



ROHS-Compliant Product

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 $+70\text{ °C}$: 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 $+25\text{ °C}$:	$\leq 350\text{ mA}$ $\leq 200\text{ mA}$
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:	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 °C to $+70\text{ °C}$ -40 °C to $+85\text{ °C}$

4				KVG Quartz Crystal Technology GmbH Waibstadter Str. 2-4 D-74924 Neckarbischofsheim Tel. +49 (0) 7263 / 648-0 Fax. +49 (0) 7263 / 6196
3				
2				
1		18.02.2022	Schweickert	
ED	Description	Date	Name	



ROHS-Compliant Product

O.30.810742-LF



2. Environmental conditions

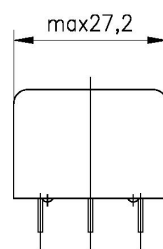
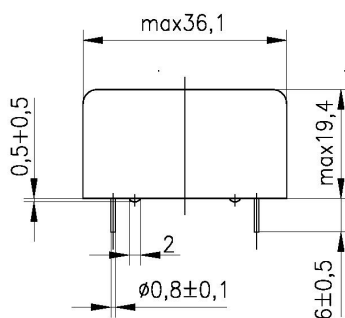
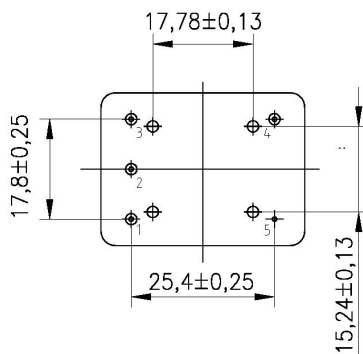
According to KVG Product Qualification Procedure AA-QM-200

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 Vc
- 2. N.C.
- 3. Supply voltage Vs
- 4. RF output 1000 MHz
- 5. Ground, case

4				KVG Quartz Crystal Technology GmbH Waibstadter Str. 2-4 D-74924 Neckarbischofsheim Tel. +49 (0) 7263 / 648-0 Fax. +49 (0) 7263 / 6196
3				
2				
1		18.02.2022	Schweickert	
ED	Description	Date	Name	