



O.30.810742-LF



1. Specification (preliminary)

Test Conditions: $V_S = +12\text{ V}$; $V_C = +5.0\text{ V}$; $T_A = +25\text{ °C} \pm 3\text{ °C}$ if not stated otherwise.

Nominal frequency F_N :	1000.0 MHz	
Frequency stability in the temperature range -40 °C to +70 °C: vs. supply voltage changes $V_S \pm 5\%$: vs. load changes $\pm 5\%$:	$\leq \pm 500\text{ ppb}$ $\leq \pm 5\text{ ppb}$ $\leq \pm 5\text{ ppb}$	
Aging (after 30 days of continuous operation): per day: first year: 15 years:	$\leq \pm 5\text{ ppb}$ $\leq \pm 300\text{ ppb}$ $\leq \pm 2\text{ ppm}$	
Frequency control range: (referred to nominal frequency F_N)	$\geq \pm 2.5\text{ ppm}$	
Control voltage range V_C :	0 V to +10 V	
Control input impedance:	$\geq 100\text{ kOhm}$	
Modulation bandwidth:	$\geq 1\text{ kHz}$	
Transfer function:	Positive	
Supply voltage V_S :	$+12\text{ V} \pm 5\%$	
Current consumption during warm-up: Current consumption @ steady state +25 °C:	$\leq 350\text{ mA}$ $\leq 200\text{ mA}$	
Warm up time @ 25°C (within $\pm 50\text{ ppb}$ referred to final frequency after 1 hr)	$\leq 10\text{ min}$	
Output signal: Output level: Nominal load:	Sinewave $\geq +6\text{ dBm}$ 50 Ohm	
Harmonics: Subharmonics: Spurious:	$\leq -30\text{ dBc}$ $\leq -40\text{ dBc}$ $\leq -100\text{ dBc}$	
Jitter (RMS) 12kHz to 20MHz:	$\leq 50\text{ fsec}$	
Phase noise at offset frequency: 10 Hz: 100 Hz: 1 kHz: 10 kHz: 100 kHz: 1 MHz:	Typical values $\leq -88\text{ dBc / Hz}$ $\leq -118\text{ dBc / Hz}$ $\leq -143\text{ dBc / Hz}$ $\leq -155\text{ dBc / Hz}$ $\leq -158\text{ dBc / Hz}$ $\leq -158\text{ dBc / Hz}$	Max values $\leq -82\text{ dBc / Hz}$ $\leq -112\text{ dBc / Hz}$ $\leq -138\text{ dBc / Hz}$ $\leq -150\text{ dBc / Hz}$ $\leq -155\text{ dBc / Hz}$ $\leq -155\text{ dBc / Hz}$
Temperature ranges Operating: Storage:	$-40\text{ °C to }+70\text{ °C}$ $-40\text{ °C to }+85\text{ °C}$	

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3				
2	Add typical phase noise values	20.05.2022	Bai	
1		18.02.2022	Schweickert	
ED	Description	Date	Name	

2. Environmental conditions

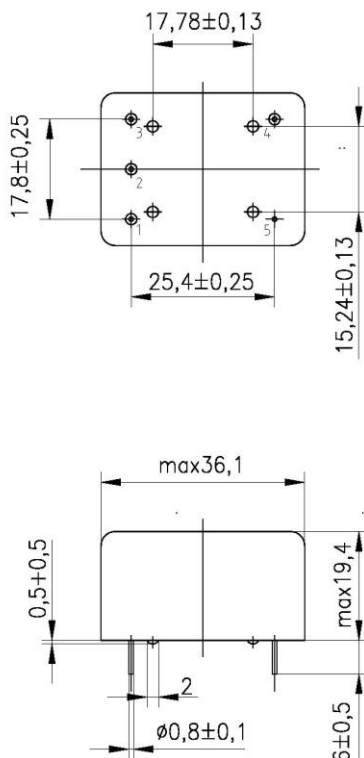
According to KVG Product Qualification Procedure AA-QM-200

3. Marking

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

4. Case

Case style: BF9-IS-19.4



max. height incl. stand-offs: 20.5 mm

1. Pin configuration

1. Control voltage input V_c
2. N.C.
3. Supply voltage V_s
4. RF output 1000 MHz
5. Ground, case

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