

1. Specification

1-1. General

Item	Specification
Frequency Range Transmitter Receiver	824.64 ~ 848.37 MHz 869.64 ~ 893.37 MHz
Channel Bandwidth	CDMA1.23MHz
Channel Spacing	30kHz
Number of Channels	20FA
Duplex Separation	45MHz
Type of Emission	G7 W
Input/Output Impedance	50 ohms
Intermediate Frequency Transmitter Receiver	130.38MHz 210.38MHz
Local Frequency Transmitter Receiver	1st($F_{TX}-130.38$), 2nd(260.76MHz) 1st($F_{RX}-210.38$), 2nd(420.76MHz)
TCXO Frequency	19.68MHz
Frequency Stability	($F_{RX}-80MHz$) $\pm 1/4$ 50Hz
Operating Temperature	-20°C ~ +50°C
Supply Voltage	9VDC nominal
Current Consumption(Average) Standby Talk	100mA(Non-slot mode) 470mA(at +10dBm)
Size and Weight	200 \times 170 \times 48.5mm/1000g

1-2. Transmitter

Item	Specification
Waveform Quality	0.944 or more
Open Loop Power Control Range -25dBm -65dBm -104dBm	-57.5dBm ~ -38.5dBm -17.5dBm ~ +1.5dBm +18.0dBm ~ +30.0dBm
Minimum Tx Power Control	-50dBm below
Closed Loop Power Control Range	Test1 beyond ± 24 dB Test2 1ms ~ 2.5ms Test3 beyond ± 24 dB Test4 beyond ± 24 dB Test5 beyond ± 24 dB
Maximum RF Output Power	220mW(+23.4dBm)
Occupied Bandwidth	1.23MHz
Conducted Spurious Emissions @ 1.25MHz	-42dBc/30kHz

1-3. Receiver

Item	Specification
Rx Sensitivity and Dynamic Range (Rate Set 1)	-104dBm, FER=0.5% or less -25dBm, FER=0.5% or less
Conducted Spurious Emission 869 ~ 894 MHz 824 ~ 849 MHz All Other Frequency	below -81 dBm/1MHz below -61 dBm/1MHz below -47 dBm/30kHz
Single Tone Desensitization Rx power = -101dBm Tone power = -30dBm Tone offset from carrier = ± 900 kHz	FER=lower than 1%

<p>Intermodulation Spurious Response Attenuation</p> <p>Rx power = -101dBm</p> <p> Tone power 1 = -43dBm</p> <p> Tone power 2 = -43dBm</p> <p> Tone 1 offset from carrier = ± 900kHz</p> <p> Tone 2 offset from carrier = ± 1700kHz</p> <p>Rx power = -90dBm</p> <p> Tone power 1 = -32dBm</p> <p> Tone power 2 = -32dBm</p> <p> Tone 1 offset from carrier = ± 900kHz</p> <p> Tone 2 offset from carrier = ± 1700kHz</p> <p>Rx power = -79dBm</p> <p> Tone power 1 = -21dBm</p> <p> Tone power 2 = -21dBm</p> <p> Tone 1 offset from carrier = ± 900kHz</p> <p> Tone 2 offset from carrier = ± 1700kHz</p>	<p>FER=lower than 1%</p>
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1-4. Antenna

Item	Specification
Frequency	824 ~ 894MHz
Gain	2 \pm 1.0dBi
VSWR	less than 1.9:1
Impedance	50 ohms
Size	210.7 \pm 1.5 mm
Temperature	-30 $\text{ }^{\circ}\text{C}$ ~ +60 $\text{ }^{\circ}\text{C}$
Input connector	BNC-Male

1-5. Channel vs. Frequency Table

FA No.	CH No.	TX[MHz]	RX[MHz]
1	1011	824.64	869.64
2	29	825.87	870.87
3	70	827.10	872.10
4	111	828.33	873.33
5	152	829.56	874.56
6	193	830.79	875.79
7	234	832.02	877.02
8	275	833.25	878.25
9	316	834.48	879.48
10	363	835.89	880.89
11	404	837.12	882.12
12	445	838.35	883.35
13	486	839.58	884.58
14	527	840.81	885.81
15	568	842.04	887.04
16	609	843.27	888.27
17	650	844.50	889.50
18	697	845.91	890.91
19	738	847.14	892.14
20	779	848.37	893.37