



MODEL MBFS010150M005100A
1000MHz~15000MHz
Frequency Synthesizer

FEATURES:

- Low Spurious;
- Low Phase Noise;
- Ultra Small Size and Easily Integrated;
- High Reliability;

ELECTRICAL SPECIFICATIONS @ +5VDC, 25°C, 50Ω

Parameter	Symbol	Min	Typ	Max	Units
Output Frequency	f	1000		15000	MHz
Output Frequency Step	Δf		5		MHz
Phase Noise @1kHz offset	PN		-90		dBc/Hz
Spurious Rejection	S _{pur}		-60		dBc
Harmonic Suppression (2nd)	H		-10		dBc
Output Power	P _{out}	13			dBm
Load Impedance	R		50		Ω
Hopping Time	Δt		200		us
Operating Voltage	VDC	4.75	+5	5.25	Volt
DC Current	I _{DD@+5V}		500		mA
Reference Frequency	f _{REF}		100		MHz
Reference Power	P _{REF}	0	5	8	dBm
Reference Phase Noise @1 kHz Offset	PN _{REF}		-150		dBc/Hz

MECHANICAL SPECIFICATIONS

Parameter	Value	Units	Notes
Dimensions	30x30x10 [1.18x1.18x0.4]	mm [inch]	±0.2mm[0.008]
Weight	35 [0.078]	g [lbs]	Maximum
RF Connectors Input/Output	SMA, Female		
DC Interface Connector	INSULATOR		

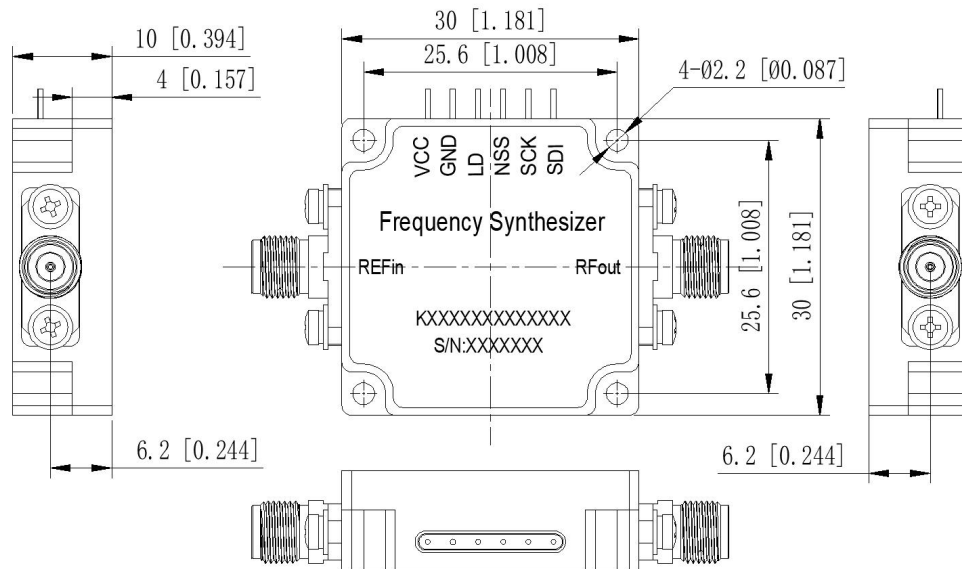
ENVIRONMENTAL CHARACTERISTICS (Design to Meet)

Parameter	Minimum	Typical	Maximum	Units	Notes
Operating Temperature	-40		+85	°C	
Non-operating Temperature	-55		+85	°C	Storage
Relative Humidity (non-condensing)			+95	%	

Absolute Maximum Rating

DC Voltage	+5.5V
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OUTLINE DRAWING (All dimensions in mm [inch])



PIN Configuration

1	VCC	+5V IN
2	GND	GND
3	LD	Lock Directive, high level: locked; low level: unlocked
4	NSS	SPI Enable signal
5	SCK	SPI Clock Signal
6	SDI	SPI Data