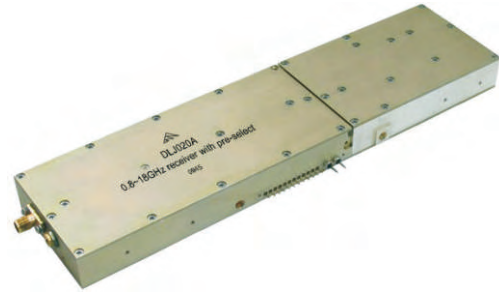
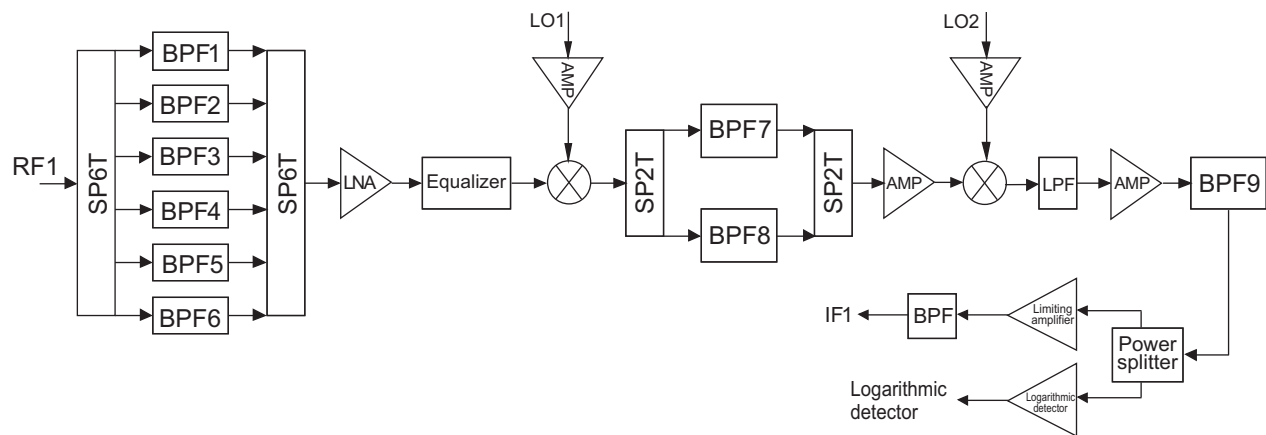


Features

- UWB received signal 0.8~18GHz
- Pre-select filter bank, good interference, High image rejection
- Variable IF frequency design
- A limiting amplifier for IF, high dynamic range of receiver
- Two IF outputs: limiting amplifying, logarithmic detecting
- Operating temp range: -40°C ~ +70°C


Schematic diagram

Electrical specifications ($V_{CC1}=+8V$, $V_{CC2}=-8V$, $T_A=25^\circ C$)

Parameter	Symbol	Value	Unit
Frequency Input	f_{in}	0.8 ~ 18	GHz
Frequency Output	f_{IF}	L band	—
IF Bandwidth	BW_{IF}	800	MHz
Channel Gain	G_P	75 (Typ)	dB
Power Output	P_O	0 ± 1	dBm
Input Dynamic Range	DR_i	65 (Min)	dB
Noise Figure	Nf	14 (Typ)	dB
Amplitude Matching	ΔM	± 0.5	dB
Phase Matching	ΔP	± 15	°
Current	I_{CC}	1.3 (Typ)	A
Dimension	—	$225 \times 57 \times 18$	mm

Note:

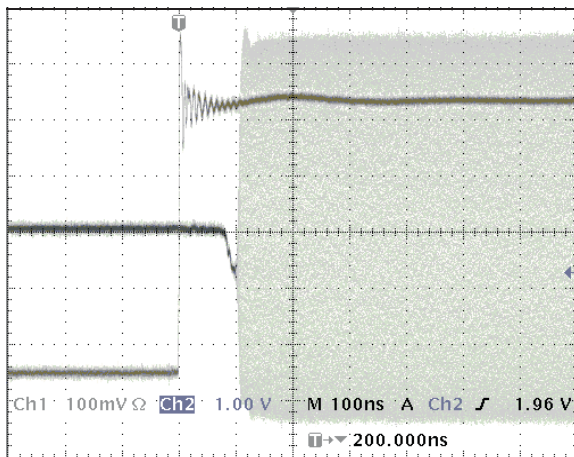
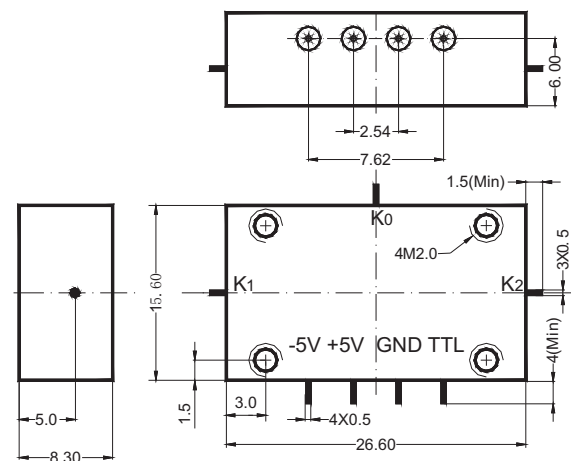
- 1) A multi channel pre-select receiver can be formed by single channel receiver.
- 2) Strict process and design make ensure excellent amplitude and phase matching between each channel.

Features

- Compact metal package
- Low insertion loss. High isolation
- Fast switching speed
- Removable SMA Connectors
- Operating temperature range:-45°C ~ +85°C


Specifications (Vcc=+5V, Vee=-5V)

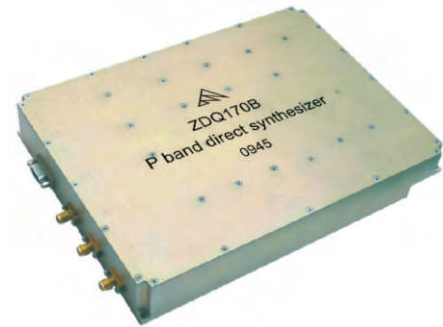
Part number	Frequency range (GHz)	Insertion loss (dB) (Typ/Max)	VSWR (Typ)	Isolation (dB) (Typ/Min)	Switching speed (ns) (Typ)	Notes
SW201	0.5~2	0.8/1.5	1.3	70/65	120	Reflective
SW201B	0.5~2	1.0/1.5	1.3	70/65	120	Absorptive
SW202	1~4	1.0/1.7	1.4	70/65	120	Reflective
SW202B	1~4	1.4/2.0	1.4	70/65	120	Absorptive
SW203	2~8	1.5/2.0	1.7	65/60	120	Reflective
SW203B	2~8	1.8/2.5	1.7	65/60	120	Absorptive
SW204	2~12	2.0/2.5	1.7	65/60	120	Reflective
SW205	2~18	3.0/3.5	2.0	60/55	120	Different outline

Switching time

Outline drawing(mm)

Application note:

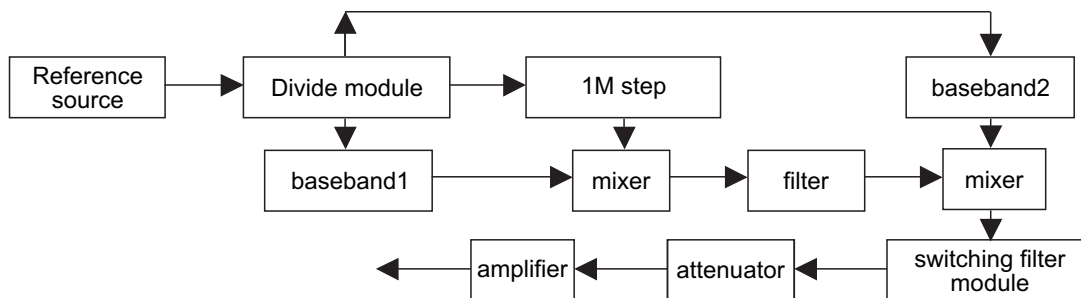
1. Supply power: +5V@30mA/-5V@30mA.
2. High power to 1w(cw).
3. Logic input high(2.5~5V,1mA Max):on
Logic input low(0~0.6V,3mA Max):off
4. Higher isolation,specified outline drawing and opposite control logic are available.
5. Do not cure the lead unduly.Exceed Soldering time(10 second at 280°C)may cause permanent damage.
6. 1uF electrolytic capacitance and 0.01~0.1uF chip Capacitance are recommed on the power port to filter the infereference.

Features

- Direct frequency synthesizer
- Multi frequency output (181 points), small step(1MHz)
- Low phase noise (better than -130dBc/Hz@1kHz)
- Fast switching, typical 300ns
- Good filtering and shielding design, low spurious output
- Operating temperature range: -45°C~+70°C


Applications

- Baseband source for C, X, Ku band direct frequency synthesizer

Schematic diagram

Electrical specifications (Vcc: +5V, +15V, 50 Ω)

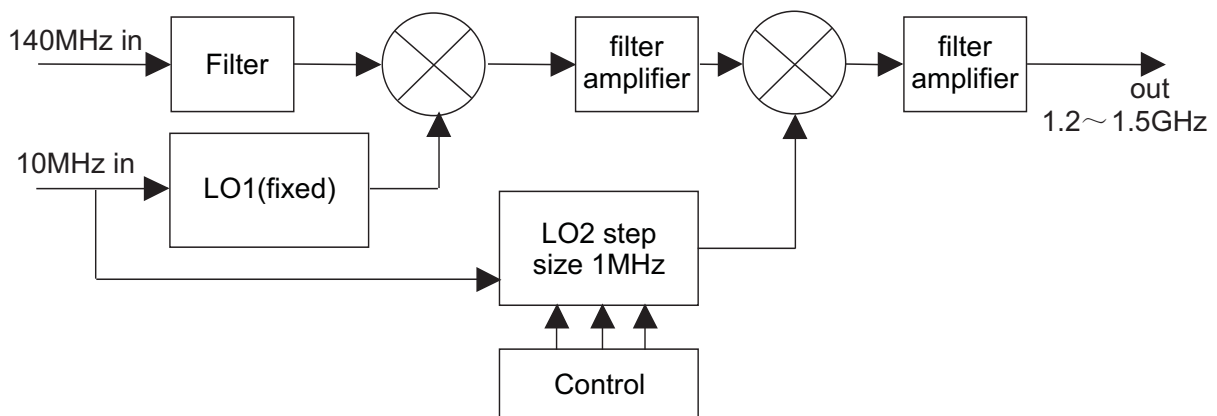
Parameter	Symbol	Unit	Value
Frequency Output	F _o	MHz	640~820
Step Size	Δf	MHz	1
Power Output	P _o	dBm	≥10, Typical 12
Phase Noise	ℒ(1kHz)	dBc/Hz	≤-130, Typical -133
Switching Time	t	us	≤1, Typical 0.2~0.3
Spurious Output	R _{f_s}	dBc	≤-70
Harmonic Output	R _{f_n}	dBc	≤-50
Dimension	L×W×H	mm	200×150×30
Connector	SMA -50K		

Notes

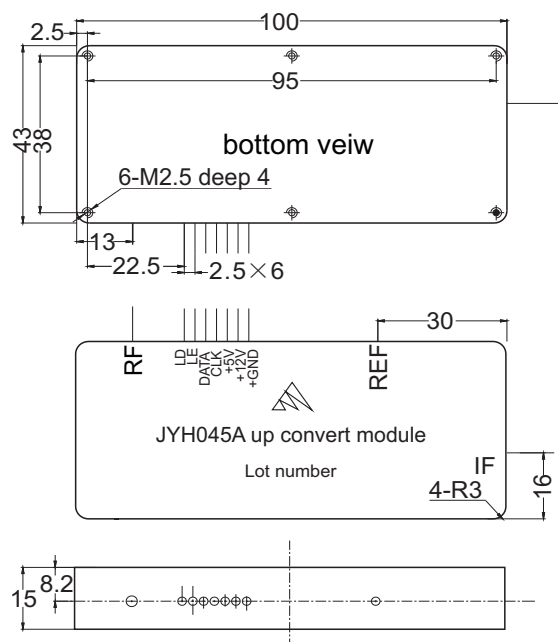
- 1) Internal or external crystal oscillator is available for this synthesizer, it depends on customer's requirement.
- 2) Custom frequency output, dimension and operating temperature range are available.

Features

- Two times frequency conversion, small size
- Integrated fixed frequency and switching synthesizer
- Input frequency: 140MHz, reference frequency: 10MHz
- Output frequency: 1.2~1.5GHz
- Step size: 10MHz
- Dimension: 100×43×15mm
- Operating temperature range: -40℃~+60℃

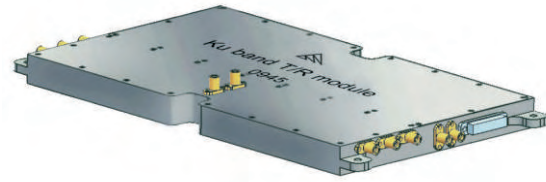

Schematic diagram

Electrical specifications ($V_{cc1}=+12V$, $V_{cc2}=+5V$)

Parameter	Symbol	Value	Unit
Input frequency	f_{in}	140	MHz
Input power	P_{in}	0 ± 1	dBm
Reference input frequency	f_r	10	MHz
Reference input power	P_r	0 ± 1	dBm
Output frequency	f_{out}	1200~1500	MHz
Step size	—	1	MHz
Output power	G_p	0 ± 2	dBm
Spurious output	R_{fs}	≤ -65	dBc
LO phase noise	@1kHz	≤ -80	dBc/Hz
	@10kHz	≤ -85	
DC power	@+12V	I_{cc1}	mA
	@+5V	I_{cc2}	

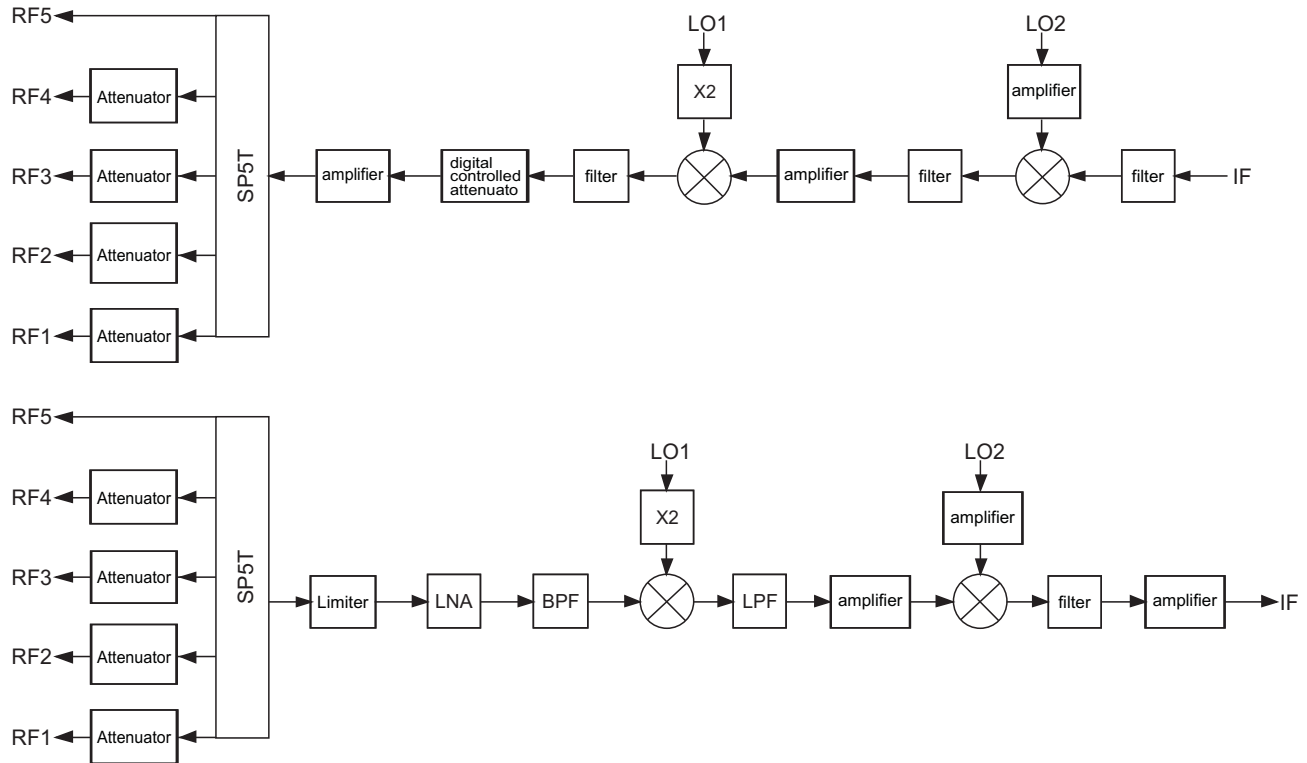
Outline drawing


Features

- Operating frequency: Ku band
- Modular design, high isolation
- Wide operating temperature range, High reliability
- Strong anti-interference
- High image rejection
- Controllable transmit signal power
- Good spurious output



Schematic diagram



Electrical specifications ($V_{CC1}=+8V$, $V_{CC2}=-8V$, $T_A=25^{\circ}C$)

Parameter	Symbol	Value	Unit
Frequency Input	F_i	Ku band, BW800MHz	—
Output Power	P_O	≥ 20	dBm
Spurious Output	R_{fs}	≤ -60	dBc
Port to Port Isolation	L	≥ 50	dB
Noise Figure	F_n	≤ 5	dB
Dynamic Range of Input	DR	100	dB
Conversion Gain	G_a	≥ 25	dB
T/R Isolation	L_{RT}	≥ 80	dB
Current	I_{CC}	1.5	A