



V-800 Series



1. Specification	
Nominal Frequency: @ $V_C = 1.5\text{ V}$, $T = 25\text{ °C} \pm 5\text{ °C}$:	622.08; 666.5143; 669.326582; 669.91625 MHz
Nominal frequency tolerance	$< \pm 10\text{ ppm}$
Frequency stability in the temperature range -20 °C to $+70\text{ °C}$: in the temperature range -40 °C to $+85\text{ °C}$ vs. supply voltage changes $U_B \pm 3\%$: vs. load changes $\pm 5\%$:	$< \pm 20\text{ ppm}$ (TCXO option available) $< \pm 30\text{ ppm}$ (TCXO option available) $< \pm 3\text{ ppm}$ $< \pm 1\text{ ppm}$
Aging @ 25 °C :	$< \pm 5\text{ ppm}$ / first year $< \pm 2\text{ ppm}$ / year in the following years
Frequency control range:	$\geq \pm 100\text{ ppm}$
Control voltage V_C :	0 V to +3.0 V
Control input impedance:	$> 20\text{ kOhm}$
Transfer function / Linearity:	positive / 10%
Supply voltage U_B :	$+3.3\text{ V} \pm 5\%$
Current consumption:	$\leq 80\text{ mA}$
Option A output voltage PECL : load : duty cycle : rise / fall time :	LVPECL complementary output 50 Ohm 40 / 60 % $\leq 2\text{ ns}$
Option B output voltage sinewave :	sinewave 1 Vpp ... 2 Vpp into 50 Ohm
Option C output voltage LVDS :	Complementary LVDS output
Phase noise: 100 Hz: 1 kHz: 10 kHz: 100 kHz:	-75 dBc / Hz -100 dBc / Hz -113 dBc / Hz -135 dBc / Hz
Jitter @ $10\text{ Hz} < f < 1\text{ MHz}$	$< 10\text{ ps}$ peak to peak
Temperature ranges Operating: Storage:	$-40\text{ °C} \dots +85\text{ °C}$ $-45\text{ °C} \dots +105\text{ °C}$

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1	V-800	30.07.01	H.-J. Herzog	
ED	Description	Date	Name	

2. Environmental conditions

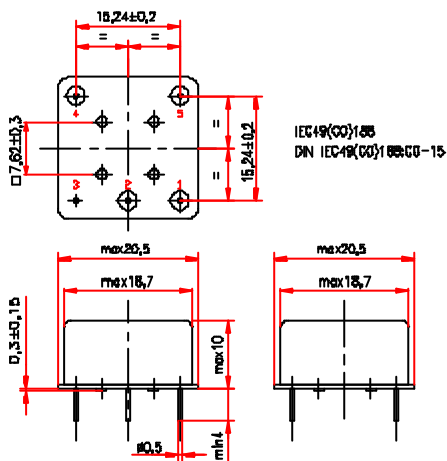
According to KVG Product Qualification Procedure AA-QM-200

3. Marking

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

4. Case

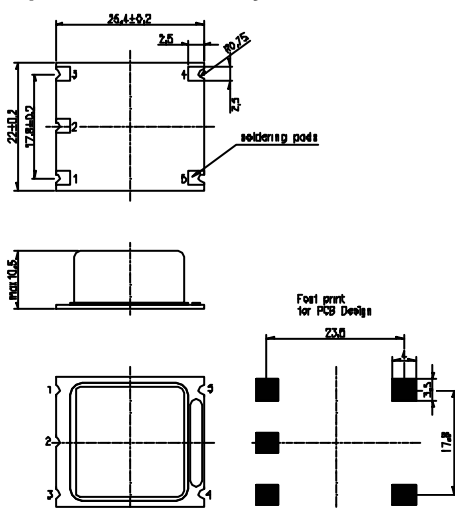
Option through hole case style: BF 144



1.Pin configuration

1. Supply voltage
2. HF-output
3. Ground, case
4. Control voltage Vc
5. Ground, case

Option SMD case style: BF144-10.5A-SMD

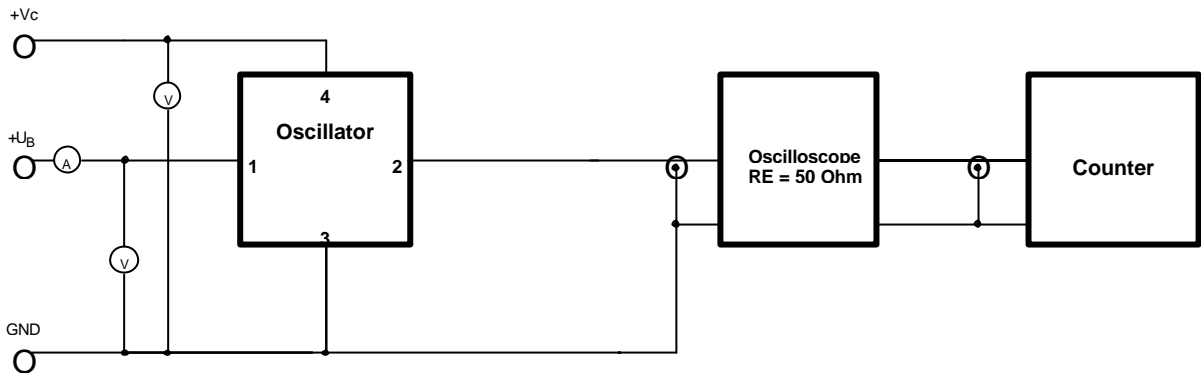


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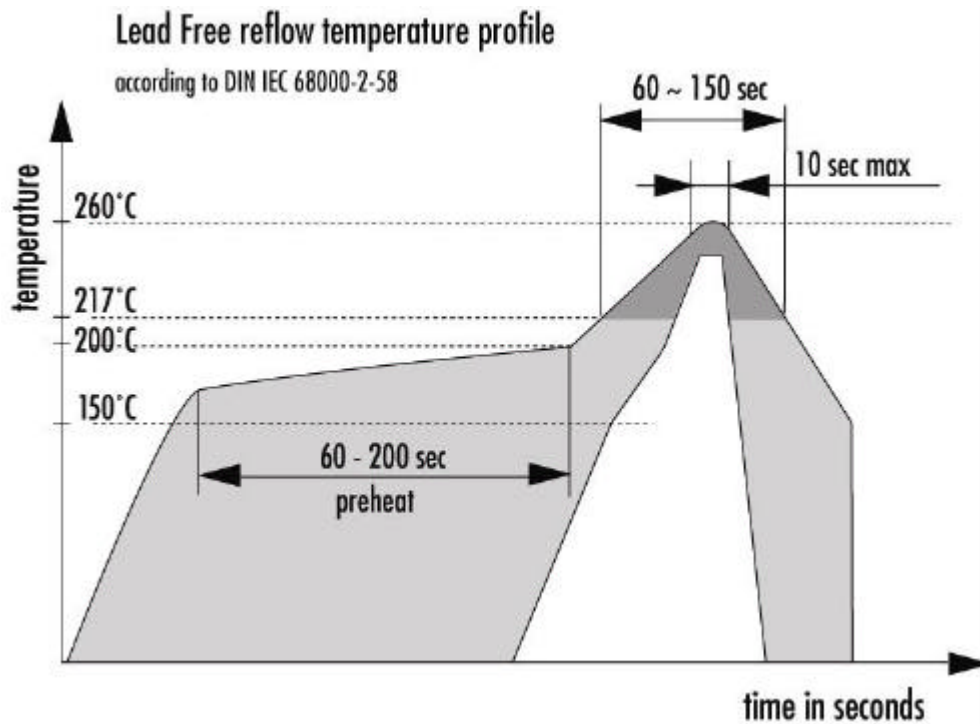
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5. Test circuit



Sinewave option

6. Soldering profile



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