



Crystal Bridge to the Future

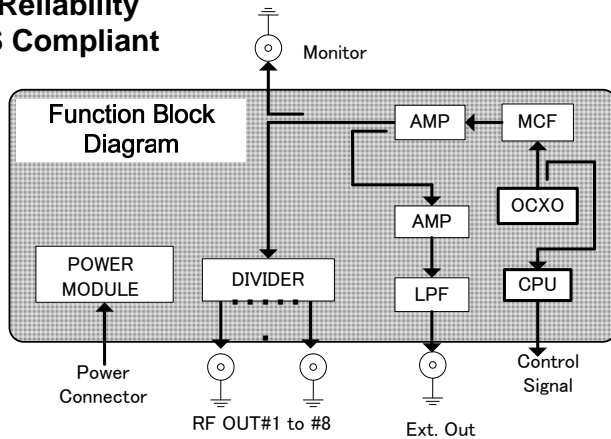
OCXO UNIT

MODEL : S010M010MA

FREQUENCY : 10MHz

Features;

- * Ultra Low Phase Noise
- * Low Spurious
- * Extremely Pure Spectrum
- * High Isolation (Typ. 30dB)
- * High Reliability
- * RoHS Compliant



RoHS Compliant
Directive 2011/65/EU

Specifications;

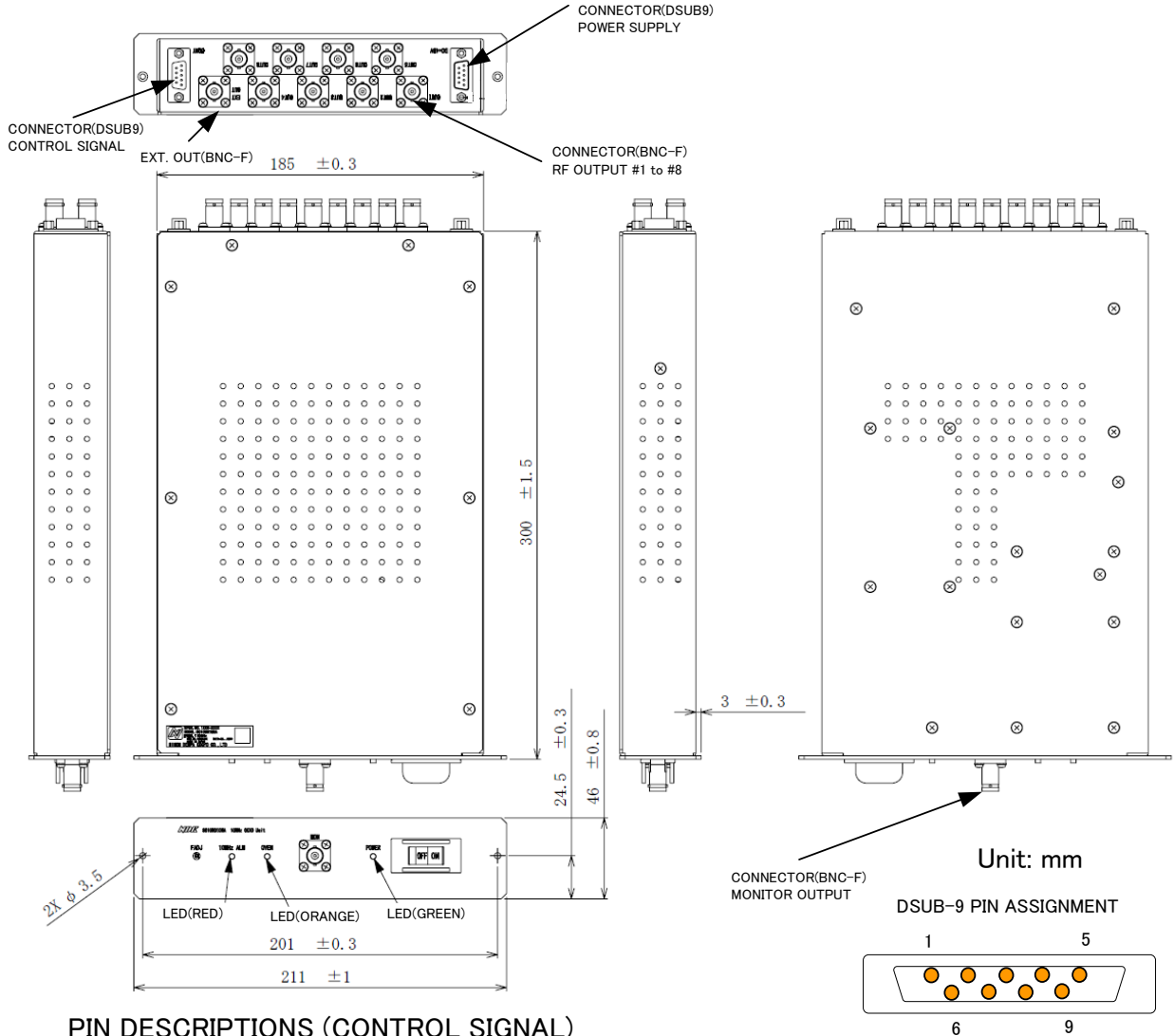
Frequency:	10MHz
Number of Output:	8 ports (Sinusoidal Wave & AC-coupled)
Output Power:	0dBm ± 1dB
Frequency Stability;	
Temp. and Power Supply Variation:	< ±10ppb
Aging:	*1 < ±50ppb/year
Warm-up:	*2 < ±100ppb
Frequency Control:	Min. ±500ppb
Phase Noise;	
@1Hz offset	< -93dBc/Hz
@10Hz offset	< -123dBc/Hz
@100Hz offset	< -133dBc/Hz
Integrated 100Hz to 1MHz	< -90dBc
Spurious (Harmonics):	< -30dBc
Spurious (Others):	< -50dBc
Monitor Signal:	Internal 10MHz Signal Sinusoidal Output, Output Level Range is 0dBm±3dB.
LED Functions:	Power ON, 10MHz Output Level Status, and OVEN Status
Alarm Signals:	Power Warning, 10MHz Output Level, and OVEN Warning
External Output Power:	13dBm±3dB
Operating Temperature Range:	-10 to +50 deg. C
Interface;	
RF connectors:	BNC-F
Control Signal and Power Connector:	D-SUB 9
Power Supply Voltage (Power Consumption):	DC+48V±15% (< 20VA)
Dimensions:	Width(211mm)×Depth(300mm)×Height(46mm)

Notes *1 ±50ppb/year is based on frequency after 30 days operation.

*2 ±100ppb is satisfied within 10 minutes after power supply.

- ◆ Specifications described in this brochure are subject to be changed without notice for improvement.
- ◆ Custom-made specifications such as stability, aging and so on are available.

Mechanical Outline



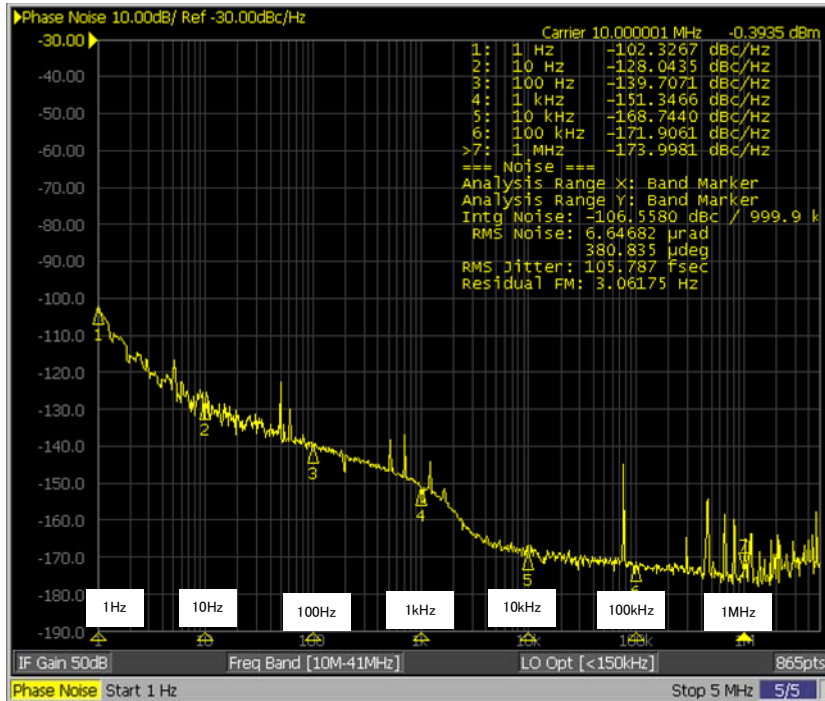
PIN DESCRIPTIONS (CONTROL SIGNAL)

#1	10MHz	10MHz output alarm terminal	#7	Power Supply	Power supply alarm terminal indicates whether power supply is normal state or not.
#6	Output Alarm	indicates whether output level is normal state or not.	#8	Alarm	
#2	NC	Do not connect	#4	OVEN	OVEN terminal indicates heater movement state of the OCXO inside.
#3	NC	Do not connect	#9		
#5	GND				

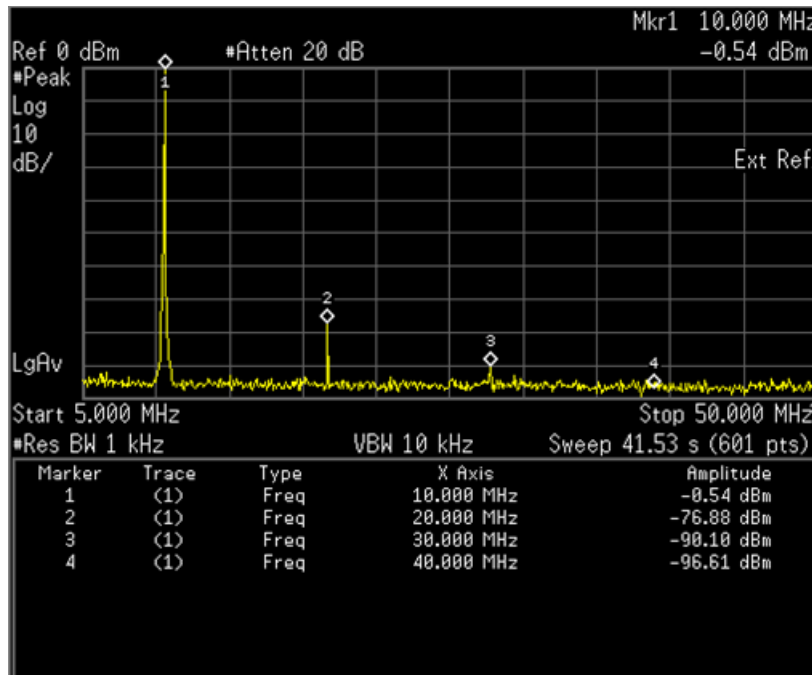
PIN DESCRIPTIONS (POWER SUPPLY)

#1	DC1	DC + 48V(DC1) power supply input terminal	#6	DC2	DC + 48V(DC2) power supply input terminal
#2	DC1		#7	DC2	
#3	NC	Do not connect	#8	GND	GND terminal of DC2
#4	GND	GND terminal of DC1	#9	GND	
#5	GND				

Typical Phase Noise Characteristics



Typical Spurious Characteristics



Harmonic Spurious Level (dBc)	2nd	-76.34
	3rd	-89.56