1
 SKY13366-378LF	SPDT (R)	2.0-6.0	0.35-0.50	24-26	50	30 @ 0.5 dB	MLPD-6 1 x 1
 SKY13348-374LF	SPDT	0.5-6.0	0.60-1.00	29-21	60	37	MLPD-6 1.5 x 1.5


### SP3T RF Switches

Part Number	Description (Absorptive / Reflective)	Frequency (GHz)	Typ. IL (dB)	Typ. Isol. (dB)	Typ. IIP3 (dBm)	Typ. IP <sub>1dB</sub> (dBm)	Package (mm)
SKY13309-370LF	SP3T (R)	0.1-3.0	0.5-0.6	26-25	45	29	QFN 2 x 2 x 0.6
 SKY13317-373LF	SP3T (R)	0.1-6.0	0.2-0.8	40-22	50	29	QFN-8 1.5 x 1.5 x 0.45

## SWITCHES

### Dual-Pole (xT) RF Switches

#### WLAN Antenna Diversity

Part Number	Description (Absorptive / Reflective)	Frequency (GHz)	Typ. IL (dB)	Typ. Isol. (dB)	Typ. IIP3 (dBm)	Typ. IP <sub>1dB</sub> (dBm)	Package (mm)
AS172-73LF	DPDT (R)	LF-2.0	0.3-0.95	25-13	50	34	SOT-6 2.8 x 2.9 x 1.18
 AS218-000	DPDT (R)	0.1-5.85	1.6-1.4	19	54	33	Chip
AS218-321LF	DPDT (R)	LF-6.0	1.2-1.6	28-19	47	33	QFN-12 3 x 3 x 0.75
AS236-321LF	DPDT (R)	LF-6.0	0.95-1.15	22-15	56	34	QFN-12 3 x 3 x 0.75
SKY13267-321LF	DPDT (R)	2.4-6.0	0.7-0.9	32-20	49	30	QFN-12 3 x 3 x 0.75
SKY13318-321LF	DPDT (R)	0.1-6.0	0.95-1.15	22-15	57	34	QFN-12 3 x 3 x 0.75

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