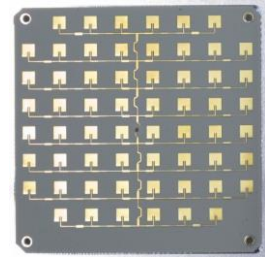


Datasheet

K-PA1 Antenna

Features

- Frequency range: 24.000 – 24.250GHz
- WR-42 Waveguide
- 12°x12° Opening angle
- 18dBi Gain

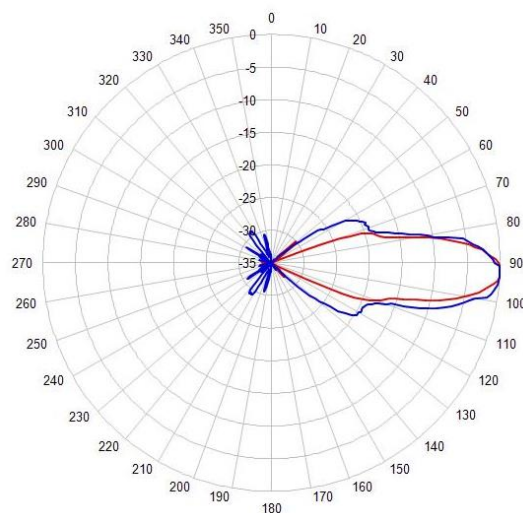


Electrical Specification

Parameter	Conditions / Notes	Symbol	Min	Typ	Max	Unit
Operating conditions						
Operating temperature		T_{op}	-40		+85	°C
Storage temperature		T_{st}	-40		+105	°C
Antenna Parameter						
Frequency range		f_{Ant}	24.000		24.250	GHz
Antenna gain	$F_{TX}=24.125GHz$	G_{Ant}		18		dBi
Horizontal -3dB beamwidth	E-Plane	W_{θ}	11	12	14	°
Vertical -3dB beamwidth	H-Plane	W_{ϕ}	11	12	14	°
Horiz. sidelobe suppression		D_{ϕ}	-16	-20		dB
Vert. sidelobe suppression		D_{θ}	-16	-20		dB
Body						
Outline Dimensions	connector left unconnected				65.6*65.6*10	mm ³
Weight					65	g

Antenna Pattern

Typical Antenna Pattern measured at 24.125GHz:



Technical drawing of the front view of a PCB. The overall dimensions are 65.6 +/- 0.2 mm in width and 65.6 +/- 0.2 mm in height. The drawing shows a central rectangular area with a width of 55.6 mm and a height of 39.0 mm. This central area contains eight mounting holes, four of which are labeled ②. The outer area contains four mounting holes, two of which are labeled ①. The dimensions for the mounting holes are specified as ① 4 x mounting hole M 2.5 and ② 4 x mounting hole M 3. The drawing also shows a central rectangular cutout with a width of 16.2 mm and a height of 4.8 mm. The dimensions for the mounting holes are specified as ① 4 x mounting hole M 2.5 and ② 4 x mounting hole M 3. The drawing also shows a central rectangular cutout with a width of 16.2 mm and a height of 4.8 mm. The dimensions for the mounting holes are specified as ① 4 x mounting hole M 2.5 and ② 4 x mounting hole M 3.

Author: Léon Audergon, RFbeam Microwave GmbH, CH-9008 St. Gallen
Date: November 15th 2016
Version: 1.0
Changes: -