

Fixed Frequency Synthesizer
PLL Reference Clock Oscillator
REF10MF



Features

- External reference clock : 10MHz (Other frequency acceptable as an option)
- Compact size
- Surface mount
- 100MHz low phase noise output



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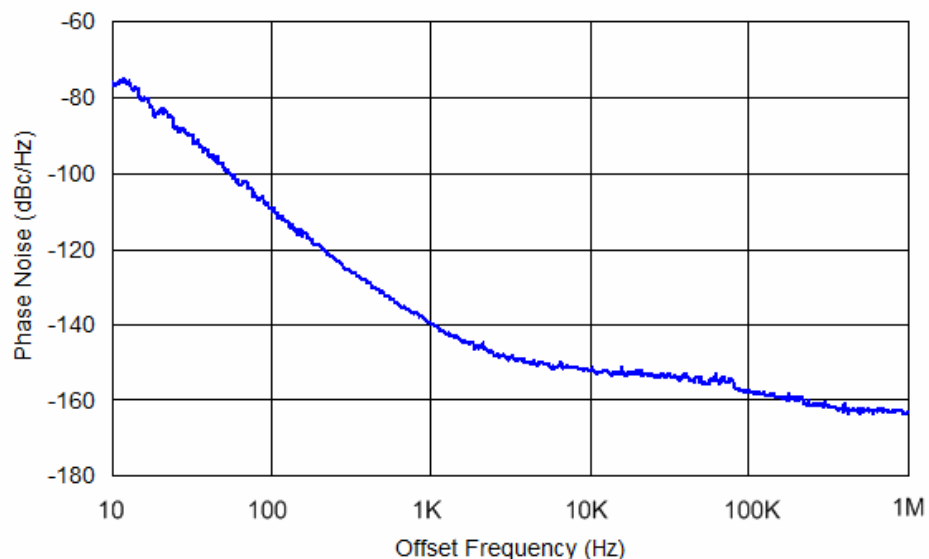
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<http://www.dst.co.jp/en>

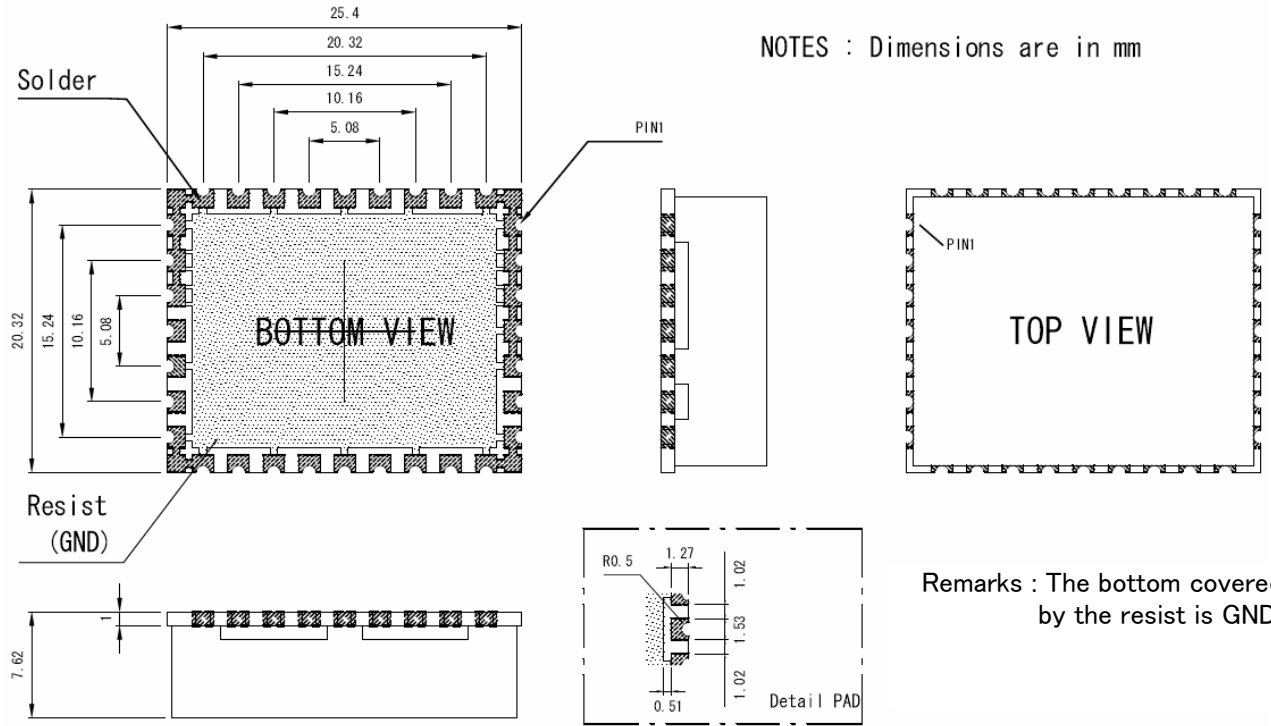
● Specification

Output frequency	100MHz	
Output port	2ports	
Output level	3.3V CMOS	
Phase Noise 100MHz (typical)	-75 dBc/Hz	@ 10 Hz
	-109 dBc/Hz	@ 100 Hz
	-140 dBc/Hz	@ 1 KHz
	-151 dBc/Hz	@ 10 KHz
	-157 dBc/Hz	@ 100 KHz
	-163 dBc/Hz	@ 1 MHz
External reference requirement	10MHz	(Other frequency acceptable as an option)
External reference signal level	+6dBm ~ +10dBm	Sine wave or squire wave
External reference signal input impedance	1K Ω	
Spurious	Less than -70dBc	(except harmonics)
PLL loop band	10Hz	
Lock range under the external clock mode	10MHz \pm 25ppm and more	
Frequency adjustment range under the internal clock mode	100MHz \pm 25ppm and more	
Frequency accuracy under the internal clock mode	Less than \pm 15ppm	0 - +60 degree C
Unlock output	lock: High level Unlock: Low level 3.3V CMOS level	
Operating temperature range	0 - +60 degree C	
Storage temperature range	-30 - +70 degree C	
Dimensions	W 25.4 x D 20.32 x H 7.62 (mm)	
Power supply	+3.3V \pm 5% max100mA	
Interface	Asynchronous Serial communication	9600bps, 8 bits, 1 stop bit, non-parity 3.3V CMOS level

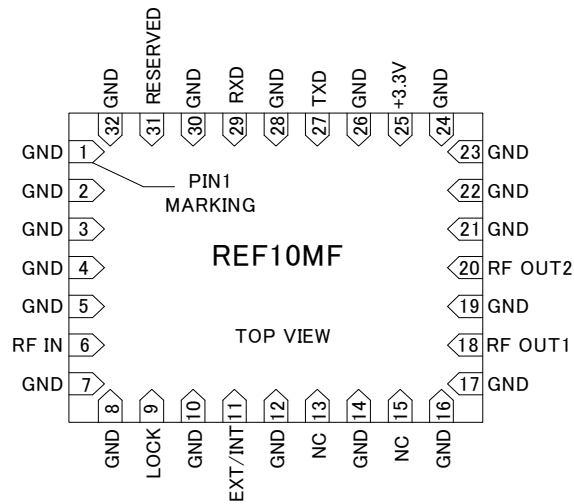
● Phase Noise



● Outer dimensions



● Pin assignment



● Pin names and description

Pin Number	Name	Description
6	REF IN	10MHz reference 1K Ω
9	LOCK	PLL lock status output High: lock Low: Unlock 3.3V CMOS
11	EXT/INT	Mode selection pin External or Internal High: External Low: Internal Internally pulled up
13, 15	NC	Not used
18	RF OUT1	Output pin 100MHz
20	RF OUT2	Output pin 100MHz
25	+3.3V	Power input +3.3V
27	TXD	Asynchronous serial TX data 3.3V CMOS
29	RXD	Asynchronous serial RX data 3.3V CMOS Internally pulled up
31	RESERVED	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