SSR-3331834012-KF-S1

Coaxial Receiver, 24 to 42 GHz, 4 dB Noise Figure, 12 dB Gain

Description:

Model SSR-3331834012-KF-S1 is a coaxial integrated receiver module. The receiver has a typical conversion gain of 12 dB with a typical Noise Figure of 4 dB in the frequency range of 24 to 42 GHz. The required LO power is 0 dBm between frequencies of 12 and 21 GHz. The input and output ports are both equipped with female 2.92mm (K) connectors. Other port configurations, such as WR-28 waveguides are also available under different model numbers.

Features:

- Good Gain and Noise Figure
- Multiplied LO Input Frequency
- Fully Integrated Module

Electrical Specifications:

• 5G Systems

Applications:

• Radar Systems

Parameter	Minimum	Typical	Maximum
RF Input Frequency	24 GHz		42 GHz
RF Input Power			+5 dBm
IF Output Frequency	DC		12 GHz
LO Frequency	12 GHz		21 GHz
LO Input Power		0 dBm	+20 dBm
RF to IF Conversion Gain		12 dB	
Noise Figure		4 dB	
Input P _{1dB}		-18 dBm	
Bias Voltage	+6 V _{DC}	+8 V _{DC}	+15 V _{DC}
Bias Current		300 mA	
Specification Temperature		+25 °C	
Operating Temperature	0°C		+50 °C

Mechanical Specifications:

Item	Specification
RF Port (Port 3)	2.92mm (K) Female
LO Port (Port 1)	2.92mm (K) Female
IF Port (Port 2)	SMA (F)
Bias	Solder Pin
Case Material	Aluminum
Finish	Gold Plated
Weight	2.0 Oz
Size	1.60" (W) X 1.50" (L) X 0.50" (H)
Outline	SR-SC-1

www.eravant.com | 501 Amapola Avenue, Torrance, CA 90501 Phone: 424-757-0168 | Fax: 424-757-0188 | Email: support@eravant.com

SSR-3331834012-KF-S1

Coaxial Receiver, 24 to 42 GHz, 4 dB Noise Figure, 12 dB Gain



Noise Figure vs. Frequency

Bias: +8 VDC/290 mA



www.eravant.com | 501 Amapola Avenue, Torrance, CA 90501 Phone: 424-757-0168 | Fax: 424-757-0188 | Email: support@eravant.com

Coaxial Receiver, 24 to 42 GHz, 4 dB Noise Figure, 12 dB Gain

Mechanical Outline: (Unless otherwise specified, all dimensions are in inches [millimeters])



Note:

- All data presented is collected from a sample lot. Actual data may vary unit to unit.
- All testing was performed under +25 °C case temperature.
- Eravant reserves the right to change the information presented without notice.
- Other mechanical configurations are available under different model numbers.

Caution:

- Exceeding absolute maximum ratings shown will damage the device.
- The device is static sensitive. Always follow ESD rules when working with the device.
- The case temperature of the device shall never exceed +50 °C. Use proper heatsink or fan if necessary.
- Proper torque, 8.0 ± 0.15 inch-pounds (0.90 ± 0.02 Nm), should be applied. **Eravant torque** wrench, model <u>SCH-08008-S1</u>, is highly recommended.



www.eravant.com | 501 Amapola Avenue, Torrance, CA 90501 Phone: 424-757-0168 | Fax: 424-757-0188 | Email: support@eravant.com