



ROHS-Compliant Product

# O-6000SC Series



1. Specification		
Frequency range:	5.0 ... 100.0 MHz	
Type:	<b>O-6500SC</b>	<b>O-6300SC</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: $\leq \pm 1 \times 10^{-8}$ vs. -10 °C to +60 °C: $\leq \pm 1 \times 10^{-8}$ vs. -20 °C to +70 °C: $\leq \pm 3 \times 10^{-8}$ vs. -40 °C to +85 °C: $\leq \pm 5 \times 10^{-8}$ vs. -40 °C to +85 °C:	<b>655x</b> <b>656x</b> <b>657x</b> <b>658x</b> <b>659x</b>	<b>635x</b> <b>636x</b> <b>637x</b> <b>638x</b> <b>639x</b>
Aging stability option (after 30 days of operation) $\leq \pm 1 \times 10^{-9}$ / day; $< \pm 1 \times 10^{-7}$ / year: $\leq \pm 2 \times 10^{-9}$ / day; $< \pm 1 \times 10^{-7}$ / year: $\leq \pm 5 \times 10^{-10}$ / day; $< \pm 5 \times 10^{-8}$ / year:	<b>65x1</b> <b>65x2</b> <b>65x3</b>	<b>63x1</b> <b>63x2</b> <b>63x3</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	
Linearity:	$\leq 10\%$	
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 $\leq \pm 10$ ppb @ +25 °C referred to final frequency after 1 hour)	$\leq 5$ min	
Output voltage / Load Option <b>H</b> : Option <b>S</b> :	(LV)HCMOS / 1 kOhm // 15 pF Sinewave / $\geq +3$ dBm / 50 Ohm	
Phase noise 10 Hz: 100 Hz: 1 kHz: 10 kHz:	(typical for 10 MHz) -110 dBc / Hz -130 dBc / Hz -145 dBc / Hz -155 dBc / Hz	
Storage temperature range:	-45 °C ... +90 °C	



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## 2. Environmental conditions

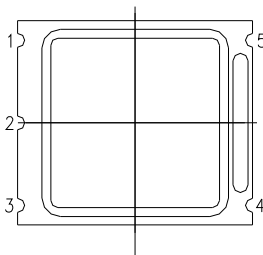
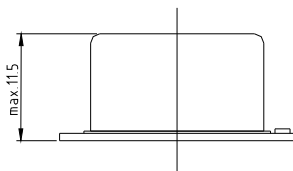
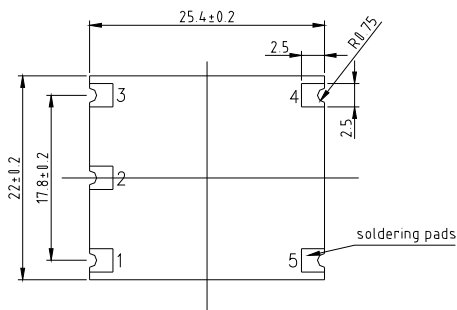
According to KVG Product Qualification Procedure AA-QM-200

## 3. Marking

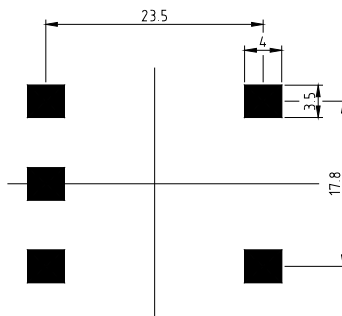
Manufacturer's name, date code(week/year); Specification; Center frequency

## 4. Case

### BF144-11.5-SMD



Foot print  
for PCB Design



### 1.Pin configuration

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

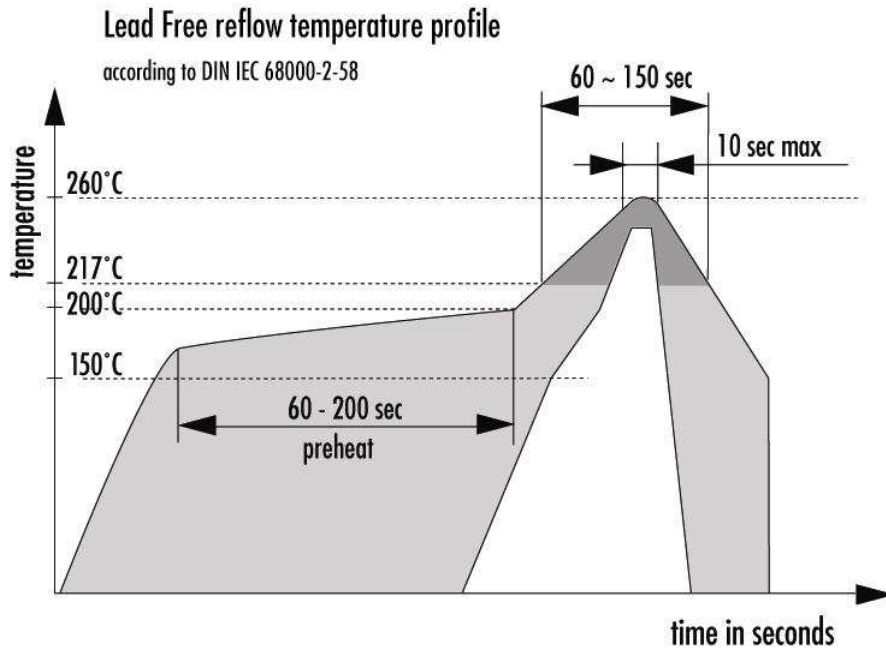


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## 5. Recommended soldering profile



## 6. Tape and reel

