

Datasheet, Rev 1A: Issue November 2015

KA2506 is a wide band low noise amplifier with high flat gain-frequency response and high level output.

KEY FEATURES

- ✓ High and flat gain
- ✓ Wide band
- ✓ Low noise figure
- Small dimensions
- ✓ Low power consumption
- ✓ Compact and solid case

APPLICATIONS

- ~ **Radio-transmitters**
- **Cellular networks**
- Radio-monitoring ~
- WLAN/Wi-Fi



KA2506 mechanical enclosure.

PRODUCT DESCRIPTION

File Trace/Chan Response Marker/Analysis Stimulus Utility Help Tr 3 1 LogM 10 50.00 2.000000 GHz 26.198 dB 1 3.000000 GHz 2: 26.592 dB 40.00 4 00000 GH₇ 6 468 dF 5.000000 GHz 25.448 dB 4: > 5: 6.000000 GHz 24.322 dB 30.00 2 3 20.00 10.00 0.00 -10.00 -20.00 -30.00 -40.00 -50.00 1 >Ch1: Start 1.50000 GHz Stop 6.00000 GHz Cont. CH 1: S21 C* 2-Port LCL

Gain vs. frequency



2-6GHz wide band low noise amplifier

Absolute maximum ratings

Supply voltage max	+35	V
Supply voltage min	+8.5	V
Maximum RF input	+10	dBm

Operation of this device in excess of any of the limits may cause permanent damage.

RF and DC characteristics*

Frequency	2GHz	3GHz	4GHz	5GHz	6GHz	
Gain	26.0	26.5	26.0	25.0	24.0	dB
Noise figure	2.3	2.3	2.1	2.9	3.2	dB
1dB output compression	17.5	18.5	19.0	19.0	19.0	dBm
Output IP3	32.0	32.5	33.0	33.0	33.0	dBm
Input return loss	10 typ.					dB
Output return loss	12 typ.				dB	
Current consumption	145					mA
Vcc	+9				V	

Values measured at environment temperature T = +25°C. *ASK FOR OTHER SPECIFICATIONS FROM RANTELON LTD.

Mechanical specifications

RF Input/output connectors	SMA-female 50 Ω /SMA-female 50 Ω			
DC connector	Soldering pins			
Dimensions	50x40x13 mm, aluminum			

Rantelon reserves the right to change the specification without notice.