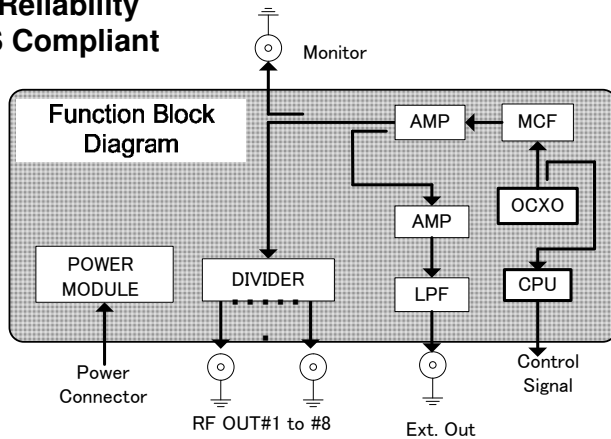


**Features;**

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



**RoHS Compliant**  
 Directive 2011/65/EU

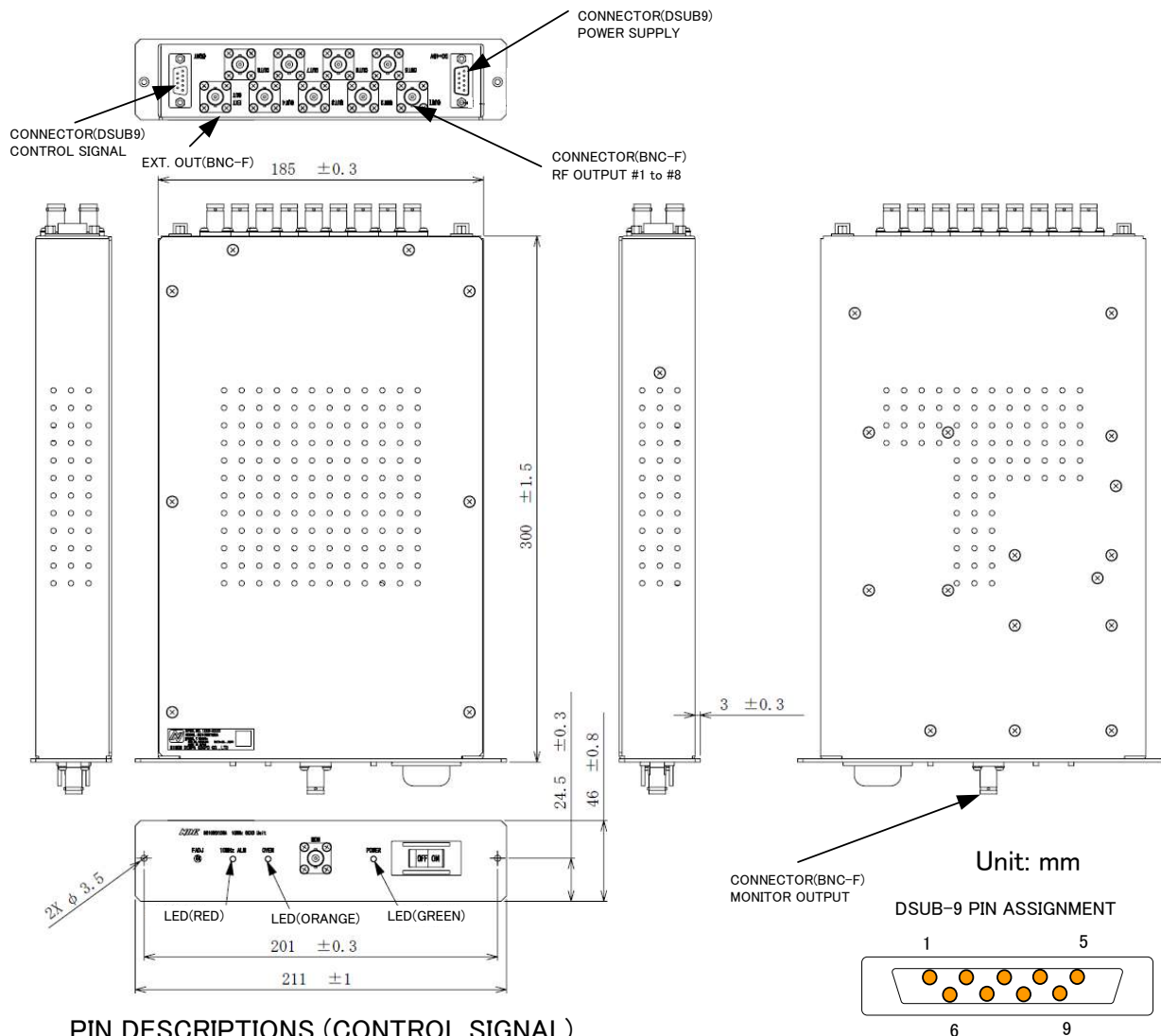
**Specifications;**

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

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



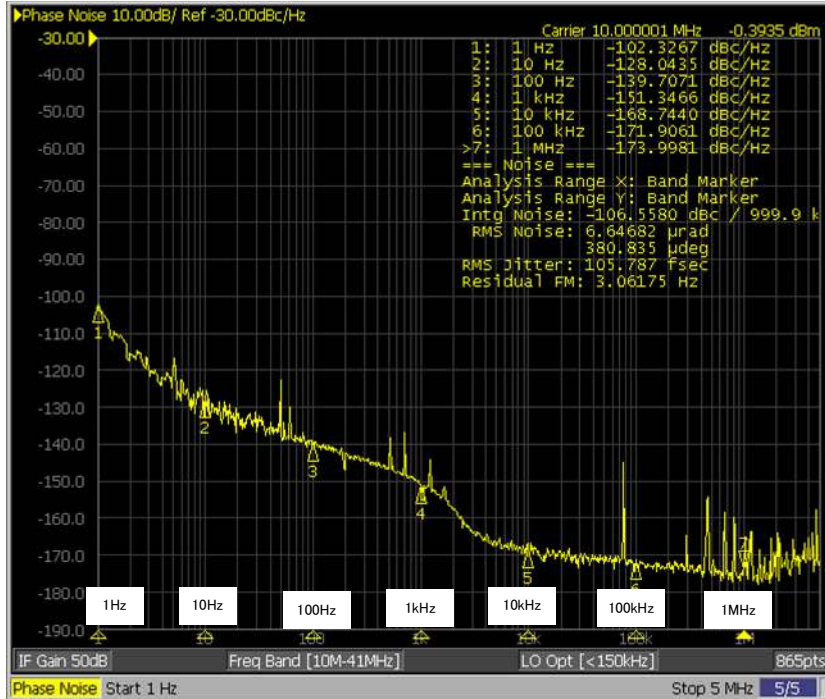
#### PIN DESCRIPTIONS (CONTROL SIGNAL)

|    |              |  |    |              |  |
|----|--------------|--|----|--------------|--|
| #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          |  |    |              |  |

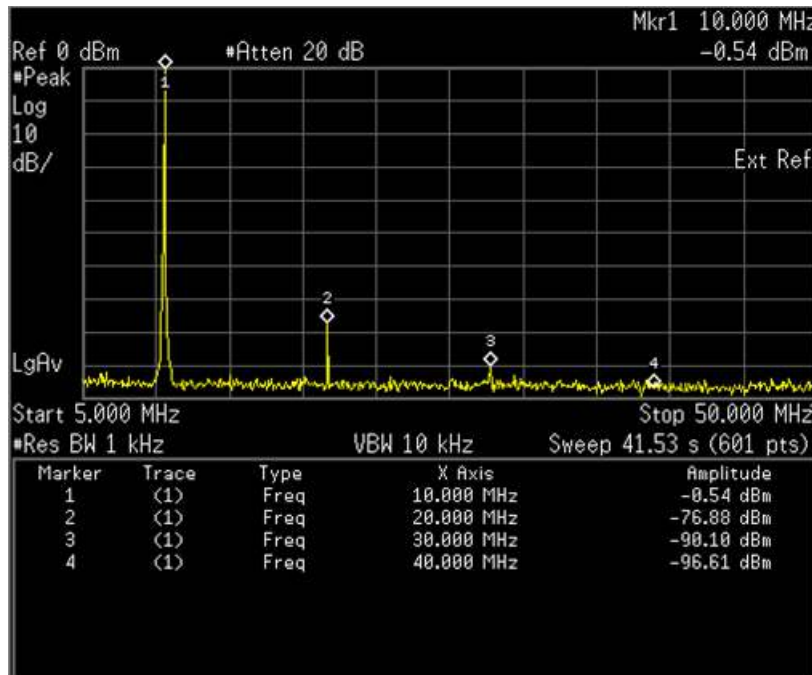
#### PIN DESCRIPTIONS (POWER SUPPLY)

|    |     |   |    |     |   |
|----|-----|---|----|-----|---|
| #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 |