



ROHS-Compliant Product

# O-7000AT Series



1. Specification (preliminary)		
Frequency range:	10 ... 100 MHz	
Type:	<b>O-7500AT</b>	<b>O-7300AT</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:		
$\leq \pm 3 \times 10^{-8}$ vs. 0 °C to +50 °C:	<b>750x</b>	<b>730x</b>
$\leq \pm 5 \times 10^{-8}$ vs. -10 °C to +60 °C:	<b>751x</b>	<b>731x</b>
$\leq \pm 1 \times 10^{-7}$ vs. 0 °C to +70 °C:	<b>752x</b>	<b>732x</b>
$\leq \pm 1 \times 10^{-7}$ vs. -20 °C to +70 °C:	<b>753x</b>	<b>733x</b>
$\leq \pm 2 \times 10^{-7}$ vs. -40 °C to +85 °C:	<b>754x</b>	<b>734x</b>
Aging stability option (after 30 days of operation)		
$\leq \pm 1 \times 10^{-8}$ / day; $\leq \pm 5 \times 10^{-7}$ / year:	<b>75x1</b>	<b>73x1</b>
$\leq \pm 5 \times 10^{-9}$ / day; $\leq \pm 3 \times 10^{-7}$ / year:	<b>75x2</b>	<b>73x2</b>
Frequency stability vs. supply voltage changes $V_S \pm 5 \%$ : vs. load changes $\pm 10 \%$ :	$\leq \pm 1.0 \times 10^{-8}$ $\leq \pm 5.0 \times 10^{-9}$	
Frequency control by external tuning voltage :	$\geq \pm 4$ ppm	
Tuning voltage range:	+0.5 V to +4.5 V	+0.3 V to +3.0 V
Transfer function / Linearity:	Positive / $\leq 10 \%$	
Power consumption steady state @ +25 °C: during warm-up:	$\leq 1.0$ W $\leq 3.0$ W	
Warm-up time: (for a typical accuracy of $< \pm 1 \times 10^{-7}$ @ +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 / $> +3$ dBm / 50 Ohm	
Phase noise (typical for 10 MHz): 10 Hz: 100 Hz: 1 kHz: 10 kHz:	$\leq -90$ dBc / Hz $\leq -125$ dBc / Hz $\leq -140$ dBc / Hz $\leq -150$ dBc / Hz	
Storage temperature range:	-45 °C to +90 °C	



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## 2. Environmental conditions

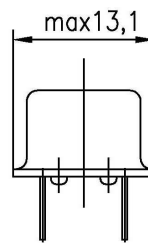
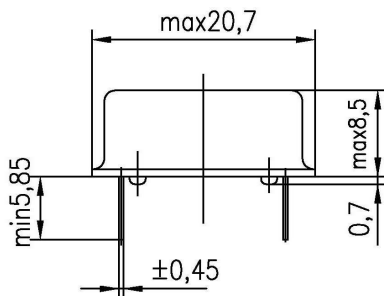
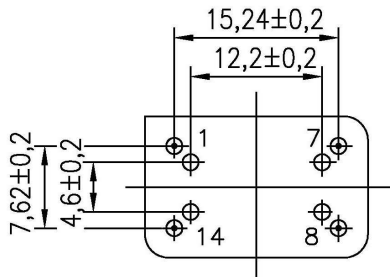
According to KVG Product Qualification Procedure AA-QM-200

## 3. Marking

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

## 4. Case

### BF100-8.5



### 1.Pin configuration

- 1. Control voltage  $V_C$
- 7. Ground, case
- 8. RF-output
- 14. Supply voltage  $V_S$