

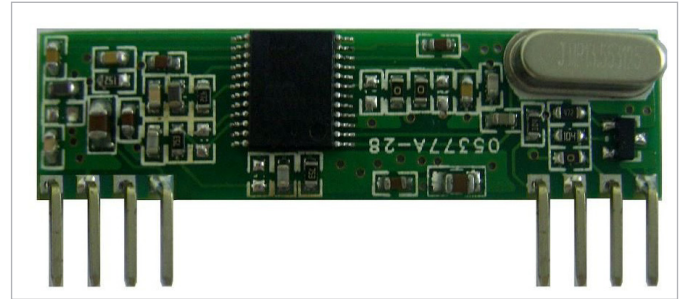


DESCRIPTION

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

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.

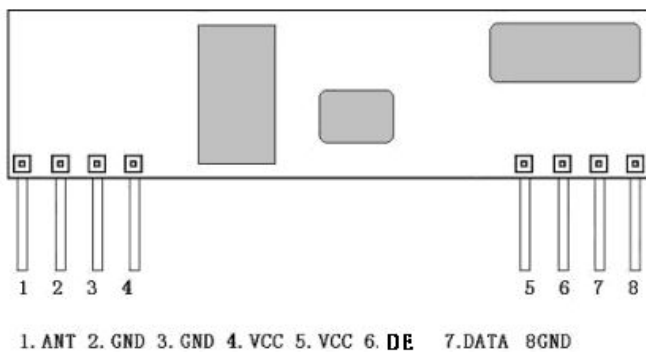


APPLICATION

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

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 power Supply
VCC	Positive power Supply
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

Note 1: ANT pin is a 50 Ohm antenna input. The length is about:
23cm for 315MHz
17cm for 433.92MHz

MECHANICAL DIMENSION

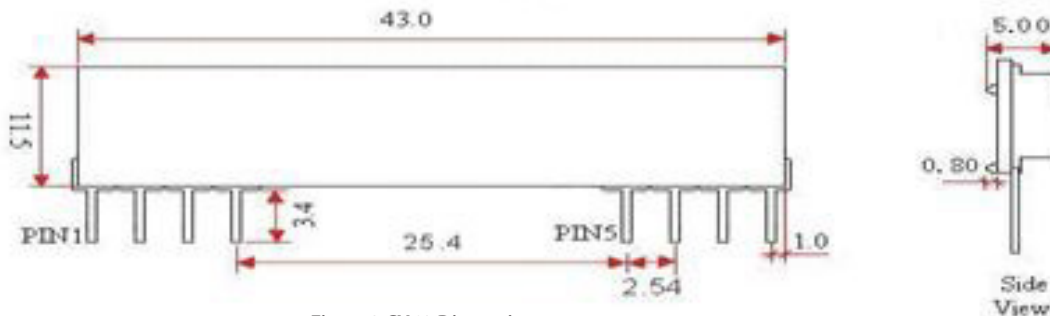


Figure2 CY68 Dimensions

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

ELECTRICAL CHARACTERISTICS						
Parameters	Symbol	Status	Reference Value			Unit
			Minimum	Standard	Maximum	
Carrier Frequency	Fc	IF = 220kHz	310	314.98	316	MHz
Supply Voltage	Vcc	5.0V at default	3.6	5.0	5.5	V
Supply current	Is	ASK	4.3	5.7	7.1	mA
		FSK	4.5	5.9	7.3	
Modulation Mode		ASK/FSK				
RF sensitivity		600bps (Manchester), dev=±40kHz		-116		dBm
Frequency Deviation	Fdev			±40kHz		
-3dB Bandwidth	Bw			250		KHz
Data rate		423.22MHz		2.4	9.6	Kbps
Turn on time from sleep	Ton	RL= 500K			3	ms
"L"level input/output level	VIL		0		0.2	mA
"H"level input/output level	VIH		2.6		5.5	V
Output leak current (H level)				0	2	µA
Output voltage (L level)	V _{DATAL}	I _{DATAL} = 200µA			0.4	V
Wave shaping output duty ratio	DR	VIN (MIX)=60dBmVEMFF or single tone	45	50	55	%
Image Suppression Ratio	IRR			35		dB
Operating Temperature Range	Top		-40		+85	°C

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

ELECTRICAL CHARACTERISTICS						
Parameters	Symbol	Status	Reference Value			Unit
			Minimum	Standard	Maximum	
Carrier Frequency	Fc	IF = 220kHz	430	433.92	435	MHz
Supply Voltage	Vcc	5.0V at default	3.0	5.0	5.5	V
Supply current	Is	ASK	4.6	6.1	7.6	mA
		FSK	4.7	6.3	7.9	
Modulation Mode		ASK/FSK				
RF sensitivity		600bps (Manchester), dev=±40kHz		-116		dBm
Frequency Deviation	Fdev			±40kHz		
-3dB Bandwidth	Bw			250		KHz
Data rate		423.22MHz		2.4	9.6	Kbps
Turn on time from sleep	Ton	RL= 500K			3	ms
"L"level input/output level	VIL		0		0.2	mA
"H"level input/output level	VIH		2.6		5.5	V
Output leak current (H level)				0	2	µA
Output voltage (L level)	V _{DATAL}	I _{DATAL} = 200µA			0.4	V
Wave shaping output duty ratio	DR	VIN (MIX)=60dBmVEMFF or single tone	45	50	55	%
Image Suppression Ratio	IRR			35		dB
Operating Temperature Range	Top		-40		+85	°C

ORDER INFORMATION:

CY 68 - 433.92 X

