

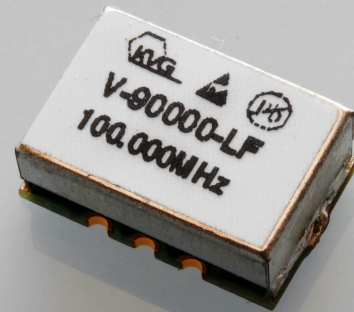


V-90000-LF Sine 5 V

Low Phase Noise SMD RF VCXO

DESCRIPTION:

V-90000-LF - 100.00 MHz is a high performance VCXO in SMD package offering exceptional Low Phase Noise values.



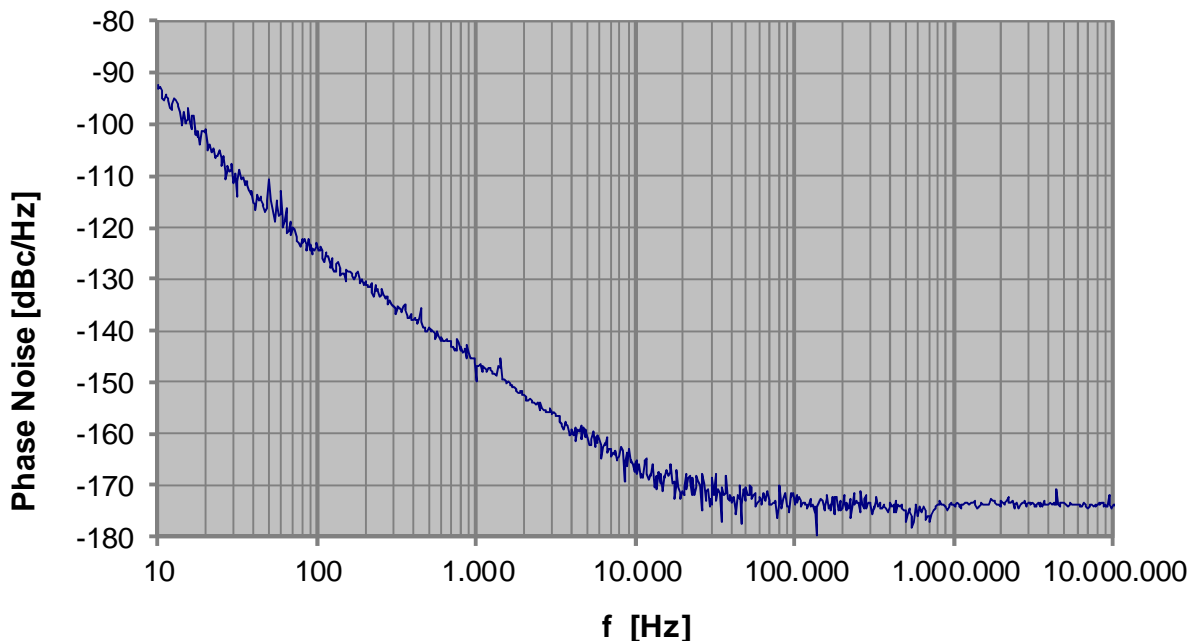
FEATURES:

- 50 ... 125 MHz output signal
- True Sinewave output signal
- Typical phase noise @ 100 Hz carrier offset < -120 dBc/Hz; typical „Noise Floor“ @ 100 kHz carrier offset < -175 dBc/Hz for 12 V and sine 100 MHz output signal.
- Supply voltage +5 V (+12V optional).

APPLICATIONS:

- Test & Measurement Equipment
- Radar Systems
- Telecom Systems
- Network and Synchronisation Units

Phase Noise V-90000-LF 100.000 MHz



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ROHS-Compliant Product

V-90000-LF



1. Specification			
Test conditions: $T_A = +25\text{ °C}$; $V_S = +5\text{ V}$; $V_C = 2.5\text{ V}$ unless otherwise identified			
Frequency range:	50.00 125.000 MHz		
Supply voltage V_S :	5.0 V \pm 5 %		
Current consumption	\leq 30 mA		
Operating temperature range options:	2070 -20 °C to +70 °C	4085 -40 °C to +85 °C	
Frequency stability overall including: - initial frequency tolerance after reflow : - vs. temperature range - vs. supply voltage changes $V_S \pm 5\%$: - vs. load changes $\pm 10\%$: - aging for 15 years	B ($\leq \pm 25$ ppm) C ($\leq \pm 30$ ppm)	C ($\leq \pm 30$ ppm) D ($\leq \pm 35$ ppm)	
Control voltage range V_C :	0.0 V to +5.0 V		
Frequency Tuning Range:	Z : ± 30 ppm; Y : ± 40 ppm		
Modulation bandwidth (3 dB cut-off freq.):	\geq 5 kHz		
Control voltage input impedance:	\geq 1 MOhm		
Transfer function / linearity:	Positive / 10 %		
Output voltage: level: load:	Sine wave \geq +8 dBm 50 Ohm		
Harmonics:	\leq 25 dBc		
Sub-harmonics:	None		
Phase noise @ offset frequ. (F_n 100.0 MHz): 10 Hz: 100 Hz: 1 kHz: 10 kHz: 100 kHz: 1 MHz:	Class A \leq -84 dBc/Hz \leq -117 dBc/Hz \leq -143 dBc/Hz \leq -165 dBc/Hz \leq -170 dBc/Hz \leq -172 dBc/Hz	Class B \leq -87 dBc/Hz \leq -120 dBc/Hz \leq -144 dBc/Hz \leq -165 dBc/Hz \leq -170 dBc/Hz \leq -172 dBc/Hz	Class C \leq -90 dBc/Hz \leq -123 dBc/Hz \leq -145 dBc/Hz \leq -165 dBc/Hz \leq -170 dBc/Hz \leq -172 dBc/Hz
Storage temperature range:	-45 °C ... +90 °C		

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2		11.09.2015	Rudolph	
1		05.05.2015	Rudolph	
ED	Description	Date	Name	

2. Environmental conditions

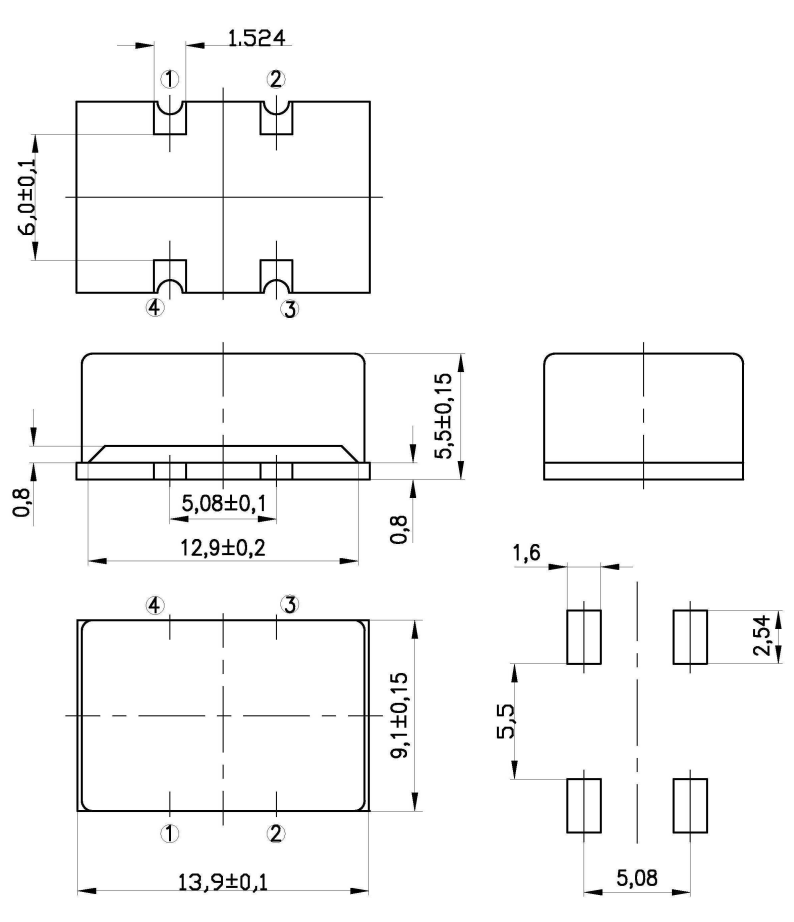
According to KVG Product Qualification Procedure AA-QM-200

3. Marking

Manufacturer's name,
V-90000
Center frequency

4. Case

Case style: BF157-5.5E

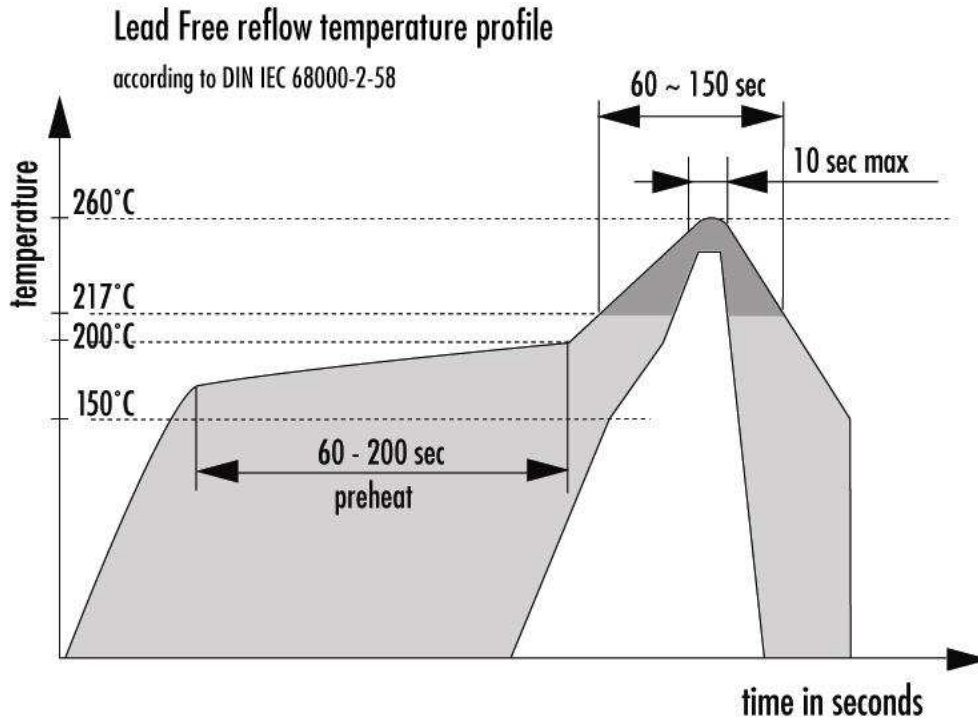


Pin configuration

1. Control voltage V_C
2. Ground, Case
3. RF output
4. Supply voltage V_S

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5. Reflow soldering profile



6. Ordering Information

Type & Package code	Supply voltage	Temperature range LOW/HIGH	Freq. stability	Tuning Range	Phase Noise Option	Output signal	RoHS compl	Nominal frequency
V-90: BF157-5.5B	B: 5 V	2070 4085	B C D	Y Z	A B C	S: Sine	-LF	- XX.YYY MHz

Example: V-90B4085CZCS-LF-100.000 MHz

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