

<u>Scope:</u>					
RF-Modul for several different Blum-Applications.					
<u>Mechanical properties:</u>		Min.	Typ.	Max.	Unit
<i>L</i>	Dimension Length	-	64.5	-	mm
<i>W</i>	Dimension Width	-	20	-	mm
<i>H</i>	Dimension Height	-	4.8	-	mm
<i>M</i>	Mass	-	5.2	-	g
<u>Environmental:</u>					
<i>T OP</i>	Operating Temperature	0	23	40	°C
<i>RH OP</i>	Operating Relative humidity (non-condensing)	5	50	80	%
<i>H AMSL</i>	Height Above Mean Sea Level	-	-	4'000	m
<i>T Store</i>	Storage Temperature	-30	-	70	°C
<i>RH Store</i>	Storage Relative humidity (non-condensing)	0	-	90	%
<i>Protection</i>	Protection Class	-	IP00	-	-
<u>Electrical properties:</u>					
<i>V in</i>	Input Voltage	2.4	3.0	3.6	VDC
<i>I</i>	Rated Current consumption	-	10	-	mA
<i>I Standby</i>	Current consumption Standby Mode	-	8	-	mA
	Polarity Protection	-	No	-	-
<u>Wired Communication Interface:</u>					
<i>V SPI</i>	Communication Voltage	-	3.3 CMOS	-	VDC
<i>Protocol</i>	Communication Protocol	SPI			-
	Speed	1			Mbps
<u>RF properties:</u>		Operating 1	Teaching	Operating 2	
<i>f Op</i>	Operating Frequencies	2'404	2'410	2'452	MHz
<i>OBW</i>	Occupied Bandwidth	1'050			kHz
<i>OCW</i>	Operating Channel Width	2'000			kHz
<i>CP</i>	Communication Protocol	NordicSemi Enhanced ShockBurst			-
<i>MOD</i>	Modulation Type	GFSK			-
<i>F Hop</i>	Frequency Hopping	none			-
<i>Bit Rate</i>	Data Rate	-	1	-	Mbps
<i>P Tx</i>	Transmitting Power	-	-	4 (fixed)	dBm
		-	-	2.5 (fixed)	mW
<i>ITU TRC-43</i>	Radio Emission Designation	-	1M05 F1D --	-	-
<i>ΔF</i>	Frequency Deviation / Modulation Characteristics	-	±160	-	kHz
<i>CS</i>	Communication System	Half Duplex			-
<i>Rec. Class</i>	Receiver Class / Category	3, testig should be done according Category "1"			-
	Receiver performance criteria	after demodulation, bit error of 1% without correction			-
<i>D</i>	maxium (corresponding) Duty Cycle	-	-	5	%

Anntena:					
ANT Type	Antenna Type	PCB trace, omni directional			-
ANT Length	Antenna Length	$\lambda/4$ wave monopole			-
P	Polarization	linear			-
Z	Impedance	50			Ω (matched)
-	Anti Manipulation Protection	Yes (Cover of Plastic)			-
		Operating 1	Teaching	Operating 2	
f	Frequency	2'404	2'410	2'452	MHz
G	Annena Gain	≤ -4			dBi
η	Efficiency	-	-	-	%
-	Directivity	-	-	-	-
Radiation Pattern:					
The radiation pattern of the antenna in a typical environment					
All measurement units are in dBi.					
[dBi]					
					