

TRC25

Operating Manual

OHM (Chongqing) Electronics Technology CO.,LTD.

Technical datasheet (TRC25)

This Module has two types of configurations for orientations of the pins for Application purpose. They are identical, only the pins placed on rear side and front respectively for the two configurations.



Technical Specification for configuration 1 (Pins on rear side)	
Common data	
Module code	TRC25
Country identity	EU1/US
Frequency Band	433MHz Band
Channel spacing	25kHz
Deviation	$\pm 5\text{kHz}$
Frequency stability	$\leq \pm 2\text{ppm}$ ($-30^{\circ}\text{C} \sim +70^{\circ}\text{C}$)
Operating temperature range	$-40^{\circ}\text{C} \sim +70^{\circ}\text{C}$
Modulation	GFSK
Switch-over time (RX-TX)	$\leq 1\text{ms}$
Dimensions	44mm x 27mm x 12mm
Weight	10g
Application	TCT-C__ ; TCR-C__ ; TCR-B__
Order number	B20048

Specific data				
Parameter	MIN	TYP	MAX	UNIT
Supply voltage	3.1	3.3	4.5	V
Supply current (Transmitter@10dBm)	40	45	50	mA
Supply current (Receiver)	25	28	30	mA
Receiving sensitivity@9.6kbps	-119	-115	-113	dBm



Technical Specification for configuration 2 (Pins on front side)

Common data

Module code	TRC25
Country identity	EU1/US
Frequency range	433MHz Band
Channel spacing	25kHz
Deviation	$\pm 5\text{kHz}$
Frequency stability	$\leq \pm 2\text{ppm}$ ($-30^{\circ}\text{C} \sim +70^{\circ}\text{C}$)
Operating temperature range	$-40^{\circ}\text{C} \sim +70^{\circ}\text{C}$
Modulation	GFSK
Switch-over time (RX-TX)	$\leq 1\text{ms}$
Dimensions	44mm x 27mm x 12mm
Weight	10g
Application	TCT-B
Order number	B20047

Specific data

Parameter	MIN	TYP	MAX	UNIT
Supply voltage	3.1	3.3	4.5	V
Supply current (Transmitter@10dBm)	40	45	50	mA
Supply current (Receiver)	25	28	30	mA
Receiving sensitivity@9.6kbps	-119	-115	-113	dBm

This radio module has been approved with the antenna types listed below, with the maximum permissible gain indicated. Antenna types not included in this list or have a gain greater than the maximum gain indicated for any type listed are strictly prohibited for use with this device.

Ant No.	Antenna type	Max gain (dBi)	Part Number	Manufacturer
1#	Integral antenna, permanently attached with soldering	1.0	OM7.769.001	OHM (ChongQing) Electronics Technology CO., LTD.
2#	Integral antenna, permanently attached with specific connector.	-6.0	C0448-ANG0003	Radiation Technology, Inc.
3#	Integral antenna, permanently attached with specific connector.	3.0	N/A	Radiation Technology, Inc.

Statement:

Changes or modifications to this equipment not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Notice for installation in host:

The final host/module combination may also need to be evaluated against the FCC Part15B criteria for unintentional radiators in order to be properly authorized for operation as a Part 15 digital device. The user's manual or instruction manual for an intentional or unintentional radiator shall caution the user that changes or modifications not expressly approved by the party.

To ensure compliance with all non-transmitter functions the host manufacturer is responsible for ensuring compliance with the module(s) installed and fully operation. For example, if a host was previously authorized as an unintentional radiator under the Declaration of Conformity procedure without a transmitter certified module and a module is added, the host manufacturer is responsible for ensuring that the after the module is installed and operational the host continues to be compliant with the Part 15B unintentional radiator requirements.

Labelling:

The proposed FCC label format is to be placed on the module. If it is not visible when the module is installed into the system, "Contains FCC ID: 2BCT6-0002" shall be placed on the outside of final host system.