

TARGET SPECIFICATION

The mentioned items and the specifications may be changed without notice.

Notice
● Precaution on using ROHM Products

- 1) Our Products are designed and manufactured for application in ordinary electronic equipment (such as AV equipment, OA equipment, telecommunication equipment, home electronics appliances, amusement equipment, etc.). If you intend to use our Products in devices requiring extremely high reliability (such as medical equipment, transport equipment, traffic equipment, aircraft/spacecraft, nuclear power controllers, fuel controllers, car equipment including car accessories, safety devices, etc.) and whose malfunction or failure may cause loss of human life, bodily injury or serious damage to property ("Special Applications"), please consult with the ROHM sales representative in advance. Unless otherwise agreed in writing by ROHM in advance, ROHM shall not be in any way responsible or liable for any damages, expenses or losses incurred by you or third parties arising from the use of any ROHM's Products for Specific Applications.
- 2) ROHM designs and manufactures its Products subject to strict quality control system. However, semiconductor products can fail or malfunction at a certain rate. Please be sure to implement, at your own responsibilities, adequate safety measures including but not limited to fail-safe design against the physical injury, damage to any property, which a failure or malfunction of our Products may cause. The following are examples of safety measures.
 - [a] Installation of protection circuits or other protective devices to improve system safety
 - [b] Installation of redundant circuits to reduce the impact of single or multiple circuit failure
- 3) Our Products are designed and manufactured for use under standard conditions and not under any special or extraordinary environments or conditions, as exemplified below. Accordingly, ROHM shall not be in any way responsible or liable for any damages, expenses or losses arising from the use of any ROHM's Products under any special or extraordinary environments or conditions. If you intend to use our Products under any special or extraordinary environments or conditions (as exemplified below), your independent verification and confirmation of product performance, reliability, etc. prior to use, must be necessary:
 - [a] Use of our Products in any types of liquid, including water, oils, chemicals, and organic solvents
 - [b] Use of our Products outdoors or in places where the Products are exposed to direct sunlight or dust
 - [c] Use of our Products in places where the Products are exposed to sea winds or corrosive gases, including Cl₂, H₂S, NH₃, SO₂, and NO₂
 - [d] Use of our Products in places where the Products are exposed to static electricity or electromagnetic waves
 - [e] Use of our Products in proximity to heat-producing components, plastic cords, or other flammable items
 - [f] Sealing or coating our Products with resin or other coating materials
 - [g] Use of the Products in places subject to dew condensation
- 4) The Products are not subject to radiation-proof design.
- 5) Please verify and confirm characteristics of the final or mounted products in using the Products.
- 6) Confirm that operation temperature is within the specified range described in the product specification.
- 7) ROHM shall not be in any way responsible or liable for failure induced under deviant condition from what is defined in this document.
- 8) This Product may be subjected to radio wave interference from other equipment emitting radio waves.
- 9) This Product emits radio waves due to the specification. To use equipment emitting radio waves, certification under the Radio Act should be obtained by region in which the Product is used. For the standards for certification under the Radio Act to be obtained for the use of this Product, separately contact your ROHM representative.

DESIGN	CHECK	APPROVAL	DATE: 12/May/2020	SPECIFICATION No.: TARGET SPECIFICATION
Kawabata			REV. E	ROHM Co.,Ltd.

Notice

● Precaution for Mounting / Circuit board design

- 1) When a highly active halogenous (chlorine, bromine, etc.) flux is used, the residue of flux may negatively affect product performance and reliability.
- 2) In principle, the reflow soldering method must be used.

● Precautions Regarding Application Examples and External Circuits

- 1) If change is made to the constant of an external circuit, please allow a sufficient margin considering variations of the characteristics of the Products and external components, including transient characteristics, as well as static characteristics.
- 2) You agree that application notes, reference designs, and associated data and information contained in this document are presented only as guidance for Products use. Therefore, in case you use such information, you are solely responsible for it and you must exercise your own independent verification and judgment in the use of such information contained in this document. ROHM shall not be in any way responsible or liable for damages, expenses or losses incurred by you or third parties arising from the use of such information.

● Precaution for Electrostatic

This Product is electrostatic sensitive product, which may be damaged due to electrostatic discharge. Please take proper caution in your manufacturing process and storage so that voltage exceeding Products maximum rating will not be applied to Products. Please take special care under dry condition (e.g. Grounding of human body / equipment / solder iron, isolation from charged objects, setting of Ionizer, friction prevention and temperature / humidity control).

● Precaution for Storage / Transportation

- 1) Product performance and soldered connections may deteriorate if the Products are stored in the places where:
 - [a] the Products are exposed to sea winds or corrosive gases, including Cl₂, H₂S, NH₃, SO₂, and NO₂
 - [b] the temperature or humidity exceeds those recommended by ROHM
 Temperature: 5°C - 40°C, Humidity: 40% - 60%RH
 - [c] the Products are exposed to direct sunshine or condensation
 - [d] the Products are exposed to high Electrostatic
- 2) Even under ROHM recommended storage condition, solderability of products out of recommended storage time period may be degraded.
 It is strongly recommended to confirm solderability before using Products of which storage time is exceeding the recommended storage time period.
 - Recommended storage condition: Temperature: 5°C - 40°C, Humidity: 40% - 60%RH
- 3) Store / transport cartons in the correct direction, which is indicated on a carton as a symbol. Otherwise bent leads may occur due to excessive stress applied when dropping of a carton.
- 4) Use Products within the specified time after opening a humidity barrier bag. Baking is required before using Products of which storage time is exceeding the recommended storage time period.
 - Maximum time : 72 hours, Temperature: 5°C - 40°C, Humidity: 40% - 60%RH
 - Baking condition: Single type: 125°C, 24 hours, up to once

Notice

● **Precaution for product label**

QR code printed on ROHM product label is for ROHM's internal use only, and please do not use at customer site.

● **Precaution for disposition**

When disposing Products please dispose them properly using an authorized industry waste company.

● **Precautions Regarding Intellectual Property Rights**

- 1) All information and data including but not limited to application example contained in this document is for reference only. ROHM does not warrant that foregoing information or data will not infringe any intellectual property rights or any other rights of any third party regarding such information or data.
- 2) ROHM shall not have any obligations where the claims, actions or demands arising from the combination of the Products with other articles such as components, circuits, systems or external equipment (including software)
- 3) No license, expressly or implied, is granted hereby under any intellectual property rights or other rights of ROHM or any third parties with respect to the Products or the information contained in this document. Provided, however, that ROHM will not assert its intellectual property rights or other rights against you or your customers to the extent necessary to manufacture or sell products containing the Products, subject to the terms and conditions herein.

● **Other Matters**

- 1) This document may not be reprinted or reproduced, in whole or in part, without prior written consent of ROHM.
- 2) The Products may not be disassembled, converted, modified, reproduced or otherwise changed without prior written consent of ROHM.
- 3) In no event shall you use in any way whatsoever the Products and the related technical information contained in the Products or this document for any military purposes, including but not limited to, the development of mass-destruction weapons.
- 4) The proper names of companies or products described in this document are trademarks of registered trademarks of ROHM, its affiliated companies or third parties.
- 5) Return one (1) copy of this Specification with your receipt stamp put on it.
If you do not return the Specification even after three (3) months elapsed from the date of issue stated on the cover of the Specification, ROHM shall, at its discretion, deem the contents of the Specification to have been accepted by you.
- 6) Any questions as to the contents of this Specification shall be promptly resolved by consultation between the parties.

● **Scope of Warranty**

ROHM Co., Ltd. (hereinafter referred to "ROHM") shall warrant materials used in this Product and the Product as stated below.

- 1) In the event that any defect in any of the said materials or this Product through analysis made at ROHM, ROHM shall repair or replace free of charge for a period of twenty-four (24) months from the date of shipment from the warehouse of ROHM.
- 2) This warranty shall not apply to any damage caused by
 - (a) fire, earthquake, flood, theft, or other disaster; or
 - (b) repair, modification, misuse, abuse, or negligence.

ROHM shall have no legal responsibility for any sort of incidental and indirect damage (such as faults in or replacement of parts of your set product, or shipping charges of such parts) or for items that explicitly or implicitly indicate the breach of the warranty of this Product.

1. Structure

Assembly using a printed circuit board

2. Product Name

Hybrid IC

3. Model Name

BP35C5

4. Application

Telecommunication equipment

5. Function

Specified low power radio module (920 MHz band)

6. Absolute Maximum Ratings

No.	Parameter	Symbol	Rating	Unit	Condition
1	Supply voltage	VDD	-0.3 to +3.9	V	DC
2	Digital input voltage	V _{DIN}	-0.3 to VDD+0.3	V	
3	Digital output voltage	V _{DO}	-0.3 to VDD+0.3	V	
5	Digital output current	I _{DO}	-8 to+8	mA	
6	Operating temperature range	Topr	-30 to 85	°C	
7	Storage temperature range	Tstg	-40 to 85	°C	

(Note) The absolute maximum ratings represent values that shall not be exceeded for even an instant on all operating or testing conditions.

Design systems with a margin for the ratings listed above.

7. Recommended Operating Conditions

No.	Parameter	Symbol	Specification			Unit	Condition
			Min.	Typ.	Max.		
1	Supply voltage	VDD	2.6	3.3	3.6	V	
2	Operating temperature range	Ta	-30	25	85	°C	

8. Major Performance

Parameter	Description
Radio standards	Compliant with ARIB STD-T108, FCC Part 15
Radio frequency	920 MHz band
Modulation method	Binary GFSK
Data rate	50 kbps, 100kbps, 150 kbps, 300kbps
Transmission power	20 mW, 10 mW, 1 mW
Receiving sensitivity	-95dBm (Typ.) (150 kbps, BER<0.1%)
Frequency deviation	±20 ppm or less
Current consumption (VDD=3.3V) (Data rate=150 kbps)	40 mA (Typ.) [Transmission: 20 mW output] 20 mA (Typ.) [Reception] 5 μA (Typ.) [Sleep state]
Host interface	UART (115,200 bps)

9. Block Diagram

Fig. 1. Block Diagram

10. Electrical Characteristics

Input current characteristics

(Ta=25°C, VDD=3.3V)

No.	Parameter	Condition	Specification			Unit
			Min.	Typ.	Max.	
1	Current consumption (Data rate: 150 kbps)	Transmission state (set to 20 mW)	30	40	50	mA
2		Reception state	10	20	30	mA
3		Sleep state* (Held by register)	-	5	-	μA

Measurement was made with the terminating end of 50 ohm measuring instrument connected with the antenna connector terminal of the module using RF cable.

Be noted that the parameter marked with “*” represents a design guaranteed value.

RF characteristics

Measurement conditions: Ta=25°C and VDD=3.3V

Modulation rate: 50kbps, 150 kbps

Modulation method: Binary GFSK

Channel spacing: 400 kHz

Measurement made at the antenna connector terminal of the module

Transmission characteristics

(Ta=25°C, VDD=3.3V)

No.	Parameter	Condition	Specification			Unit
			Min.	Typ.	Max.	
1	Transmission output power	20 mW mode	11.0	13.0	15.0	dBm
		10 mW mode	8.0	10.0	12.0	dBm
		1 mW mode	0.3	1.9	3.6	dBm
2	Occupied bandwidth	n=1 (50 kbps)	-	89	200	kHz
		n=2 (150 kbps)	-	166	400	kHz
3	Adjacent channel leakage power [ACPR]	20 mW mode ± 1 channel Bandwidth: 200 kHz	-	-	-15	dBm
4	Frequency shift [Fdev]*	50 kbps	-	25	-	kHz
		150 kbps	-	37.5	-	kHz

Be noted that the parameter marked with “*” represents a design guaranteed value.

Transmission characteristics (continued)

(Ta=25°C, VDD=3.3V)

No.	Parameter	Condition	Specification			Unit
			Min.	Typ.	Max.	
5	Spurious emission levels for transmission (in 20 mW mode)	100 kHz bandwidth below 710 MHz	-	-	-36	dBm
6		1 MHz bandwidth between 710 MHz and 900 MHz	-	-	-55	dBm
7		100 kHz bandwidth between 900 MHz and 915 MHz	-	-	-55	dBm
8		100 kHz bandwidth between 915 MHz and 930 MHz (except levels detuned by 400 kHz or less from the center of radio channels (n=2); provided that levels ranging from 920.5 MHz to 922.3 MHz and detuned by 300 kHz or less shall be excluded)	-	-	-36	dBm
9		100 kHz bandwidth between 930 MHz and 1 GHz	-	-	-55	dBm
10		1 MHz bandwidth between 1 GHz and 1.215 GHz	-	-	-45	dBm
11		1 MHz bandwidth over 1.215 GHz (over second harmonic)	-	-	-30	dBm

Be noted that the parameter marked with “*” represents a design guaranteed value.

Reception characteristics

(Ta=25°C, VDD=3.3V)

No.	Parameter	Condition	Specification			Unit
			Min.	Typ.	Max.	
12	Minimum receiving sensitivity	* BER<0.1%, 150 kbps mode	-	-95	-85	dBm
13	Maximum receiving input level*	150 kbps mode	0	-	-	dBm
14	Minimum power detection (ED value) level*	-	-	-	-95	dBm
15	Power detection range*	Dynamic range	-	60	-	dB
16	Power detection accuracy*	-	-10	-	+10	dB

Be noted that the parameter marked with “*” represents a design guaranteed value.

Reception characteristics (continued)

(Ta=25°C, VDD=3.3V)

No.	Parameter	Condition	Specification			Unit
			Min.	Typ.	Max.	
17	Subsidiary emission levels	100 kHz bandwidth below 710 MHz*	-	-	-54	dBm
18		1 MHz bandwidth between 710 MHz and 900 MHz*	-	-	-55	dBm
19		100 kHz bandwidth between 900 MHz and 915 MHz*	-	-	-55	dBm
20		100 kHz bandwidth between 915 MHz and 930 MHz	-	-	-54	dBm
21		100 kHz bandwidth between 930 MHz and 1 GHz*	-	-	-55	dBm
22		1 MHz bandwidth over 1 GHz *	-	-	-47	dBm

Be noted that the parameter marked with “*” represents a design guaranteed value.

11. Interface Characteristics

Terminal characteristics (design guarantee values)

(Operating supply voltage: VDD=2.6V to 3.6V, Ta=−30°C to +85°C)

No.	Parameter	Symbol	Condition	Specification			Unit
				Min.	Typ.	Max.	
1	High-level input voltage	VIH1	(*1)	VDD x 0.7	-	VDD	V
2	Low-level input voltage	VIL1	(*1)	0	-	VDD x0.3	V
3	High-level output voltage	VOH	IOH=4mA (*2)	VDD -0.4	-	VDD	V
4	Low-level output voltage	VOL	IOL=−4mA (*2)	-	-	0.4	V

(*1) Pin shown as “I” in the “I/O” column in “Pin Description” table.

(*2) Pin shown as “O” in the “I/O” column in “Pin Description” table.

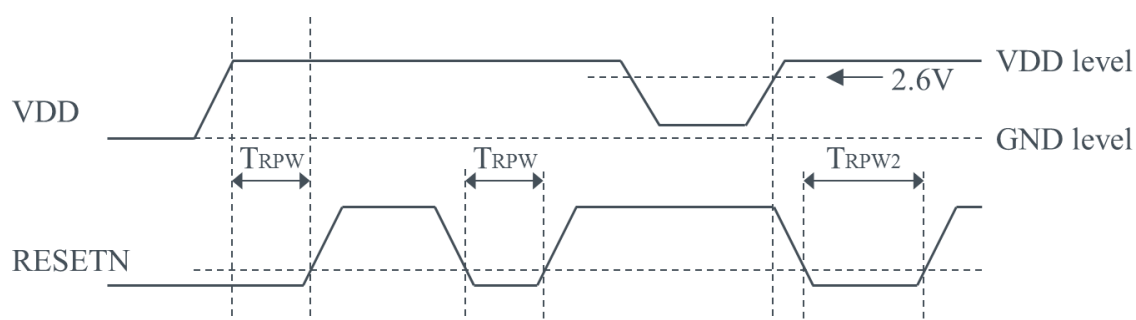
UART specification

Parameter	Specification
Baud rate	115,200 bps
Data width	8 bits
Parity	Not provided
Stop bit	1 bit
HW flow control	Disabled (Default)

Reset characteristics (design guarantee value)

(Operating supply voltage: VDD=2.6V to 3.6V, Ta=−30 to +85°C)

Parameter	Symbol	Condition	Specification			Unit
			Min.	Typ.	Max.	
RESETN pulse period (When starting from VDD=0V)	TRPW	-	200	-	-	ns
RESETN pulse period 2 (*1) (When starting from VDD≠0V)	TRPW2	VDD>2.6V	1	-	-	ms



(*1) When starting from VDD≠0V, input a pulse to the RESETN signal after VDD exceeds 2.6V.

Startup time

Insert “WAIT” period of **three** seconds or more before the first command is issued after turning ON the power supply or resetting.

12. Channel Setting

For Japan region (ARIB STD-T108)

Region	Japan	Japan	Japan	Japan
Data Rate	50 kbps	100 kbps	150 kbps	300 kbps
n unit radio channel	1	2	2	3
Modulation Index	1	1	0.5	0.5
Channel space	200 kHz	200 kHz	200 kHz	200 kHz
F_Dev	25.0 kHz	50.0 kHz	37.5 kHz	75.0 kHz

Channel Number	Center Frequency [kHz]	Center Frequency [kHz]	Center Frequency [kHz]	Center Frequency [kHz]
24	920.6	920.7	920.7	920.8
25	920.8	920.9	920.9	921.0
26	921.0	921.1	921.1	921.2
27	921.2	921.3	921.3	921.4
28	921.4	921.5	921.5	921.6
29	921.6	921.7	921.7	921.8
30	921.8	921.9	921.9	922.0
31	922.0	922.1	922.1	922.2
32	922.2	922.3	922.3	922.4
33	922.4	922.5	922.5	922.6
34	922.6	922.7	922.7	922.8
35	922.8	922.9	922.9	923.0
36	923.0	923.1	923.1	923.2
37	923.2	923.3	923.3	923.4
38	923.4	923.5	923.5	923.6
39	923.6	923.7	923.7	923.8
40	923.8	923.9	923.9	924.0
41	924.0	924.1	924.1	924.2
42	924.2	924.3	924.3	924.4
43	924.4	924.5	924.5	924.6
44	924.6	924.7	924.7	924.8
45	924.8	924.9	924.9	925.0
46	925.0	925.1	925.1	925.2
47	925.2	925.3	925.3	925.4
48	925.4	925.5	925.5	925.6
49	925.6	925.7	925.7	925.8
50	925.8	925.9	925.9	926.0
51	926.0	926.1	926.1	926.2
52	926.2	926.3	926.3	926.4
53	926.4	926.5	926.5	926.6
54	926.6	926.7	926.7	926.8
55	926.8	926.9	926.9	927.0
56	927.0	927.1	927.1	927.2
57	927.2	927.3	927.3	927.4
58	927.4	927.5	927.5	927.6
59	927.6	927.7	927.7	927.8
60	927.8	927.9	927.9	-
61	928.0	-	-	-

For United States region (FCC Part 15) (1/4)

Region	US	US	US	US
Data Rate	50 kbps	150 kbps	300 kbps	600 kbps
Modulation Index	1	0.5	0.5	0.4
Channel space	200 kHz	400 kHz	600 kHz	1000 kHz
F_Dev	25.0 kHz	37.5 kHz	75.0 kHz	120.0 kHz

Channel Number	Center Frequency [kHz]	Center Frequency [kHz]	Center Frequency [kHz]	Center Frequency [kHz]
0	902.2	902.4	902.6	903.0
1	902.4	902.8	903.2	904.0
2	902.6	903.2	903.8	905.0
3	902.8	903.6	904.4	906.0
4	903.0	904	905	907.0
5	903.2	904.4	905.6	908.0
6	903.4	904.8	906.2	909.0
7	903.6	905.2	906.8	910.0
8	903.8	905.6	907.4	911.0
9	904.0	906	908	912.0
10	904.2	906.4	908.6	913.0
11	904.4	906.8	909.2	914.0
12	904.6	907.2	909.8	915.0
13	904.8	907.6	910.4	916.0
14	905.0	908	911	917.0
15	905.2	908.4	911.6	918.0
16	905.4	908.8	912.2	919.0
17	905.6	909.2	912.8	920.0
18	905.8	909.6	913.4	921.0
19	906.0	910	914	922.0
20	906.2	910.4	914.6	923.0
21	906.4	910.8	915.2	924.0
22	906.6	911.2	915.8	925.0
23	906.8	911.6	916.4	926.0
24	907.0	912	917	927.0
25	907.2	912.4	917.6	-
26	907.4	912.8	918.2	-
27	907.6	913.2	918.8	-
28	907.8	913.6	919.4	-
29	908.0	914	920	-
30	908.2	914.4	920.6	-
31	908.4	914.8	921.2	-
32	908.6	915.2	921.8	-
33	908.8	915.6	922.4	-
34	909.0	916	923	-
35	909.2	916.4	923.6	-
36	909.4	916.8	924.2	-
37	909.6	917.2	924.8	-

For United States region (FCC Part 15) (2/4)

Region	US	US	US	US
Data Rate	50 kbps	150 kbps	300 kbps	600 kbps
Modulation Index	1	0.5	0.5	0.4
Channel space	200 kHz	400 kHz	600 kHz	1000 kHz
F_Dev	25.0 kHz	37.5 kHz	75.0 kHz	120.0 kHz

38	909.8	917.6	925.4	-
39	910.0	918	926	-
40	910.2	918.4	926.6	-
41	910.4	918.8	927.2	-
42	910.6	919.2	-	-
43	910.8	919.6	-	-
44	911.0	920	-	-
45	911.2	920.4	-	-
46	911.4	920.8	-	-
47	911.6	921.2	-	-
48	911.8	921.6	-	-
49	912.0	922	-	-
50	912.2	922.4	-	-
51	912.4	922.8	-	-
52	912.6	923.2	-	-
53	912.8	923.6	-	-
54	913.0	924	-	-
55	913.2	924.4	-	-
56	913.4	924.8	-	-
57	913.6	925.2	-	-
58	913.8	925.6	-	-
59	914.0	926	-	-
60	914.2	926.4	-	-
61	914.4	926.8	-	-
62	914.6	927.2	-	-
63	914.8	927.6	-	-
64	915.0	-	-	-
65	915.2	-	-	-
66	915.4	-	-	-
67	915.6	-	-	-
68	915.8	-	-	-
69	916.0	-	-	-
70	916.2	-	-	-
71	916.4	-	-	-
72	916.6	-	-	-
73	916.8	-	-	-
74	917.0	-	-	-
75	917.2	-	-	-
76	917.4	-	-	-
77	917.6	-	-	-

For United States region (FCC Part 15) (3/4)

Region	US	US	US	US
Data Rate	50 kbps	150 kbps	300 kbps	600 kbps
Modulation Index	1	0.5	0.5	0.4
Channel space	200 kHz	400 kHz	600 kHz	1000 kHz
F_Dev	25.0 kHz	37.5 kHz	75.0 kHz	120.0 kHz

78	917.8	-	-	-
79	918.0	-	-	-
80	918.2	-	-	-
81	918.4	-	-	-
82	918.6	-	-	-
83	918.8	-	-	-
84	919.0	-	-	-
85	919.2	-	-	-
86	919.4	-	-	-
87	919.6	-	-	-
88	919.8	-	-	-
89	920.0	-	-	-
90	920.2	-	-	-
91	920.4	-	-	-
92	920.6	-	-	-
93	920.8	-	-	-
94	921.0	-	-	-
95	921.2	-	-	-
96	921.4	-	-	-
97	921.6	-	-	-
98	921.8	-	-	-
99	922.0	-	-	-
100	922.2	-	-	-
101	922.4	-	-	-
102	922.6	-	-	-
103	922.8	-	-	-
104	923.0	-	-	-
105	923.2	-	-	-
106	923.4	-	-	-
107	923.6	-	-	-
108	923.8	-	-	-
109	924.0	-	-	-
110	924.2	-	-	-
111	924.4	-	-	-
112	924.6	-	-	-
113	924.8	-	-	-
114	925.0	-	-	-
115	925.2	-	-	-
116	925.4	-	-	-
117	925.6	-	-	-

For United States region (FCC Part 15) (4/4)

Region	US	US	US	US
Data Rate	50 kbps	150 kbps	300 kbps	600 kbps
Modulation Index	1	0.5	0.5	0.4
Channel space	200 kHz	400 kHz	600 kHz	1000 kHz
F_Dev	25.0 kHz	37.5 kHz	75.0 kHz	120.0 kHz

118	925.8	-	-	-
119	926.0	-	-	-
120	926.2	-	-	-
121	926.4	-	-	-
122	926.6	-	-	-
123	926.8	-	-	-
124	927.0	-	-	-
125	927.2	-	-	-
126	927.4	-	-	-
127	927.6	-	-	-
128	927.8	-	-	-

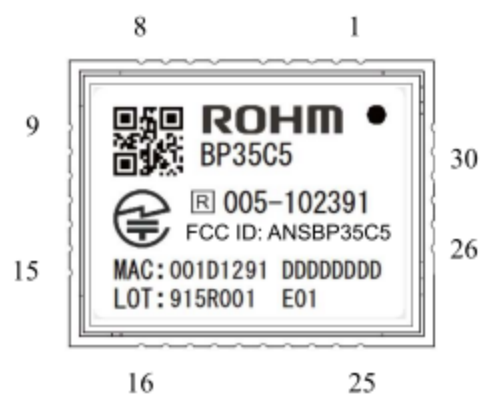
13. Setting of Communication Time Limit and Carrier Sensing Time

This Product has acquired the Technical Regulations Conformity Certification with the settings listed in the table below. The Products is not allowed to be used with any setting outside the setting range listed below.

Unit Channel Number	Data rate setting (Number of channels to use at a time)	Carrier sensing time	Transmission time limit	Pause time	Total of transmission time per hour
33-61(JP)	50 kbps (n=1) 100kbps (n=2), 150kbps (n=2) 300kbps (n=3)	128 μ s or more (Sensing at all times)	400 ms or less per transmission	2 ms or more	360 sec. or less With channel hopping; 720 sec. or less

Unit Channel Number	Data rate setting	Carrier sensing time	Transmission time limit	Pause time	Total of transmission time per hour
0-128(US)	50 kbps 150kbps 300kbps 600kbps	128 μ s or more (Sensing at all times)	400 ms or less per transmission	2 ms or more	-

14. List of Pins



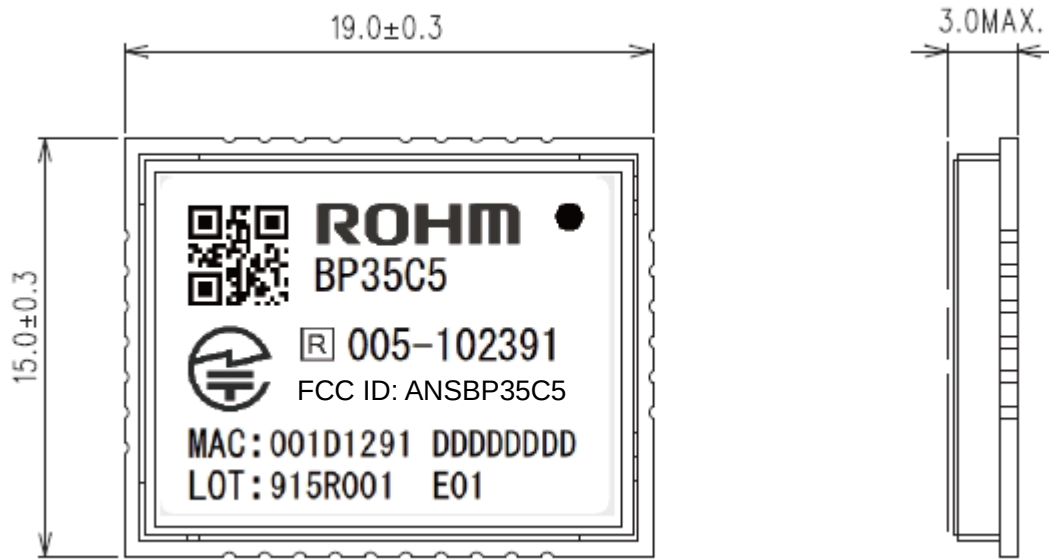
15. Reference Peripheral Circuit DiagramsRouter / Leaf mode (UART : 1 port)

Fig. 2.1. Reference Peripheral Circuit Diagrams (for Router / Leaf mode)

Border Router mode (UART : 2 ports)

Fig. 2.2. Reference Peripheral Circuit Diagrams (for Border Router mode)

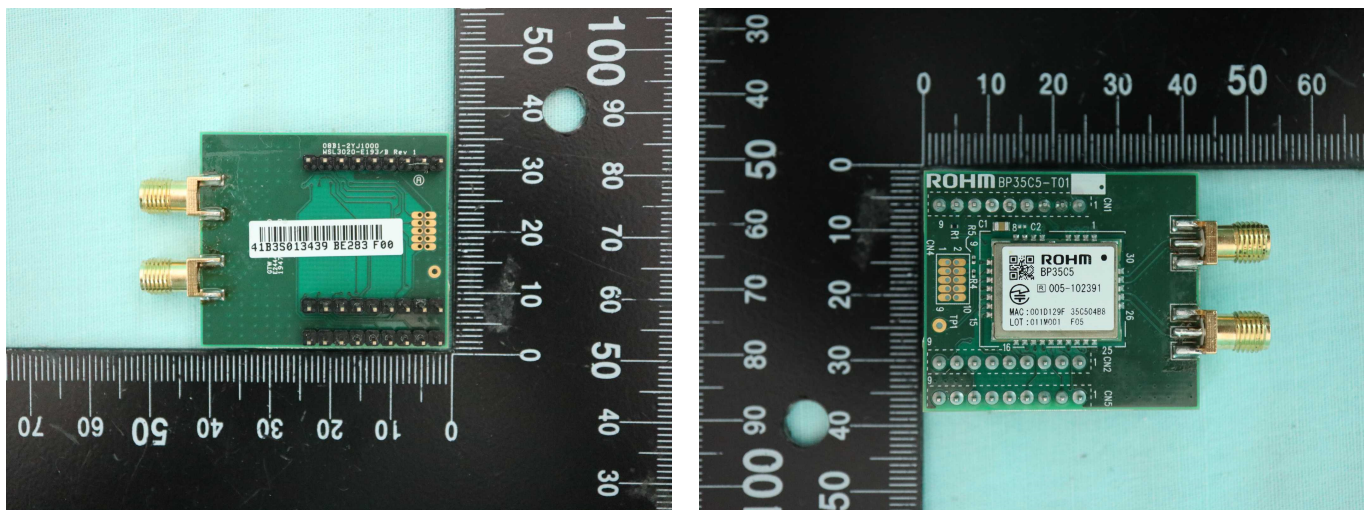
16. Outline Dimensions



UNIT: mm

Fig. 3. Outline Dimensions Diagram

*Any defects in the appearance other than scratches and dents harmful to the practical use of this Product are overlooked.



17. Product Marking and Labeling Specification

The following items are indicated on the product.

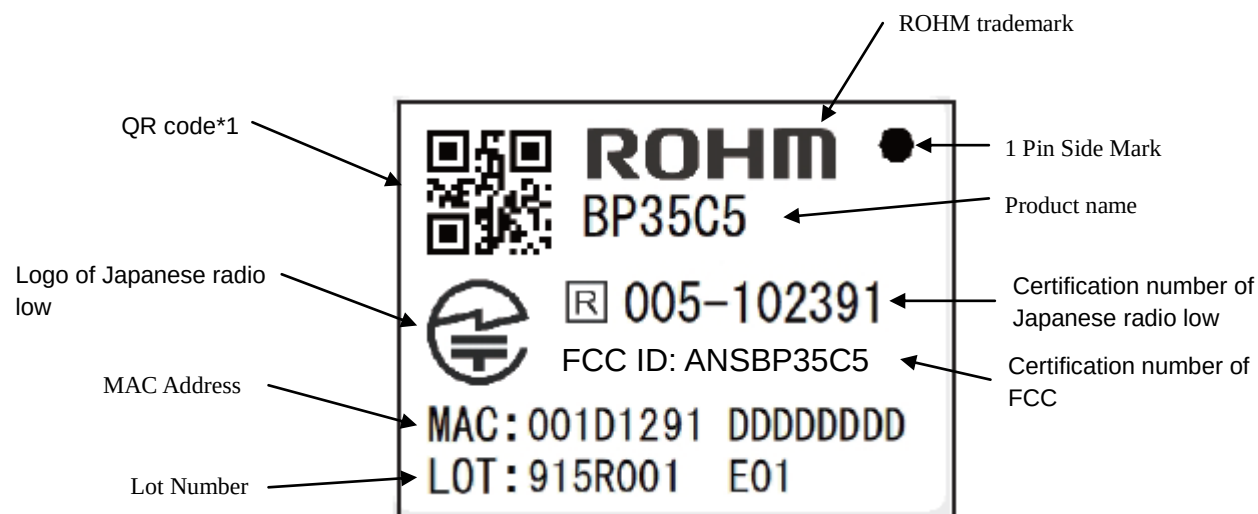


Fig. 4. Marking Specification

*1 QR code has a product serial number as information.
 The design of marking is subject to change without prior notice.

Marking information

ROHM

BP35C5
 915R001

: ROHM Trademark

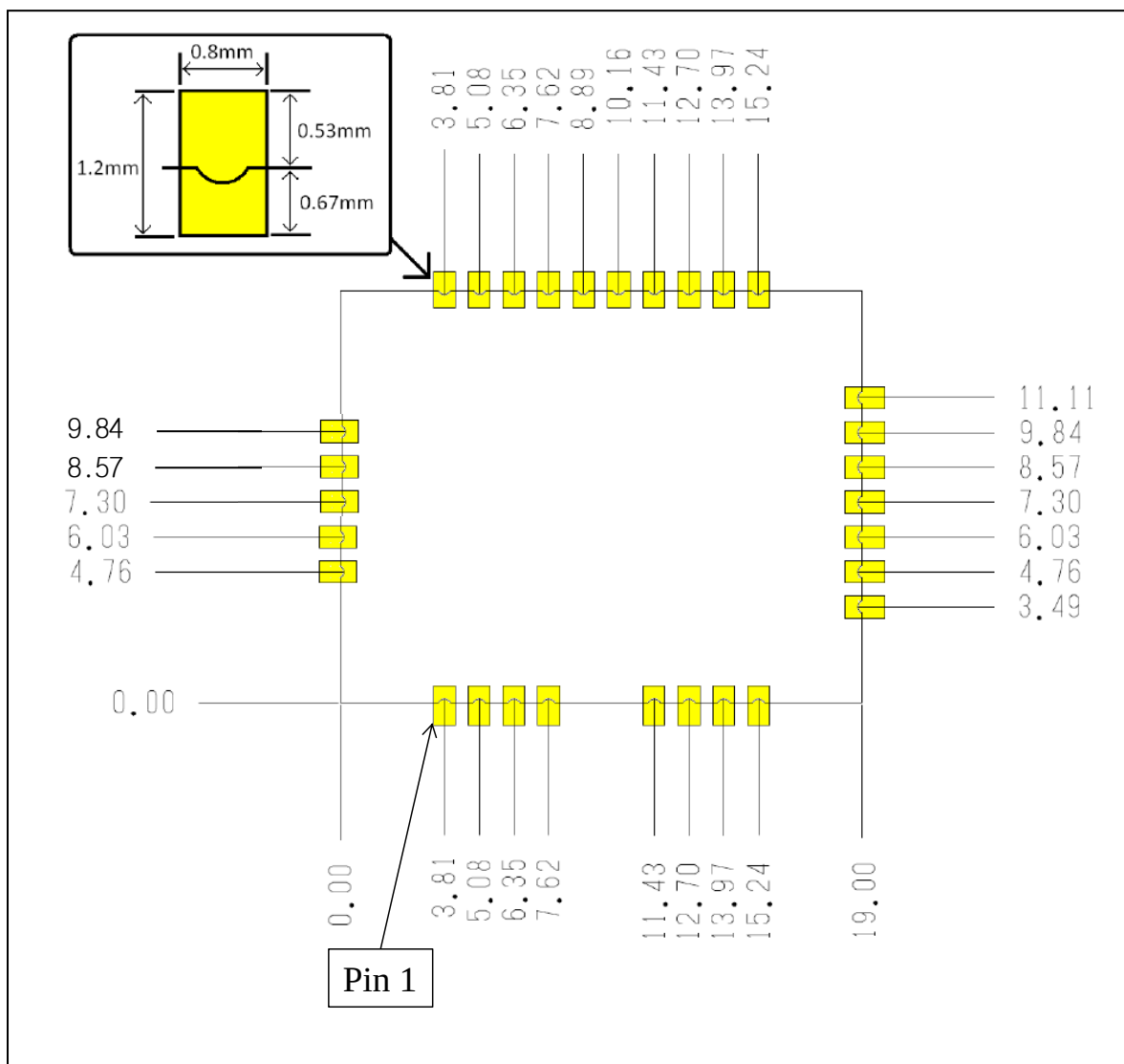
: Product name

: Manufacturing Lot Number

(Example) 915▲▲▲▲→ 2019_15th week_▲▲▲▲

(▲▲▲▲: Secret number)

18. RECOMMENDED LAND PATTERN



UNIT: mm

Fig.5. Recommended Land Pattern

Caution: There are patterning on the soldering surface (bottom side).

Please be sure not to wire (including GND) on the part of PCB under the module except land pattern.