

SKYWORKS®

| Wireless Infrastructure Solutions

Connecting Your World: Smart Solutions for Wireless Infrastructure

Wherever you are, Skyworks' infrastructure solutions are enabling faster data connectivity. Whether in a few cell phone towers thinly disguised as trees or in small cells hidden under stadium seats and lamp posts, our groundbreaking products are connecting people with the information they need.

Our broad portfolio spans RF components to complete subsystems—from the antenna connection to the baseband output—for applications ranging from small cells to repeaters to macro and massive MIMO base stations.

Partner with us on your next project to enable multimedia and data intensive platforms that are exploding across mobile, the Internet of Things and emerging 5G devices. We are at the forefront of developing revolutionary wireless solutions.



| Table of Contents

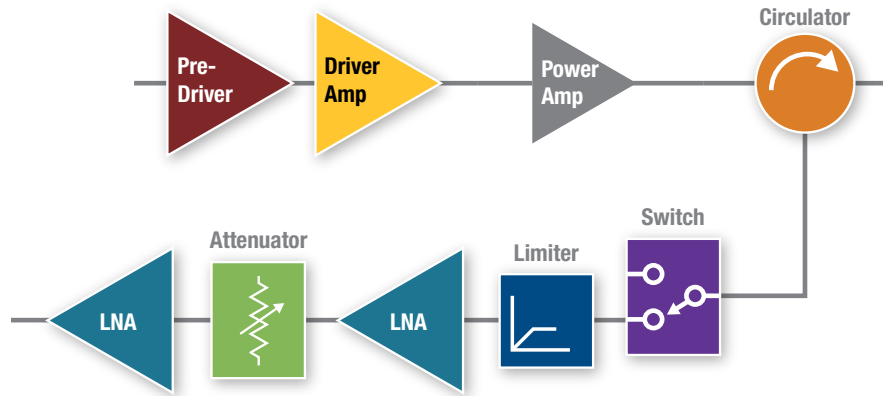
| | | | |
|--|---|-------------------------------------|----|
| It All Begins with Connectivity | 3 | Limiters | 9 |
| Amplifiers | 4 | Switches | 10 |
| Attenuators | 8 | Skyworks Sales Offices | 12 |
| Circulators | 8 | | |



It All Begins with Connectivity

Enabling Seamless Connections with Revolutionary Wireless Solutions

Below we invite you to explore a select group of our highly innovative infrastructure products. Our comprehensive list with full product specifications begins on page 4.



Massive MIMO Transceiver Building Blocks



Pre-Driver Amplifiers

SKY65017-70LF SKY66013-11
SKY66001-11 SKY66181-11



Limiters

SKY16601-555LF SKY16602-632LF



Driver Amplifiers

High Efficiency Requiring Digital Predistortion (DPD)
SKY662xx Series SKY663xx Series
Pin-to-Pin Compatible PA Family for 700 MHz to 5.9 GHz

Linear Amplifiers
AWB71xx Series AWB72xx Series



Low Noise Amplifiers

SKY67150-396LF SKY67180-306LF
SKY67154-396LF SKY67183-396LF
SKY67189-396LF



Digital Step Attenuators (Adjustment)

SKY12408-321LF SKY12329-350LF
SKY12355-337LF SKY12340-364LF
SKY12345-362LF AA116-72LF



Circulators

SKYFR-001 Series



Switches

SKY1224x Series SKY13522-644LF
SKY12207-478LF SKY13372-467LF

Switch + LNA

SKY73214-11 SKY73217-21

Product Specifications

Specification tables for products in this brochure are provided on the following pages.

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

NEW products (purple, bold) are continually being introduced at Skyworks. For a complete list of our newest products, please visit the New Products section of our website at www.skyworksinc.com.

Coming Soon products (blue, bold) indicates products that will be available soon for purchase.

Amplifiers

Low Noise Amplifiers

| Part Number | Frequency Range (GHz) | Test Frequency (GHz) | Gain (dB) | OIP3 (dBm) | OP _{1dB} (dBm) | V _{DD} (V) | Typ. Supply Current (mA) | Typ. NF (dB) | Package (mm) |
|-----------------------|-----------------------|--------------------------|------------------------------|--------------------------|----------------------------------|--------------------------|--------------------------|------------------------------|----------------------------|
| SKY67021-396LF | 0.6–1.2 | 0.9 | 17.5 | +40 | +21.7 | 5 | 100 | 0.6 | 8-pin DFN 2 x 2 x 0.75 |
| SKY67022-396LF | 1.6–2.2 | 1.85 | 17.5 | +39.5 | +22 | 5 | 95 | 0.65 | 8-pin DFN 2 x 2 x 0.75 |
| SKY67023-396LF | 2.0–3.0 | 2.6 | 17.3 | +39.5 | +19.5 | 5 | 100 | 0.89 | 8-pin DFN 2 x 2 x 0.75 |
| SKY67150-396LF | 0.3–2.2 | 0.45 1.9 | 23 14.5 | +36 +36.5 | +19 +18 | 5 | 82 | 0.45 0.38 | 8-pin DFN 2 x 2 x 0.75 |
| SKY67151-396LF | 0.7–3.8 | 0.849 1.840 3.600 | 26.0 20.5 16.5 | +34.5 +36.0 +36.0 | +21.5 +20.5 +18 | 5 | 80 70 80 | 0.25 0.35 0.70 | 8-pin DFN 2 x 2 x 0.75 |
| SKY67153-396LF | 0.7–3.8 | 0.849 2.500 3.600 | 26.0 19.0 16.5 | +34.5 +36.0 +36.0 | +21.5 +20.0 +18.0 | 5 | 80 72 80 | 0.25 0.50 0.70 | 8-pin DFN 2 x 2 x 0.75 |
| SKY67154-396LF | 0.7–3.8 | 2.5 | 19 | +38 | +21 | 5 | 72 | 0.55 | 8-pin DFN 2 x 2 x 0.75 |
| SKY67159-396LF | 0.2–6.0 | 0.7 2.7 3.8 3.5 | 17.5 17.0 16.5 14.0 | +31 +29 +27 +29 | +18.0 +16.0 +14.5 +15.5 | 3.3 3.3 3.3 5.0 | 45 | 0.95 1.00 1.30 1.70 | 8-pin DFN 2 x 2 x 0.75 |
| SKY67178-11 | 3.4–3.8 | 3.6 | 17 | +27 | – | 1.8/3.3/5 | 113 | 1.65 | 16-pin MCM 6 x 6 x 0.97 |
| SKY67179-306LF | 1.5–3.8 | 2.6 | 34 | +35 | +18 | 5 | 113 | 0.65 | 16-pin QFN 4 x 4 x 0.90 |
| SKY67180-306LF | 1.5–3.8 | 2.6 3.5 | 34 31 | +36 +34 | +15 | 5 | 125 | 0.64 0.80 | 16-pin QFN 4 x 4 x 0.90 |
| SKY67113-11 | 1.7–2.7 | 2.7 | 12.5 | +37 | – | 5 | 107 | 5.15 | 36-pin SMT 6 x 6 x 0.95 |
| SKY67114-11 | 3.4–3.8 | 3.8 | 13 | +36 | +20 | 5 | 130 | 6.5 | 36-pin SMT 6 x 6 x 0.95 |
| SKY67183-396LF | 3.5–6.0 | 3.8 4.7 5.9 | 17 15 15 | +36 | +18 | 3.3 | 70 | 0.7 0.9 0.9 | 8-pin DFN 2 x 2 |

Amplifiers

Low Noise Amplifiers

| Part Number | Frequency Range (GHz) | Test Frequency (GHz) | Gain (dB) | OIP3 (dBm) | OP _{1 dB} (dBm) | V _{DD} (V) | Typ. Supply Current (mA) | Typ. NF (dB) | Package (mm) |
|----------------|-----------------------|----------------------|-----------|------------|--------------------------|---------------------|--------------------------|--------------|--------------------|
| SKY67188-396LF | 1.5–4.0 | 1.5 | 22 | +36 | +20 | 3.3 | 70 | 0.7 | 8-pin DFN 2 x 2 |
| | | 2.2 | 22 | | +20 | | | 0.7 | |
| | | 2.7 | 22 | | +19 | | | 0.7 | |
| | | 3.8 | 20 | | +19 | | | 1.0 | |
| SKY67189-396LF | 0.4–6.0 | 0.4–1.1 | 22 | +36 | +20 | 3.3 | 75 | 0.6 | 8-pin DFN 2 x 2 |
| | | 1.1–2.2 | 22 | +36 | +20 | | | 0.7 | |
| | | 2.2–2.7 | 22 | +36 | +19 | | | 0.7 | |
| | | 2.7–3.8 | 22 | +36 | +18 | | | 0.7 | |
| | | 3.8–6.0 | 20 | +34 | +19 | | | 1.0 | |

High Efficiency DPD-Friendly Power Amplifiers

| Part Number | Frequency (GHz) | Band | Typ. Gain (dB) | Power (dBm) | Power Added Efficiency (%) | iBW (MHz) | V _{DD} (V) | Typ. Quiescent Current (mA) | Package (mm) |
|-------------|-----------------|------------------------|----------------|-------------|----------------------------|-----------|---------------------|-----------------------------|---------------------------|
| SKY66296-11 | 0.700–0.800 | 12, 13, 14, 17, 29, 44 | 35 | +28 | 43 | 20 | 5 | 70 | 16-pin MCM 5 x 5 x 1.3 |
| SKY66289-11 | 0.791–0.821 | 20 | 36.1 | +28 | 35.5 | 20 | 5 | 70 | 16-pin MCM 5 x 5 x 1.3 |
| SKY66295-21 | 0.800–0.900 | 5, 18, 19, 26, 27 | 34 | +28 | 36 | 20 | 5 | 135 | 16-pin MCM 5 x 5 x 1.3 |
| SKY66298-11 | 0.9–0.99 | 8 | 34 | +28 | 40 | 20 | 5 | 86 | 16-pin MCM 5 x 5 x 1.3 |
| SKY66291-11 | 1.8–1.88 | 3, 9 | 37.5 | +28 | 36.5 | 20 | 5 | 80 | 16-pin MCM 5 x 5 x 1.3 |
| SKY66391-12 | 1.805–1.880 | 3, 9 | 37 | +28 | 34.5 | 40 | 5 | 80 | 16-pin MCM 5 x 5 x 1.3 |
| SKY66299-11 | 1.9–2.0 | 2, 25, 33, 36, 37 | 36 | +28 | 35 | 20 | 5 | 80 | 16-pin MCM 5 x 5 x 1.3 |
| SKY66399-11 | 1.930–1.935 | 2, 25, 33, 36, 37 | 36.5 | +28 | 34 | 40 | 5 | 90 | 16-pin MCM 5 x 5 x 1.3 |
| SKY66294-11 | 2.1–2.2 | 1, 4, 10, 23 | 36 | +28 | 37 | 20 | 5 | 75 | 16-pin MCM 5 x 5 x 1.3 |
| SKY66394-11 | 2.100–2.200 | 1, 4, 10, 23 | 36 | +28 | 35 | 40 | 5 | 105 | 16-pin MCM 5 x 5 x 1.3 |
| SKY66292-11 | 2.3–2.4 | 30, 40 | 35.5 | +28 | 36.5 | 20 | 5 | 70 | 16-pin MCM 5 x 5 x 1.3 |
| SKY66312-11 | 2.300–2.400 | 30, 40 | 35 | +23 | 22 | 100 | 5 | 75 | 16-pin MCM 5 x 5 x 1.3 |
| SKY66297-11 | 2.49–2.69 | 7, 38, 41 | 32.5 | +28 | 36 | 20 | 5 | 85 | 16-pin MCM 5 x 5 x 1.3 |
| SKY66317-11 | 2.490–2.700 | 7, 38 and 41 | 35 | +23 | 22 | 100 | 5 | 75 | 16-pin MCM 5 x 5 x 1.3 |
| SKY66397-12 | 2.570–2.690 | 38, 41 | 35 | +28 | 35 | 40 | 5 | 95 | 16-pin MCM 5 x 5 x 1.3 |
| SKY66293-21 | 3.4–3.8 | 22, 42, 43 | 33.5 | +28 | 29 | 20 | 5 | 85 | 16-pin MCM 5 x 5 x 1.3 |

Amplifiers

High Efficiency DPD-Friendly Power Amplifiers

| Part Number | Frequency (GHz) | Band | Typ. Gain (dB) | Power (dBm) | Power Added Efficiency (%) | iBW (MHz) | V _{DD} (V) | Typ. Quiescent Current (mA) | Package (mm) |
|-------------|-----------------|-------------------|----------------|-------------|----------------------------|-----------|---------------------|-----------------------------|---------------------------|
| SKY66313-11 | 3.400–3.600 | 22, 42 | 36 | +23 | 15 | 100 | 5 | 115 | 16-pin MCM 5 x 5 x 1.3 |
| SKY66315-11 | 4.400–5.000 | n79 | 35 | +23 | 20 | 100 | 5 | 75 | 16-pin MCM 5 x 5 x 1.3 |
| SKY66288-11 | 5.150–5.925 | LTE-U, 46 | >30 | +28 | 20–25 | 40 | 5 | 95 | 16-pin MCM 5 x 5 x 1.3 |
| SKY66318-11 | 3.300–3.600 | 22, 42 | 36 | +28 | 20 | 100 | 5 | 115 | 16-pin MCM 5 x 5 x 1.3 |
| SKY66299-21 | 1.900–2.000 | 2, 25, 33, 36, 37 | 36 | +28 | 28 | 20 | 5 | 110 | 16-pin MCM 5 x 5 x 1.3 |
| SKY66291-21 | 1.805–1.880 | 3, 9 | 37.5 | +28 | 31.5 | 20 | 5 | 80 | 16-pin MCM 5 x 5 x 1.3 |
| SKY66319-11 | 4.800–5.000 | China 5G | 35 | +28 | 40 | 200 | 5 | 100 | 16-pin MCM 5 x 5 x 1.3 |

Linear Power Amplifiers, +19 dBm Output Power

| Part Number | Frequency (GHz) | Typ. Gain (dB) | OIP3 (dBm) | P _{1dB} (dBm) | ACLR (5 MHz WCDMA) (dBc) | V _{DD} (V) | Typ. Quiescent Current (mA) | Package (mm) |
|-------------|-----------------|----------------|------------|------------------------|--------------------------|---------------------|-----------------------------|---------------------------|
| SKY66001-11 | 2.10–2.20 | 30 | +40 | +27 | < -48 | 4.2 | 57 | 10-pin MCM 3 x 3 x 0.9 |
| SKY66002-11 | 1.9–2.025 | 30 | +40 | +27 | < -48 | 4.2 | 60 | 10-pin MCM 3 x 3 x 0.9 |
| SKY66005-11 | 0.85–0.92 | 30 | +40 | +27 | < -48 | 4.2 | 46 | 10-pin MCM 3 x 3 x 0.9 |
| SKY66008-11 | 0.90–0.99 | 30 | +40 | +27 | < -48 | 4.2 | 48 | 10-pin MCM 3 x 3 x 0.9 |
| SKY66013-11 | 0.7–0.8 | 27.5 | +40 | +27 | < -48 | 4.2 | 46 | 10-pin MCM 3 x 3 x 0.9 |

Linear Power Amplifiers, +23 dBm Output Power

| Part Number | Frequency (GHz) | Typ. Gain (dB) | OIP3 (dBm) | P _{1dB} (dBm) | ACLR (5 MHz WCDMA) (dBc) | V _{DD} (V) | Typ. Quiescent Current (mA) | Package (mm) |
|-------------|-----------------|----------------|------------|------------------------|--------------------------|---------------------|-----------------------------|----------------------------|
| SKY66181-11 | 1.805–1.88 | 39 | +44 | +31 | < -48 | 3.3 | 360 | 28-pin MCM 5 x 5 x 1.25 |
| SKY66184-11 | 2.1–2.2 | 39 | +44 | +31 | < -48 | 3.3 | 400 | 28-pin MCM 5 x 5 x 1.25 |
| SKY66185-11 | 0.85–0.9 | 36.5 | +44 | +30 | < -48 | 3.3 | 130 | 28-pin MCM 5 x 5 x 1.25 |
| SKY66186-11 | 0.728–0.768 | 37 | +44 | +31 | < -48 | 3.3 | 125 | 28-pin MCM 5 x 5 x 1.25 |
| SKY66188-11 | 0.758–0.803 | 37 | +44 | +31 | < -48 | 3.3 | 155 | 28-pin MCM 5 x 5 x 1.25 |
| SKY66189-11 | 1.930–1.995 | 40 | +44 | +31 | < -48 | 3.3 | 370 | 28-pin MCM 5 x 5 x 1.25 |

Amplifiers

Linear Power Amplifiers, +24.5 dBm Output Power

| Part Number | Frequency (GHz) | Typ. Gain (dB) | Power Added Efficiency (%) | Supply Voltage (V) | Package (mm) |
|-------------|-----------------|----------------|----------------------------|--------------------|---------------------------|
| AWB7122 | 1.805–1.880 | 30 | 16 | 4.2 | 14-pin SMT 7 x 7 x 1.3 |
| AWB7123 | 1.93–1.99 | 32 | 18 | 4.2 | 14-pin SMT 7 x 7 x 1.3 |
| AWB7124 | 0.728–0.768 | 30 | 14.5 | 4.2 | 14-pin SMT 7 x 7 x 1.3 |
| AWB7125 | 0.860–0.894 | 30 | 16 | 4.2 | 14-pin SMT 7 x 7 x 1.3 |
| AWB7127 | 2.11–2.17 | 32 | 18 | 4.2 | 14-pin SMT 7 x 7 x 1.3 |
| AWB7128 | 2.545–2.69 | 28 | 16 | 4.2 | 14-pin SMT 7 x 7 x 1.3 |
| AWB7129 | 0.925–0.960 | 30 | 16 | 4.2 | 14-pin SMT 7 x 7 x 1.3 |
| AWB7132 | 2.3–2.4 | 28 | 16 | 4.2 | 14-pin SMT 7 x 7 x 1.3 |
| AWB7138 | 0.791–0.821 | 30 | 15 | 4.2 | 14-pin SMT 7 x 7 x 1.3 |

Linear Power Amplifiers, +27 dBm Output Power

| Part Number | Frequency (GHz) | Typ. Gain (dB) | Power Added Efficiency (%) | Supply Voltage (V) | Package (mm) |
|-------------|-----------------|----------------|----------------------------|--------------------|---------------------------|
| AWB7222 | 1.805–1.880 | 32 | 14 | 4.5 | 14-pin SMT 7 x 7 x 1.3 |
| AWB7223 | 1.93–1.995 | 29 | 14 | 4.5 | 14-pin SMT 7 x 7 x 1.3 |
| AWB7224 | 0.728–0.768 | 29 | 13 | 4.5 | 14-pin SMT 7 x 7 x 1.3 |
| AWB7225 | 0.860–0.894 | 29.5 | 14 | 4.5 | 14-pin SMT 7 x 7 x 1.3 |
| AWB7227 | 2.11–2.17 | 29 | 14 | 4.5 | 14-pin SMT 7 x 7 x 1.3 |
| AWB7228 | 2.496–2.69 | 28 | 14 | 4.5 | 14-pin SMT 7 x 7 x 1.3 |
| AWB7229 | 0.925–0.960 | 29 | 14 | 4.5 | 14-pin SMT 7 x 7 x 1.3 |
| AWB7231 | 2.01–2.025 | 29 | 14 | 4.8 | 14-pin SMT 7 x 7 x 1.3 |
| AWB7232 | 2.3–2.4 | 29 | 15 | 4.5 | 14-pin SMT 7 x 7 x 1.3 |
| AWB7238 | 0.791–2.821 | 30 | 14 | 4.5 | 14-pin SMT 7 x 7 x 1.3 |
| AWB7239 | 1.850–1.930 | 30 | 14 | 4.5 | 14-pin SMT 7 x 7 x 1.3 |

Attenuators

Digital Step Attenuators

| Part Number | Frequency (GHz) | Bits | LSB | P _{1dB} (dBm) | Attenuation (dB) | In Loss (dB) | IIP3 (dBm) | Package (mm) |
|----------------|-----------------|------|------|------------------------|------------------|--------------|------------|-------------------------------|
| SKY12408-321LF | 0.05–0.6 | 2/P | 6 | +34 | 12 | 0.3 | +49 | 12-pin QFN 3 x 3 |
| SKY12407-321LF | 0.05–0.60 | 2/P | 12 | +31 | 15 | 0.3 | +48 | 12-pin QFN 3 x 3 |
| SKY12355-337LF | 0.35–4.0 | 2/P | 6 | +28 | 12 | 0.45–0.75 | +47 | 12-pin QFN 3 x 3 x 0.75 |
| SKY12349-362LF | 0.7–4.0 | 5/S | 0.5 | +32 | 18 | 1.2–2.0 | +42 | 24-pin QFN 4 x 4 x 0.9 |
| SKY12348-350LF | 0.1–3.0 | 4/P | 1 | +30 | 7 | 0.8–1.2 | +45 | 16-pin QFN 3 x 3 x 0.75 |
| SKY12345-362LF | 0.7–4.0 | 5/S | 0.5 | +32 | 15.5 | 1.2–2.0 | +42 | 24-pin QFN 4 x 4 x 0.9 |
| SKY12343-364LF | 0.01–4.0 | 7/P | 0.25 | +35 | 15.5 | 1.8–1.9 | +50 | 32-pin QFN 5 x 5 x 0.9 |
| SKY12340-364LF | 0.3–2.0 | 5/S | 0.5 | +30 | 31 | 1.4–1.8 | +45 | 32-pin QFN 5 x 5 x 0.9 |
| SKY12329-350LF | 0.4–4.0 | 5/P | 1 | +29 | 31 | 1.2–2.7 | +39 | 16-pin QFN 3 x 3 x 0.75 |
| SKY12325-350LF | 0.5–6.0 | 3/P | 1 | +27 | 15.5 | 0.7–1.3 | +47 | 16-pin QFN 3 x 3 x 0.75 |
| AA116-72LF | LF–2.0 | 1/P | 15 | +20 | 31.75 | 0.35–0.4 | +41 | SOT-23 5L 2.8 x 2.9 x 1.18 |

Circulators

Circulators for Wireless Infrastructure Applications

| Part Number | Frequency (MHz) | Band | Power (W) (Avg/Peak) | Insertion Loss (dB) | Isolation/Return Loss (dB) | IMD (dBc) | IMD Conditions | Rotation | Case Size (Inch / mm) | Package |
|--------------|-----------------|---------------|----------------------|---------------------|----------------------------|-----------|---------------------------------|----------|-----------------------|-----------------|
| SKYFR-001385 | 729–756 | 37 | 60 / 200 | 0.32 | 23 / 23 | -65 | 2 x 5 W CW Tones, 5 MHz Spacing | CW | 0.94 / 23.8 | SMT–Robust Lead |
| SKYFR-001723 | 758–788 | 14 | 80 / 250 | 0.38 | 23 / 18 | -52 | 2 x 20W CW Tones, 1 MHz spacing | CW | 0.61 / 15.5 | SMT–Robust Lead |
| SKYFR-000892 | 2400–2500 | | 80 / 500 | 0.3 | 23 / 21 | -60 | 2 x 25W CW Tones, 5 MHz spacing | CW | 0.61 / 15.5 | SMT–Robust Lead |
| SKYFR-001549 | 860–894 | 5,6,18,19 | 80 / 250 | 0.35 | 20 / 20 | -56 | 2 x 20W CW Tones, 1 MHz spacing | CW | 0.61 / 15.5 | SMT–Robust Lead |
| SKYFR-001387 | 1805–1880 | 39 | 20 / 100 | 0.25 | 20 / 20 | -60 | 2 x 5W CW Tones, 1 MHz spacing | CW | 0.40 / 10.2 | SMT–Robust Lead |
| SKYFR-001400 | 925–960 | 8 | 80 / 250 | 0.3 | 22 / 22 | -56 | 2 x 20W CW Tones, 1 MHz spacing | CW | 0.61 / 15.5 | SMT–Robust Lead |
| SKYFR-001505 | 1880–2025 | 2,25,33,36,37 | 70 / 500 | 0.3 | 21 / 22 | -60 | 2 x 20W CW Tones, 1 MHz spacing | CCW | 0.49 / 12.5 | SMT–Robust Lead |
| SKYFR-001388 | 1930–1995 | 2,25,33,36,37 | 20 / 100 | 0.25 | 20 / 20 | -60 | 2 x 5W CW Tones, 1 MHz spacing | CW | 0.40 / 10.2 | SMT–Robust Lead |

Circulators

Circulators for Wireless Infrastructure Applications

| Part Number | Frequency (MHz) | Band | Power (W) (Avg/Peak) | Insertion Loss (dB) | Isolation/Return Loss (dB) | IMD (dBc) | IMD Conditions | Rotation | Case Size (Inch / mm) | Package |
|--------------|-----------------|-----------|----------------------|---------------------|----------------------------|-----------|---------------------------------|----------|-----------------------|-----------------|
| SKYFR-001688 | 2110–2170 | 1,4,10,23 | 70 / 500 | 0.2 | 25 / 23 | -60 | 2 x 20W CW Tones, 1 MHz spacing | CW | 0.49 / 12.5 | SMT–Robust Lead |
| SKYFR-001739 | 2110–2200 | 23 | 20 / 100 | 0.25 | 20 / 20 | -60 | 2 x 5W CW Tones, 1 MHz spacing | CW | 0.40 / 10.2 | SMT–Robust Lead |
| SKYFR-001493 | 2300–2400 | 30,40 | 50 / 120 | 0.25 | 21 / 21 | -60 | 2 x 15W CW Tones, 1 MHz spacing | CW | 0.49 / 12.5 | SMT–Robust Lead |
| SKYFR-001685 | 2496–2690 | 7,38,41 | 70 / 500 | 0.25 | 22 / 23 | -60 | 2 x 20W CW Tones, 1 MHz spacing | CW | 0.43 / 10.8 | SMT–Robust Lead |
| SKYFR-001692 | 3400–3600 | 22,42 | 20 / 160 | 0.23 | 21 / 22 | -60 | 2 x 5W CW Tones, 1 MHz spacing | CW | 0.40 / 10.2 | SMT–Robust Lead |
| SKYFR-001709 | 3600–3800 | 43 | 20 / 160 | 0.23 | 21 / 22 | -60 | 2 x 5W CW Tones, 5 MHz spacing | CW | 0.40 / 10.2 | SMT–Robust Lead |
| SKYFR-001705 | 4400–5000 | LTE-U | 50 / 200 | 0.35 | 21 / 21 | -60 | 2 x 20W CW Tones, 1 MHz spacing | CW | 0.49 / 12.5 | SMT–Robust Lead |
| SKYFR-001693 | 5150–5925 | LTE-U | 10 / 30 | 0.4 | 18 / 18 | -60 | 2 x 1W CW Tones, 1 MHz spacing | CW | 0.40 / 10.2 | SMT–Robust Lead |

Limiters

Limiter Modules

| Part Number | RF Test Freq. (GHz) | Typ. Insertion Loss (dB) Pin = 0 dBm | Typ. Return Loss (dB) Pin = 0 dBm | Typ. Threshold Level (dBm) | Max. Saturated Power (W) | Typ. Flat Leakage Power (dBm) | Package (mm) |
|----------------|---------------------|--------------------------------------|-----------------------------------|----------------------------|--------------------------|--|--------------------------------------|
| SKY16601-555LF | 0.50–6.0 | 0.1 | 27.5 | +11 | 29 | 13 (Pin = +20 dBm) | 2-pin MLP 2.5 x 2.5 x 0.75 |
| SKY16602-632LF | 0.90 2.45 | 0.3 0.5 | 14 25 | +6 +5 | 30 23 | 6 (Pin = +10 dBm) 4 (Pin = +10 dBm) | 16-ball CSP 1.991 x 1.991 x 0.695 |

Switches

SPDT (SP2T) RF Switches

| Part Number | Description (Absorptive/ Reflective) | Frequency (GHz) | Typ. IL (dB) | Typ. Isol. (dB) | Typ. IIP3 (dBm) | Typ. IP _{0.1 dB} (dBm) | Max. Tx Power (W) | Package (mm) |
|----------------|--------------------------------------|-----------------|--------------|-----------------|-----------------|---------------------------------|-------------------|-------------------------------|
| SKY12245-492LF | SPDT (R) | 0.3–3.8 | 0.1–0.35 | 46–43 | +86 | +50 | 100 | 6-pin SC-70 2 x 1.25 x 0.9 |
| SKY12247-492LF | SPDT (R) | 3.4–3.8 | 0.3 | 40 | +86 | +50 | 100 | 12-pin QFN 2 x 2 x 0.55 |
| SKY12210-478LF | SPDT (R) | 0.9–3.4 | 0.4 | 44 | +78 | +49 | 100 | 16-pin QFN 4 x 4 x 1.5 |
| SKY12207-478LF | SPDT (R) | 0.9–4.0 | 0.4 | 42 | +78 | +47 | 50 | 16-pin QFN 4 x 4 x 1.5 |
| SKY13392-359LF | SP4T (A) | 0.02–4.0 | 0.9–1.5 | 60–46 | +47 | +30 | 1.5 | 16-pin QFN 4 x 4 x 0.9 |
| SKY13286-359LF | SPDT (A) | 0.1–6.0 | 0.8–1.5 | 62–42 | +46 | +30 | 1 | 16-pin QFN 4 x 4 x 0.9 |
| SKY13581-676LF | SPDT (A) | 0.4–3.8 | 0.35–0.6 | 25–36 | +66 | +35 | 2.5 | 9-pin QFN 1.1 x 1.1 x 0.5 |
| SKY13522-644LF | SPDT (A) | 0.7–6.0 | 0.6–0.9 | 35–53 | +57 | +32 | 0.5 | 8-pin QFN 1.1 x 1.1 x 0.45 |
| SKY13372-467LF | SPDT (A) | 0.1–6.0 | 0.8–1.7 | 40–56 | +42 | +28 | 1 | 16-pin QFN 4 x 4 x 0.9 |

SP4T RF Switches

| Part Number | Description (Absorptive/ Reflective) | Frequency (GHz) | Typ. IL (dB) | Typ. Isol. (dB) | Typ. IIP3 (dBm) | Typ. IP _{0.1 dB} (dBm) | Max. Tx Power (W) | Package (mm) |
|----------------|--------------------------------------|-----------------|--------------|-----------------|-----------------|---------------------------------|-------------------|---------------------------|
| SKY13392-359LF | SP4T (A) | 0.02–4.0 | 0.9–1.5 | 60–46 | +47 | +30 | 1.5 | 16-pin QFN 4 x 4 x 0.9 |

Switches + Low Noise Amplifiers

| Part Number | Frequency (GHz) | Description | NF (dB) | Rx Isol. (dB) | Rx Gain (dB) | Tx IL (dB) | Tx Isol. (dB) | Max. Tx Power (W) | Package (mm) |
|-------------|-----------------|-------------|---------|---------------|-----------------------|------------|---------------|-------------------|---------------------------|
| SKY73214-11 | 2.3–2.7 | SPDT + LNA | 1.2 | 70 | 23 (Low Gain Mode) | 0.5 | 54 | 60 | 16-pin MCM 8 x 8 x 1.3 |
| SKY73217-21 | 3.4–3.8 | SPDT + LNA | 1.3 | 70 | 33 | 0.5 | 54 | 60 | 16-pin MCM 8 x 8 x 1.3 |

Copyright © 2014, 2015, 2016, 2017, 2018, 2019 Skyworks Solutions, Inc.
All Rights Reserved.

Information in this document is provided in connection with Skyworks Solutions, Inc. ("Skyworks") products or services. These materials, including the information contained herein, are provided by Skyworks as a service to its customers and may be used for informational purposes only by the customer. Skyworks assumes no responsibility for errors or omissions in these materials or the information contained herein. Skyworks may change its documentation, products, services, specifications or product descriptions at any time, without notice. Skyworks makes no commitment to update the materials or information and shall have no responsibility whatsoever for conflicts, incompatibilities, or other difficulties arising from any future changes.

No license, whether express, implied, by estoppel or otherwise, is granted to any intellectual property rights by this document. Skyworks assumes no liability for any materials, products or information provided hereunder, including the sale, distribution, reproduction or use of Skyworks products, information or materials, except as may be provided in Skyworks Terms and Conditions of Sale.

THE MATERIALS, PRODUCTS AND INFORMATION ARE PROVIDED "AS IS" WITHOUT WARRANTY OF ANY KIND, WHETHER EXPRESS, IMPLIED, STATUTORY, OR OTHERWISE, INCLUDING FITNESS FOR A PARTICULAR PURPOSE OR USE, MERCHANTABILITY, PERFORMANCE, QUALITY OR NON-INFRINGEMENT OF ANY INTELLECTUAL PROPERTY RIGHT; ALL SUCH WARRANTIES ARE HEREBY EXPRESSLY DISCLAIMED. SKYWORKS DOES NOT WARRANT THE ACCURACY OR COMPLETENESS OF THE INFORMATION, TEXT, GRAPHICS OR OTHER ITEMS CONTAINED WITHIN THESE MATERIALS. SKYWORKS SHALL NOT BE LIABLE FOR ANY DAMAGES, INCLUDING BUT NOT LIMITED TO ANY SPECIAL, INDIRECT, INCIDENTAL, STATUTORY, OR CONSEQUENTIAL DAMAGES, INCLUDING WITHOUT LIMITATION, LOST REVENUES OR LOST PROFITS THAT MAY RESULT FROM THE USE OF THE MATERIALS OR INFORMATION, WHETHER OR NOT THE RECIPIENT OF MATERIALS HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

Skyworks products are not intended for use in medical, lifesaving or life-sustaining applications, or other equipment in which the failure of the Skyworks products could lead to personal injury, death, physical or environmental damage. Skyworks customers using or selling Skyworks products for use in such applications do so at their own risk and agree to fully indemnify Skyworks for any damages resulting from such improper use or sale.

Customers are responsible for their products and applications using Skyworks products, which may deviate from published specifications as a result of design defects, errors, or operation of products outside of published parameters or design specifications. Customers should include design and operating safeguards to minimize these and other risks. Skyworks assumes no liability for applications assistance, customer product design, or damage to any equipment resulting from the use of Skyworks products outside of stated published specifications or parameters.

Skyworks, the Skyworks symbol, "Breakthrough Simplicity," Green, Green Initiative, SkyOne, SkyHi, and Innovation to Go are trademarks or registered trademarks of Skyworks Solutions, Inc., in the United States and other countries. Third-party brands and names are for identification purposes only, and are the property of their respective owners. Additional information, including relevant terms and conditions, posted at www.skyworksinc.com, are incorporated by reference.

For more information, please visit us at www.skyworksinc.com.





Skyworks Sales Offices

USA

Headquarters: Irvine, CA

Skyworks Solutions
5221 California Avenue
Irvine, CA 92617
Telephone: (949) 231-3000
Fax: (949) 231-3206
sales@skyworksinc.com

Skyworks Solutions
2740 Zanker Road
San Jose, CA 95134
Telephone: (408) 232-2900
Fax: (408) 232-2902
sales@skyworksinc.com

Skyworks Solutions
880 Yosemite Way
Milpitas, CA 95035, USA
Telephone: (408) 946-1968
hirel.sales@skyworksinc.com

Massachusetts

Skyworks Solutions
20 Sylvan Road
Woburn, MA 01801
Telephone: (781) 376-3000
Fax: (781) 376-3100
sales@skyworksinc.com

Maryland

Skyworks Solutions
5520 Adamstown Road
Adamstown, MD 21710
Telephone: (301) 695-9400
Fax: (301) 695-7065
RFceramics@skyworksinc.com

EUROPE

France

Skyworks Solutions
60 rue Saint André des Arts
Bâtiment D
75006 Paris, France
Telephone: +33 1 43548540
Fax: +33 1 43540005
irene.pfeiffer@skyworksinc.com

United Kingdom

Skyworks Solutions
Thremhall Park
Start Hill
Bishop's Stortford
Hertfordshire CM22 7WE
United Kingdom
Telephone: +44 7920 838883
will.kerley@skyworksinc.com

Finland

Skyworks Solutions
Keilaranta 16 (5th Floor)
FIN-02150 Espoo
Finland
Telephone: +358 9251 07131
Fax: +358 9 2510 7129
tommi.hiillos@skyworksinc.com

ASIA • PACIFIC

China

Skyworks Solutions
Unit 1201-1203 and 1206, Bldg# A,
No. 868 Yinghua Road
Pudong, Shanghai, China, PRC
Telephone: +86 21 23066230
ext. 60167
Fax: +86 21 33663398
elaine.zhao@skyworksinc.com

Skyworks Solutions
Room 2701, 27/F Tower 3
Kerry Plaza
No. 1 Zhongxinsi Road
Futian District
Shenzhen 518048 China PRC
Telephone: +86 755 8828 8399
Fax: +86 755 8828 8358
jesse.li@skyworksinc.com

Skyworks Solutions
Unit 703, 7th Floor
Radiance Building, Qiyang Road
Wangjing, Chaoyang District
Beijing City, China 100102
Telephone: +8610 652 60859
ext. 61602
Fax: +8610 652 61358
abby.huang@skyworksinc.com

Japan

Skyworks Solutions
Shinjuku Nomura Bldg. 33F
1-26-2 Nishi-Shinjuku
Shinjuku-ku
Tokyo 163-0533, Japan
Telephone: +81 3 6894 5180
Fax: +81 3 6894 5190
takeae.enokida@skyworksinc.com

Korea

Skyworks Solutions
POSCO Center (West Wing 12F)
440 Taeheran-ro, Gangnam-ku
Seoul, 06194, Korea
Telephone: +82 2 3490 3800
Fax: +82 2 553 5459
juhee.lee@skyworksinc.com

Singapore

Skyworks Solutions
10 Ang Mo Kio Street 65
#05-15/16 Techpoint
Singapore 569059
Telephone: +65 64031971
Fax: +65 64031931
yuenfong.choong@skyworksinc.com

Taiwan

Skyworks Solutions
4 F, #198, Section 2
Tun Hwa S. Road
Taipei 106, Taiwan ROC
Telephone: +8862 5559 8992
Fax: +8662 2735 6508
joanna.wu@skyworksinc.com

Skyworks Solutions, Inc. | NASDAQ: SWKS | sales@skyworksinc.com

USA: 781-376-3000 | Asia: 886-2-2735 0399 | Europe: 33 (0)1 43548540 | BRO428-19A 1/19 |



X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for [RF Amplifier](#) category:

Click to view products by [Skyworks](#) manufacturer:

Other Similar products are found below :

[A82-1](#) [BGA622H6820XTSA1](#) [BGA 728L7 E6327](#) [BGB719N7ESDE6327XTMA1](#) [HMC397-SX](#) [HMC405](#) [HMC561-SX](#) [HMC8120-SX](#)
[HMC8121-SX](#) [HMC-ALH382-SX](#) [HMC-ALH476-SX](#) [SE2433T-R](#) [SMA3101-TL-E](#) [SMA39](#) [A66-1](#) [A66-3](#) [A67-1](#) [A81-2](#) [LX5535LQ](#)
[LX5540LL](#) [MAAM02350](#) [HMC3653LP3BETR](#) [HMC549MS8GETR](#) [HMC576-SX](#) [HMC-ALH435-SX](#) [SMA101](#) [SMA32](#) [SMA411](#)
[SMA531](#) [SST12LP19E-QX6E](#) [WPM0510A](#) [HMC5879LS7TR](#) [HMC1087F10](#) [HMC1086](#) [HMC1016](#) [SMA1212](#) [MAX2689EWS+T](#)
[MAAMSS0041TR](#) [MAAM37000-A1G](#) [LTC6430AIUF-15#PBF](#) [SMA70-2](#) [SMA4011](#) [A231](#) [HMC-AUH232](#) [LX5511LQ](#) [LX5511LQ-TR](#)
[HMC7441-SX](#) [HMC-ALH310](#) [XD1001-BD-000V](#) [A4011](#)