ROHS-Compliant Product

O-3000AT Series

1. Specification

Nominal frequency range :	5.0 … 100.0 MHz		
Type:	**3100**	**3200**	**3300**
Supply voltage V_S:	5.0 V ± 5 %	3.3 V ± 5 %	12.0 V ± 5 %
Frequency stability vs. temperature options:			
≤ ± 2 x 10^{-8} vs. 0 °C to +50 °C:	**311x**	**321x**	**331x**
≤ ± 3 x 10^{-8} vs. –10 °C to +60 °C:	**312x**	**322x**	**332x**
≤ ± 5 x 10^{-8} vs. –20 °C to +70 °C:	**313x**	**323x**	**333x**
≤ ± 1 x 10^{-7} vs. –40 °C to +85 °C:	**314x**	**324x**	**334x**
≤ ± 5 x 10^{-8} vs. –40 °C to +85 °C:	**315x**	**325x**	**335x**
Aging stability options (after 30 days of operation)			
≤ ± 1 x 10^{-9} / day; < ± 1 x 10^{-7} / year:	**31x1**	**32x1**	**33x1**
≤ ± 2 x 10^{-9} / day; < ± 2 x 10^{-7} / year:	**31x2**	**32x2**	**33x2**
≤ ± 3 x 10^{-9} / day; < ± 3 x 10^{-7} / year:	**31x3**	**32x3**	**33x3**
Frequency stability vs. supply voltage changes V_S ± 5 %: vs. load changes ± 5 %:	≤ ± 1.0 x 10^{-8} ≤ ± 5.0 x 10^{-9}		
Frequency control by ext. voltage 0 V … V_{REF}:	≥ ± 3 ppm (typical)		
Transfer function / linearity:	Positive / 10 %		
Reference Voltage V_{REF}:	+4 V ± 5 %	+3 V ± 5 %	+10 V ± 5 %
Power consumption @ +25 °C: steady state: during warm-up:	≤ 1.5 W (2.0 W @-40 °C) ≤ 3.5 W (4.0 W @ -40 °C)		
Warm-up time for a typical accuracy of ≤ ± 5 x 10^{-8} @ +25°C referred to final frequency after 1 hour:	≤ 5 min		
Output voltage / Load Option **H**: Option **S**:	(LV)**H**CMOS / 1 kOhm // 15 pF **S**inewave / ≥ +3 dBm / 50 Ohm		
Phase noise: 10 Hz 100 Hz 1 kHz 10 kHz	typical for 10 MHz -90 dBc / Hz -125 dBc / Hz -140 dBc / Hz -150 dBc / Hz		
Storage temperature range:	-45°C ... +90°C		

4				KVG Quartz Crystal Technology GmbH
3				**P.O.Box 61**
2	V_{REF} bei 12V V_S ändert	15.07.11	H. Kuntz	**D-74924 Neckarbischofsheim**
1		24.08.07	M. Zupan	Tel. +49 (0) 7263 / 648-0
ED	Description	Date	Name	Fax. +49 (0) 7263 / 6196

Subject to technical modification

2. Environmental conditions

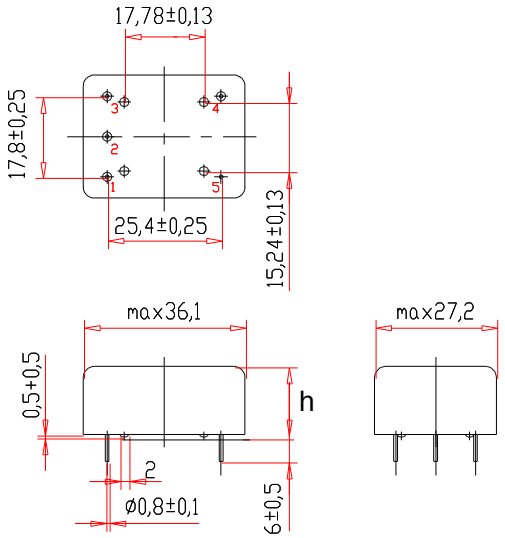
According to KVG Product Qualification Procedure AA-QM-200

3. Marking

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

4. Case

Case style: BF9-IS



max. height incl. Stand-off:
Standard version: **12.7 mm**
Tight/high stability option: **20.5 mm**

1.Pin configuration

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

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