



# O-4000SC Series



1. Specification		
Frequency range:	5.0 ... 100.0 MHz	
Type:	<b>O-4100SC</b>	<b>O-4200SC</b>
Supply voltage $V_S$ :	<b>+5.0 V <math>\pm</math> 5 %</b>	<b>+3.3 V <math>\pm</math> 5 %</b>
Frequency stability vs. temperature options:		
$\leq \pm 5 \times 10^{-9}$ vs. 0 °C to +50 °C:	<b>415x</b>	<b>425x</b>
$\leq \pm 1 \times 10^{-8}$ vs. -10 °C to +60 °C:	<b>416x</b>	<b>426x</b>
$\leq \pm 1 \times 10^{-8}$ vs. -20 °C to +70 °C:	<b>417x</b>	<b>427x</b>
$\leq \pm 3 \times 10^{-8}$ vs. -40 °C to +85 °C:	<b>418x</b>	<b>428x</b>
$\leq \pm 5 \times 10^{-8}$ vs. -40 °C to +85 °C:	<b>419x</b>	<b>429x</b>
Aging stability option (after 30 days of continuous operation)		
$\leq \pm 1 \times 10^{-9}$ / day; $\leq \pm 1 \times 10^{-7}$ / year:	<b>41x1</b>	<b>42x1</b>
$\leq \pm 2 \times 10^{-9}$ / day; $\leq \pm 1 \times 10^{-7}$ / year:	<b>41x2</b>	<b>42x2</b>
$\leq \pm 5 \times 10^{-10}$ / day; $\leq \pm 5 \times 10^{-8}$ / year:	<b>41x3</b>	<b>42x3</b>
Frequency stability vs. supply voltage changes $V_S \pm 5\%$ : vs. load changes $\pm 5\%$ :	$\leq \pm 5.0 \times 10^{-9}$ $\leq \pm 1.0 \times 10^{-9}$	
Frequency control by external voltage 0 V ... $V_{REF}$ :	$\geq \pm 1$ ppm	
Transfer function / Linearity:	Positive / $\leq 10\%$	
Reference Voltage $V_{REF}$ :	<b>+4.0 V <math>\pm</math> 5%</b>	<b>+3.0 V <math>\pm</math> 5%</b>
Power consumption @ +25°C steady state: during warm-up:	$\leq 1.5$ W $\leq 3.5$ W	
Warm-up time for a typical accuracy of $< \pm 1 \times 10^{-8}$ @ +25°C referred to final frequency after 1 hour:	$\leq 5$ min	
Output voltage / Load Option <b>H</b> : Option <b>S</b> :	HCMOS / 1 kOhm // 15 pF Sinewave / $> +3$ dBm / 50 Ohm	
Phase noise (typical for 10 MHz): 10 Hz: 100 Hz: 1 kHz: 10 kHz:	-110 dBc / Hz -130 dBc / Hz -145 dBc / Hz -155 dBc / Hz	
Storage temperature range:	-45°C ... +90°C	

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1		24.08.07	M. Zupan	
ED	Description	Date	Name	



ROHS-Compliant Product

# O-4000SC Series



## 2. Environmental conditions

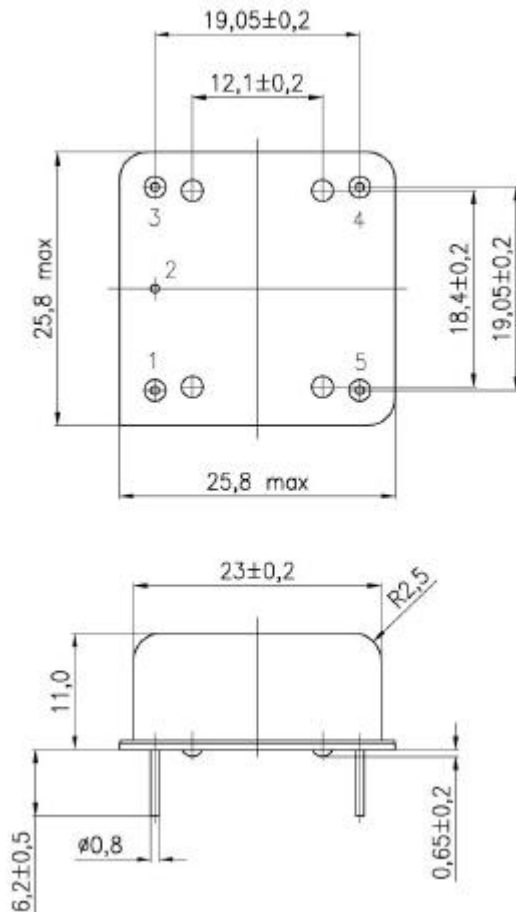
According to KVG Product Qualification Procedure AA-QM-200

## 3. Marking

Manufacturer's name, date code (week/year); Specification; Center frequency

## 4a. Case

Package style BF171-IS-S11.0:



**Note: max height depends on frequency stability and temperature range!**

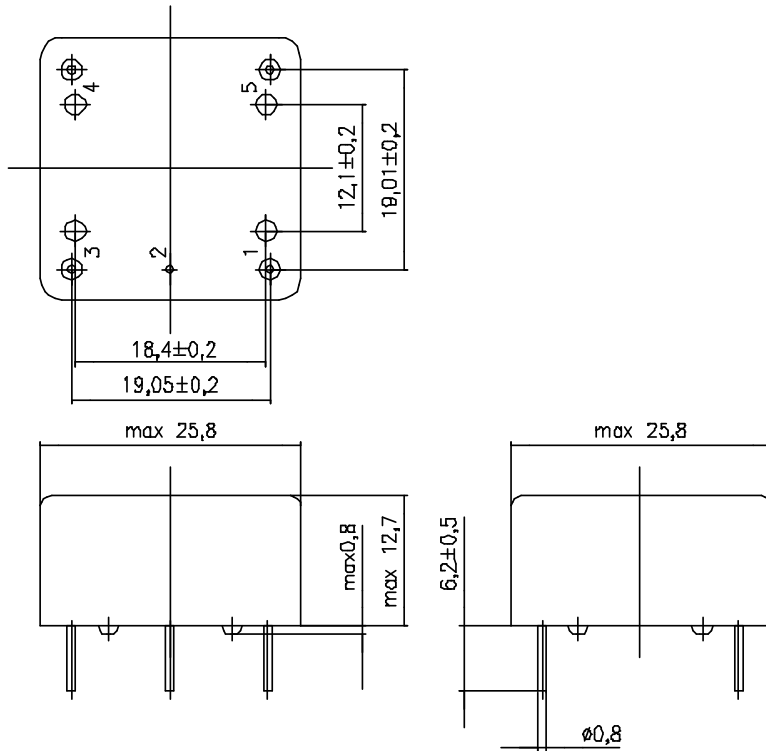
### 1.Pin configuration

1. RF-output
2. Ground, case
3. Control voltage  $V_C$
4. Reference voltage output  $V_{REF}$
5. Supply voltage  $V_S$

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## 4b. Case

### Package style BF171-12.7A:



### 1. Pin configuration

1. RF-output
2. Ground, case
3. Control voltage  $V_C$
4. Reference voltage output  $V_{REF}$
5. Supply voltage  $V_S$

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