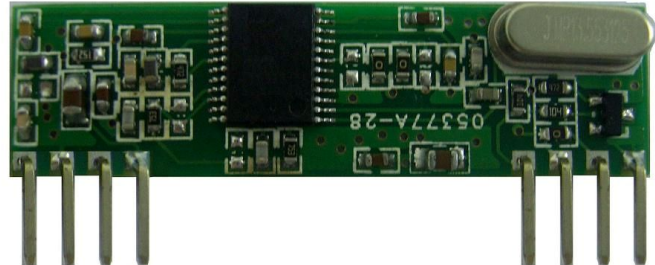


Type: ASK/OOK/FSK Super-Heterodyne Receiver Module Model: CY68-XXX

1. DESCRIPTION:

The CY68-XXX is a ASK/OOK/FSK compatible superhet receiver. Which is designed with high sensitivity, long distance, easy use for designing.



2. FEATURES:

- Frequency: 315MHz/433.92MHz(custom frequency is available);
- High sensitivity -116dBm (ASK/OOK) , -115dBm(FSK);
- Supply voltage: VCC= 3.6 to 5.5 V;
- IF band: 220KHz;
- Low power consumption: Icc=6.3mA(FM mode, Vcc=5.0V@434MHz);
- Consumption current during BS(battery saving)mode: 0uA(typ.);
- Easy for application;
- Wide operating temperature;
- Fast response time.

3. APPLICATION:

- Remote gate controls
- Remote keyless entry
- Car alarm systems
- wireless security systems
- Automation systems

4. PIN DEFINITION:

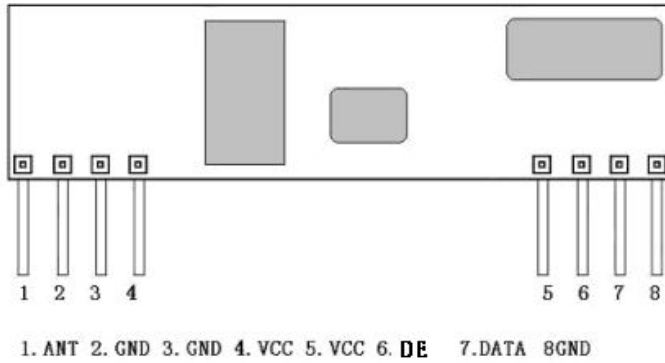


Figure1 CY68 Shape & Pins

Pin-out as showed in figure1 above.

PIN NAME	Pin Definition
ANT	Antenna In
GND	Ground
GND	Ground
VCC	Positive Supply Power
VCC	Positive Supply Power
DE	Optional output: 1, DATA output(default setting) 2, Battery Saving Mode: (Working mode in High level input) (Sleeping mode in Low level input)
DATA	Data Output
GND	Ground

Note1: ANT pin is a 50 ohm antenna input. The length is about:

23cm for 315MHz

17cm for 433.92MHz

5. ELECTRICAL CHARACTERISTICS:

Condition: Ta=25°C Vcc=5.0V Frequency=315MHz

Characteristics		Min	Typ	Max	Unit	Note
F _c	Carrier Frequency	310	314.98	316	MHz	IF = 220kHz
V _{cc}	Supply Voltage	3.6	5.0	5.5	V	5.0v at default
I _s	Supply current	4.3	5.7	7.1	mA	ASK
		4.5	5.9	7.3		FSK
Modulation Mode		ASK/FSK				
	RF sensitivity		-116		dBm	600bps(Manchester), dev=±40kHz
F _{dev}	Frequency Deviation		±40kHz			
B _w	-3dB Bandwidth		250		KHz	
	Datarate		2.4	9.6	kbps	
T _{on}	Turn on time from sleep			3	ms	
V _{IL}	“L”level input/output level	0		0.2	mA	
V _{IH}	“H”level input/output level	2.6		5.5	V	
	Output leak current (H level)		0	2	μA	
V _{DATAL}	Output voltage (L level)			0.4	V	I _{DATAL} = 200μA
DR	Wave shaping output duty ratio	45	50	55	%	V _{IN} (MIX) = 60dBmVEMFF or single tone
I _{RR}	Image Suppression Ratio		35		dB	
T _{op}	Operating Temperature Range	-40		+85	°C	

Condition: Ta=25°C Vcc=5.0V Frequency=433.92MHz

Characteristics		Min	Typ	Max	Unit	Note
F _c	Carrier Frequency	430	433.92	435	MHz	IF = 220kHz
V _{cc}	Supply Voltage	3.0	5.0	5.5	V	5.0v at default
I _s	Supply current	4.6	6.1	7.6	mA	ASK
		4.7	6.3	7.9		FSK
Modulation Mode		ASK/FSK				
	RF sensitivity		-116		dBm	600bps(Manchester), dev=±40kHz
F _{dev}	Frequency Deviation		±40kHz			
B _w	-3dB Bandwidth		250		KHz	
	Datarate		2.4	9.6	kbps	At default

T _{on}	Turn on time from sleep			3	ms	
V _{IL}	“L”level input/output level	0		0.2	mA	
V _{IH}	“H”level input/output level	2.6		5.5	V	
	Output leak current (H level)		0	2	μA	
V _{DATAL}	Output voltage (L level)			0.4	V	I _{DATAL} = 200μA
DR	Wave shaping output duty ratio	45	50	55	%	V _{IN} (MIX) = 60dBmVEMFF or single tone
I _{RR}	Image Suppression Ratio		35		dB	
T _{op}	Opertaing Temperature Range	-40		+85	°C	

6. MECHANICAL SIZE: (UNIT: mm)

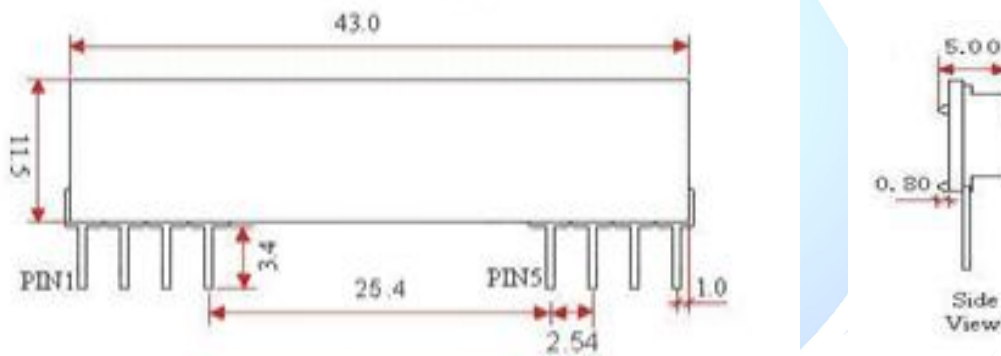
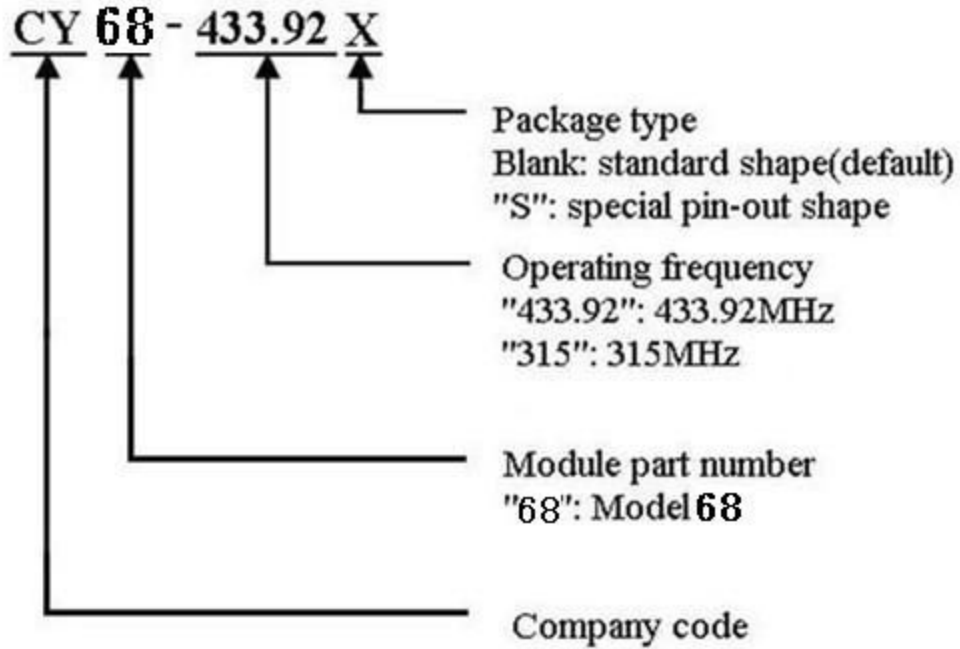


Figure2 CY68 Dimension

7.ORDER INFORMATION



For more information and assistance, please contact us as follows:

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