

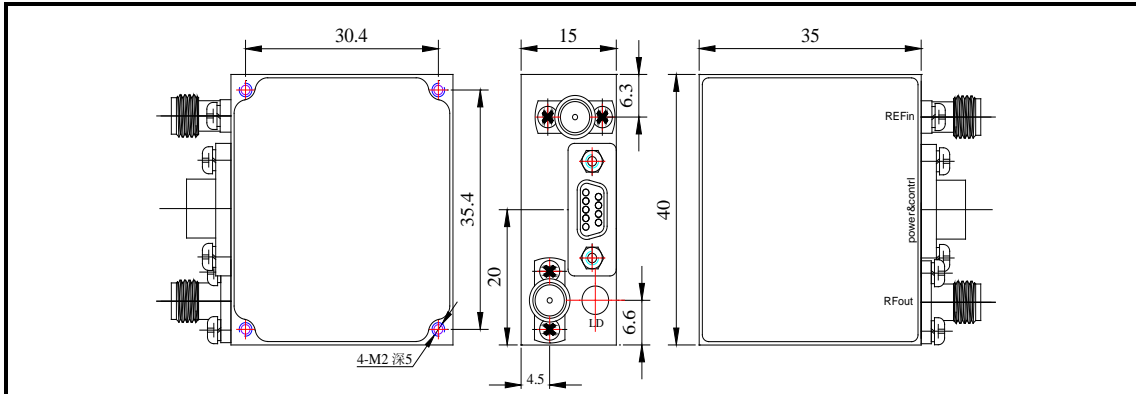
General

Low-frequency

Frequency Synthesizer



Description:					
1. Internal 50M TCXO;					
2. Detection options: internal and external reference for adaptive switching;					
3. Used in 30M ~ 4200M output;					
4. Provide point frequency or variable reference.					
Frequency range (MHz)		2800~4200 30~3000			
Output Level (dBm)		≥+13			
Step (MHz)		1			
Frequency switching (uS)		≤600			
Steady Frequency temperature stability		±3×10 ⁻⁷ (Same as external reference)			
Frequency accuracy		±3×10 ⁻⁷ (Same as external reference)			
Spurious (dBc)		≤-70			
Harmonics (dBc)		≤-10			
Phase Noise	dBc/Hz@100Hz	@2.5GHz HMC830LP6GE	≤-75	@3.6GHz HMC829LP6E	≤-71
	dBc/Hz@1kHz		≤-94		≤-90
	dBc/Hz@10kHz		≤-103		≤-100
	dBc/Hz@100kHz		≤-105		≤-103
	dBc/Hz@1MHz		≤-132		≤-126
Phase Noise (System Floor)	dBc/Hz@100Hz	@2.5GHz HMC830LP6GE	≤-90	@3.6GHz HMC829LP6E	≤-84
	dBc/Hz@1kHz		≤-102		≤-102
	dBc/Hz@10kHz		≤-103		≤-102
	dBc/Hz@100kHz		≤-105		≤-103
	dBc/Hz@1MHz		≤-132		≤-126
Power supply (V/mA)		5.5V/450mA			
Connector		RF connector: SMA-KFD Control and power connector: J30J-9ZKP			
Dimensions		40×35×15mm			
Control		SPI/UART			
Operating temperature (°C)		-40~+70			
Storage temperature (°C)		-55~+85			



Notes: Internal reference with 50MHz TCXO, the phase noise does not reach the floor of the chip noise, for better phase noise to be synchronized outside the reference.

DB9/J30J-9 Common Interface Definition (SPI and serial control)

Pin number	Pin definition	Function	Pin number	Pin definition	Function
1	U/S	Communication mode selection	6	SCLK	SPI Clock
2	TXD	Serial transmission	7	MOSI	SPI DATA
3	RXD	Serial receive	8	GND	GND
4	NSS	SPI LE	9	+12V	Power
5	MISO	SPI DATA			

Notes: When the U / S is set to high, the system is serial communication, U / S is set to low, the system for the SPI communication; this pin is floating when the high.