



ROHS-Compliant Product

O-4000AT Series



1. Specification		
Frequency range:	5.0 ... 100.0 MHz	
Type:	O-4100AT	O-4200AT
Supply voltage V_S :	5.0 V \pm 5 %	3.3 V \pm 5 %
Frequency stability vs. temperature options:		
$\leq \pm 2 \times 10^{-8}$ vs. 0 °C to +50 °C:	410x	420x
$\leq \pm 3 \times 10^{-8}$ vs. -10 °C to +60 °C:	411x	421x
$\leq \pm 1 \times 10^{-7}$ vs. -20 °C to +70 °C:	412x	422x
$\leq \pm 5 \times 10^{-8}$ vs. -20 °C to +70 °C:	413x	423x
$\leq \pm 1 \times 10^{-7}$ vs. -40 °C to +85 °C:	414x	424x
Aging stability options (after 30 days of operation)		
$\leq \pm 1 \times 10^{-9}$ / day; $\leq \pm 1 \times 10^{-7}$ / year:	41x1	42x1
$\leq \pm 2 \times 10^{-9}$ / day; $\leq \pm 2 \times 10^{-7}$ / year:	41x2	42x2
$\leq \pm 3 \times 10^{-9}$ / day; $\leq \pm 3 \times 10^{-7}$ / year:	41x3	42x2
Frequency stability vs. supply voltage changes $V_S \pm 5 \%$: vs. load changes $\pm 5 \%$:	$\leq \pm 1.0 \times 10^{-8}$ $\leq \pm 5.0 \times 10^{-9}$	
Frequency control by external voltage $0V \dots V_{REF}$:	$\geq \pm 3$ ppm	
Transfer function / Linearity:	Positive / 10 %	
Reference Voltage V_{REF} :	+4 V \pm 5 %	+3 V \pm 5 %
Power consumption @ +25 °C steady state: during warm-up:	≤ 1.0 W (1.5 W @ -40 °C) ≤ 2.5 W (3.5 W @ -40 °C)	
Warm-up time (for a typical accuracy of $< \pm 5 \times 10^{-8}$ @ +25 °C referred to final frequency after 1 hour)	≤ 5 min	
Output voltage / Load Option H : Option S :	(LV)HCMOS / 1 kOhm // 15 pF Sinewave / $\geq +3$ dBm / 50 Ohm	
Phase noise:	typical for 10 MHz	
10 Hz:	-90 dBc / Hz	
100 Hz:	-125 dBc / Hz	
1 kHz:	-140 dBc / Hz	
10 kHz:	-150 dBc / Hz	
Storage temperature range:	-45 °C ... +90 °C	



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2. Environmental conditions

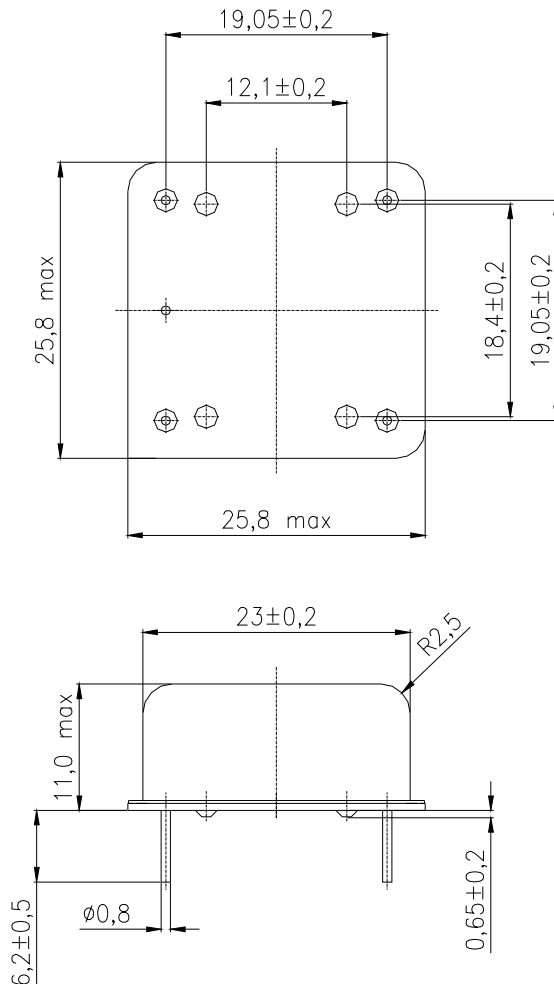
According to KVG Product Qualification Procedure AA-QM-200

3. Marking

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

4. Case

BF171-IS-S11_0.



1.Pin configuration

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