

# Programmable Frequency Synthesizer

## PCK3GF-1



### Features

- Compact size
- Surface mounting
- Low phase noise
- Programmable 1KHz step
- Wide band 50MHz-3000MHz



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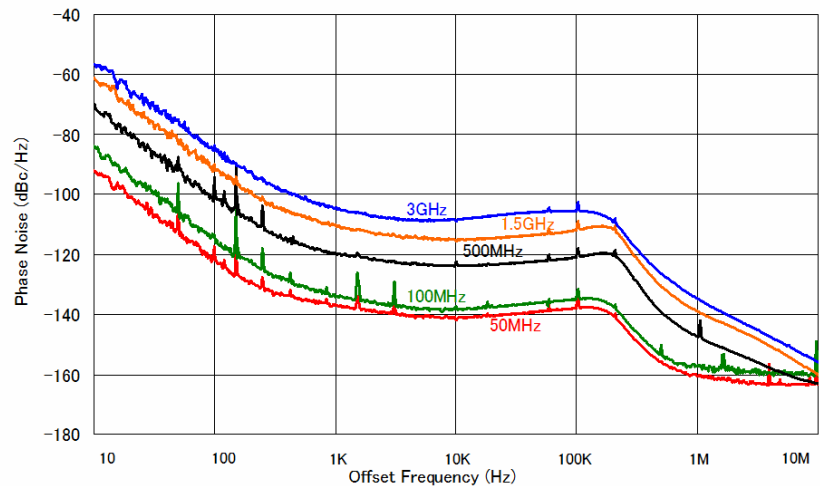
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<http://www.dst.co.jp/en>

## ● Specification

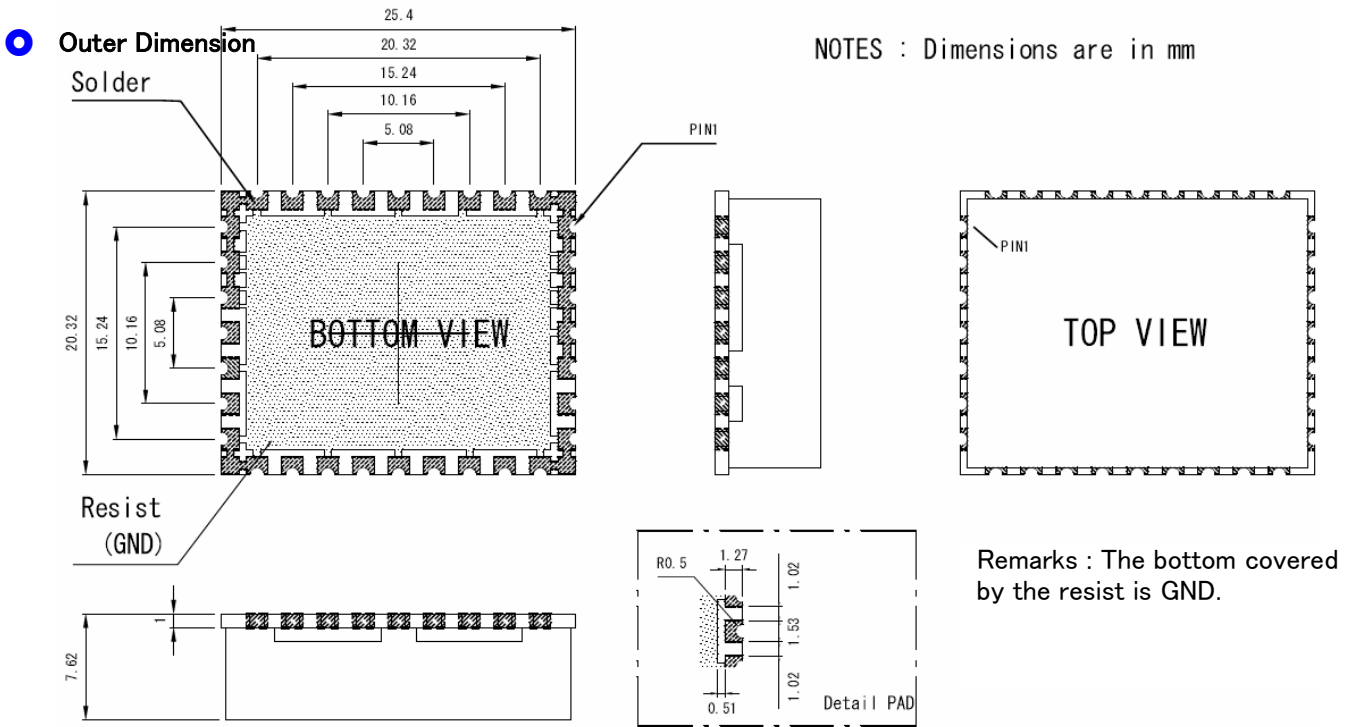
Frequency Range	50~3000MHz	
Frequency Resolution	1KHz	
Phase Noise 3GHz(typical)	-55 dBc/Hz	@ 10 Hz
	-85 dBc/Hz	@ 100 Hz
	-104 dBc/Hz	@ 1 KHz
	-105 dBc/Hz	@ 10 KHz
	-105 dBc/Hz	@ 100 KHz
	-132 dBc/Hz	@ 1 MHz
	-155 dBc/Hz	@ 10 MHz
Spurious	-65dBc Max	(except harmonics)
Harmonics spurious	max -8dBc	
Output Level	>+3dBm @50ohm	
Ext Ref Requirement	50MHz or100MHz Level :: +6dBm - +10dBm	
Ext Ref input impedance	1K $\Omega$	
Unlock Output	Locked: High Level    Unlocked: Low Level 3.3V CMOS Level	
Lock Time	40m sec Max	
Operating Temperature Range	0 - +60 Deg. C	
Storage Temperature Range	-30 - +70 .Deg. C	
Dimensions	W 25.4 x D 20.32 x H 7.62 (mm)	
Power Supply	+5V+/-5% 500mA	
Controls	(1) Asynchronous Serial Communication 9600bps, 8bits, one stop bits, non-parity (2) SPI serial communication 3 bytes data (24bits)	

## ● Phase noise performance

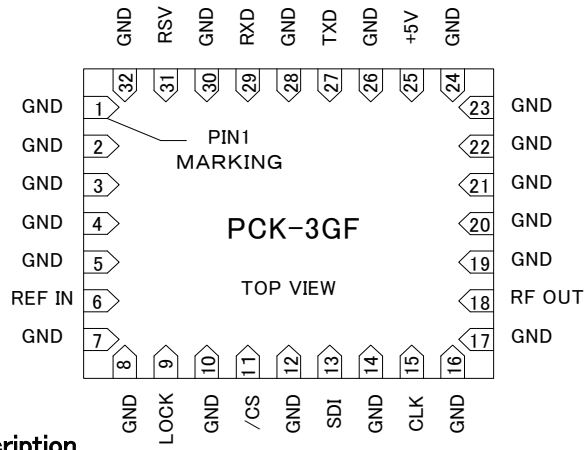


## ● Related Products

REF10MF    PGN-3GF    GPSG-3G  
Refer to each brochure.



**Pin Assignment**



**Pin names and description**

Pin No.	Name	Description
6	REF IN	50MHz or100MHz reference 1K $\Omega$
9	LOCK	PLL Lock status output 3.3V CMOS High: locked Low: unlocked
11	/CS	In SPI mode, chip select input low active. 3.3V CMOS Internally pulled up
13	SDI	In SPI mode, serial clock input. 3.3V CMOS
15	CLK	In SPI mode, serial clock input. 3.3V CMOS
18	RF OUT1	Output pin, 50 $\Omega$
25	+5V	Power input +5V
27	TXD	Asynchronous serial TX data 3.3V CMOS
29	RXD	Asynchronous serial RX data 3.3V CMOS internally pulled up
31	RSV	Reserved pin. This pin must be opened

Other pins are all GND  
pin1-5, 7, 8, 10, 12, 14, 16, 17, 19, 21 - 24 ,26, 28, 30, 32