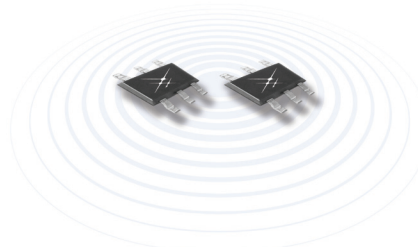
# SKY65013-70LF: InGaP Cascadable Amplifier LF–7 GHz

## Features



- Broadband: LF–7 GHz
- Small signal gain: 12.5 dB typ. @ 2 GHz
- High output 3rd order intercept: 29 dBm typ.
- 0 $P_{1\,dB}$: 12.5 dBm typ. @ 2 GHz
- Input and output impedance: 50 Ω nominal
- Single, positive DC supply voltage
- SOT-89 package
- Available lead (Pb)-free, RoHS compliant and Green™ MSL-1 @ 260 °C per JEDEC J-STD-020

## Description

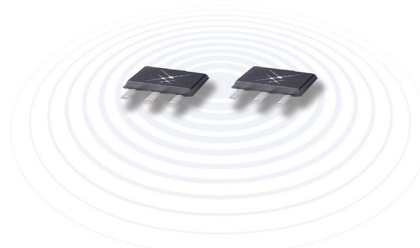
The SKY65013 is a general-purpose, broadband amplifier fabricated from Skyworks InGaP HBT process and packaged in a SOT-89 package. The amplifier's input and output impedances are 50 Ω, which allows these amplifiers to be cascaded without external impedance matching networks. The typical -3 dB bandwidth of the SKY65013 is LF–7 GHz. This amplifier is also available in the plastic micro-X package (SKY65013-214LF) and the SC-88 package (SKY65013-92LF).

The SKY65013 is lead (Pb)-free and RoHS-compliant. It is also "Green"—environmentally friendly, containing no antimony or halogens, such as bromine.

A populated evaluation board is available upon request. Full scattering parameters for this part are available for download at www.skyworksinc.com

# SKY65014-70LF: InGaP Cascadable Amplifier LF–6 GHz

## Features



- Broadband: LF–6 GHz
- Small signal gain: 16 dB typ. @ 2 GHz
- High output 3rd order intercept: 36 dBm typ.
- 0 $P_{1\,dB}$: 18 dBm typ. @ 2 GHz
- Input and output impedance: 50 Ω nominal
- Single, positive DC supply voltage
- SOT-89 package
- Available lead (Pb)-free, RoHS compliant and Green™ MSL-1 @ 260 °C per JEDEC J-STD-020

## Description

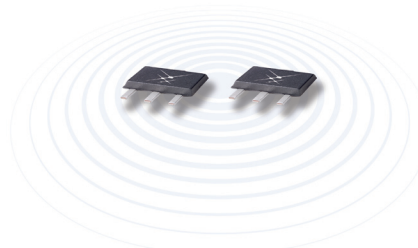
The SKY65014 is a general-purpose, broadband amplifier fabricated from Skyworks InGaP HBT process and packaged in a SOT-89 package. The amplifier's input and output impedances are 50 Ω, which allows these amplifiers to be cascaded without external impedance matching networks. The typical -3 dB bandwidth of the SKY65014 is LF–6 GHz. This amplifier is also available in the miniature SC-88 package (SKY65014-92LF) and the plastic micro-X package (SKY65014-214LF).

The SKY65014 is lead (Pb)-free and RoHS-compliant. It is also "Green"—environmentally friendly, containing no antimony or halogens, such as bromine.

A populated evaluation board is available upon request. Full scattering parameters for this part are available for download at www.skyworksinc.com

# SKY65015-70LF: InGaP Cascadable Amplifier LF–6 GHz

## Features



- Broadband: LF–6 GHz
- Small signal gain: 18 dB typ. @ 2 GHz
- High output 3rd order intercept: 35 dBm typ.
- 0 $P_{1\,dB}$: 17 dBm typ. @ 2 GHz
- Input and output impedance: 50 Ω nominal
- Single, positive DC supply voltage
- SOT-89 package
- Available lead (Pb)-free, RoHS Compliant and Green™ MSL-1 @ 260 °C per JEDEC J-STD-020

## Description

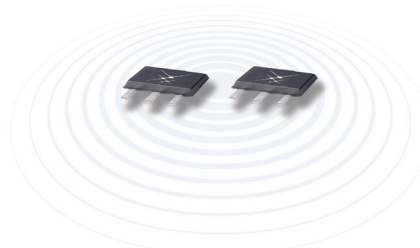
The SKY65015 is a general-purpose, broadband amplifier fabricated from Skyworks InGaP HBT process and packaged in a SOT-89 package. The amplifier's input and output impedances are 50 Ω, which allows these amplifiers to be cascaded without external impedance matching networks. The typical -3 dB bandwidth of the SKY65015 is LF–6 GHz. This amplifier is also available in the miniature SC-88 package (SKY65015-92LF) and the plastic micro-X package (SKY65015-214LF).

The SKY65015 is lead (Pb)-free and RoHS-compliant. It is also "Green"—environmentally friendly, containing no antimony or halogens such as bromine.

A populated evaluation board is available upon request. Full scattering parameters for this part are available for download at www.skyworksinc.com

# SKY65016-70LF: InGaP Cascadable Amplifier LF–3 GHz

## Features



- Broadband: LF–3 GHz
- Small signal gain: 20 dB typ. @ 2 GHz
- High output 3rd order intercept: 27 dBm typ.
- 0 $P_{1\,dB}$: 14 dBm typ. @ 2 GHz
- Input and output impedance: 50 Ω nominal
- Single, positive DC supply voltage
- SOT-89 package
- Available lead (Pb)-free, RoHS Compliant and Green™ MSL-1 @ 260 °C per JEDEC J-STD-020

## Description

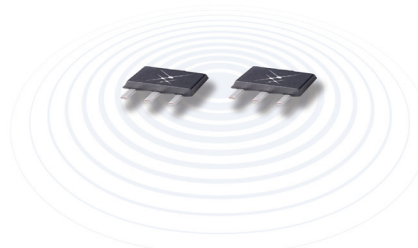
The SKY65016 is a general-purpose, broadband amplifier fabricated from Skyworks InGaP HBT process and packaged in a SOT-89 package. The amplifier's input and output impedances are 50 Ω, which allows these amplifiers to be cascaded without external impedance matching networks. The typical -3 dB bandwidth of the SKY65016 is LF–3 GHz. This amplifier is also available in the miniature SC-88 package (SKY65016-92LF) and the plastic micro-X package (SKY65016-214LF).

The SKY65016 is lead (Pb)-free and RoHS-compliant. It is also "Green"—environmentally friendly, containing no antimony or halogens such as bromine.

A populated evaluation board is available upon request. Full scattering parameters for this part are available for download at www.skyworksinc.com

# SKY65017-70LF: InGaP Cascadable Amplifier LF–6 GHz

## Features



- Broadband: LF–6 GHz
- Small signal gain: 20 dB typ. @ 2 GHz
- High output 3rd order intercept: 35 dBm typ.
- 0 $P_{1\ dB}$: 20 dBm typ. @ 2 GHz
- Input and output impedance: 50 Ω nominal
- Single, positive DC supply voltage
- SOT-89 package
- Available lead (Pb)-free, RoHS-compliant and Green™ MSL-1 @ 260 °C per JEDEC J-STD-020

## Description

The SKY65017 is a general purpose, broadband amplifier fabricated from Skyworks InGaP HBT process and packaged in a SOT-89 package. The amplifier's input and output impedances are 50 Ω, which allows these amplifiers to be cascaded without external impedance matching networks. The typical -3 dB bandwidth of the SKY65017 is LF–6 GHz.

The SKY65017 is lead (Pb)-free and RoHS-compliant. It is also "Green" — environmentally friendly, containing no antimony or halogens such as bromine.

A populated evaluation board is available upon request. Full scattering parameters for this part are available for download at www.skyworksinc.com

## General-Purpose Amplifiers

| Part Number | Frequency Range (GHz) | Test Frequency (GHz) | Gain Typ. (dB) | $P_{1\,dB}$ (dBm) | OIP3 (dBm) | Operating Current Typ. (mA) | Noise Figure Typ. (dB) | Package (mm) |
|---|---|---|---|---|---|---|---|---|
| SKY65013-70LF | LF–7 | 2 | 12.5 | 12.5 | 29 | 40 | 5.5 | SOT-89 |
| SKY65014-70LF | LF–6 | 2 | 16.0 | 18.0 | 36 | 70 | 4.8 | SOT-89 |
| SKY65015-70LF | LF–6 | 2 | 18.0 | 17.0 | 35 | 70 | 4.2 | SOT-89 |
| SKY65016-70LF | LF–3 | 2 | 20.0 | 14.0 | 27 | 40 | 4.8 | SOT-89 |
| SKY65017-70LF | LF–6 | 2 | 20.0 | 20.0 | 35 | 100 | 4.5 | SOT-89 |

Skyworks Green™ products are lead (Pb)-free, Restriction of Hazardous Substances (RoHS)-compliant, conform to the EIA/EICTA/JEITA Joint Industry Guide (JIG) Level A guidelines, and are free from antimony trioxide, and brominated flame retardants.