



V-75000P/L Series



1. Specification			
Type: Fundamental mode VCXO	V-75A		V-75H
Frequency range:	1.5 MHz ... 200 MHz		65 MHz ... 200 MHz
Standard frequencies:	77.76, 106.25, 122.88, 125, 155.52, 156.25, 200 MHz		
Supply voltage V_S :	$+3.3\text{ V} \pm 5\%$		$+2.5\text{ V} \pm 5\%$
Current consumption @ $f_N = 1.5\text{ MHz} \dots 65\text{ MHz}$, LVPECL: @ $f_N = 1.5\text{ MHz} \dots 65\text{ MHz}$, LVDS: @ $f_N = 65\text{ MHz} \dots 200\text{ MHz}$, LVPECL: @ $f_N = 65\text{ MHz} \dots 200\text{ MHz}$, LVDS:	85 mA 45 mA 100 mA 80 mA		
Temperature range options -20 °C to +70 °C: -40 °C to +85 °C: -40 °C to +125 °C:	2070 4085 40125		
Frequency stability options ⁽¹⁾ $\leq \pm 25\text{ ppm}$ (n.a. for -40 °C to +85 °C): $\leq \pm 50\text{ ppm}$: $\leq \pm 75\text{ ppm}$: (-40°C/+125°C)	D F G		
Control voltage range V_C :	$+0.3\text{ V}$ to $+3.0\text{ V}$		$+0.0\text{ V}$ to $+2.5\text{ V}$
Absolute pulling range (APR) referred to f @ $V_C = +1.65\text{ V} / +1.25\text{ V}$:	$\geq \pm 50\text{ ppm}$		
Modulation bandwidth (3 dB cut-off freq.):	$\geq 25\text{ kHz}$		
Control voltage input impedance:	$\geq 50\text{ kOhm}$		
Transfer function / linearity:	Positive / 10 %		
Output signal type options:			
P: LVPECL level ($V_S = +3.3\text{ V}$): level ($V_S = +2.5\text{ V}$): load: duty cycle: rise time, fall time 20 % / 80 %:	$V_{OH}: \geq +2.275\text{ V}$, $V_{OL}: \leq +1.680\text{ V}$ $V_{OH}: \geq +1.475\text{ V}$, $V_{OL}: \leq +1.095\text{ V}$ 50 Ohm 45 / 55 % $\leq 1.0\text{ nsec}$		
L: LVDS level ($V_S = +3.3\text{ V}$): level ($V_S = +2.5\text{ V}$): load: duty cycle: rise time, fall time 20 % / 80 %:	$V_{OH}: \leq +1.6\text{ V}$, $V_{OL}: \geq +0.9\text{ V}$ $V_{OH}: \leq +1.6\text{ V}$, $V_{OL}: \geq +0.9\text{ V}$ 100 Ohm 40 / 60 % $\leq 1.0\text{ nsec}$		
Start-up time:	$\leq 3\text{ ms}$		
RMS Phase Jitter (12 kHz - 20 MHz):	$\leq 1\text{ ps rms}$		
4			KVG Quartz Crystal Technology GmbH
3			P.O.Box 61
2	Extendet temp. range -40/+125 °C	24.11.2015	Balzer
1		31.03.2015	Schweickert
ED	Description	Date	Name
			D-74924 Neckarbischofsheim Tel. +49 (0) 7263 / 648-0 Fax. +49 (0) 7263 / 6196



ROHS-Compliant Product

V-75000P/L Series



Output Enable/Disable (Pin 2) V_{ED} HIGH ($\geq 70\% V_S$) or N.C: V_{ED} LOW ($\leq 30\% V_S$) or connected to GND:	Output Enable Output Disable
Storage temperature range:	-55 °C ... +125 °C
Note (1): overall frequency stability includes: Initial tolerance, 1st year aging, frequency stability vs. temperature, vs. supply voltage changes $\pm 5\%$, vs. load changes $\pm 5\%$	

2. Environmental conditions

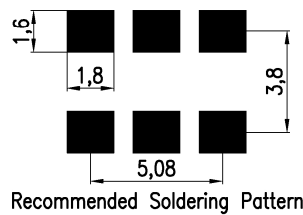
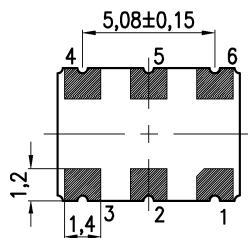
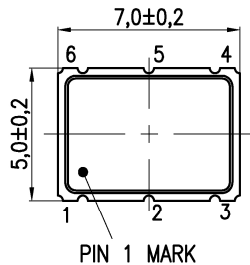
According to KVG Product Qualification Procedure AA-QM-200

3. Marking

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

4. Case

Case style: **BF189-2.0B**

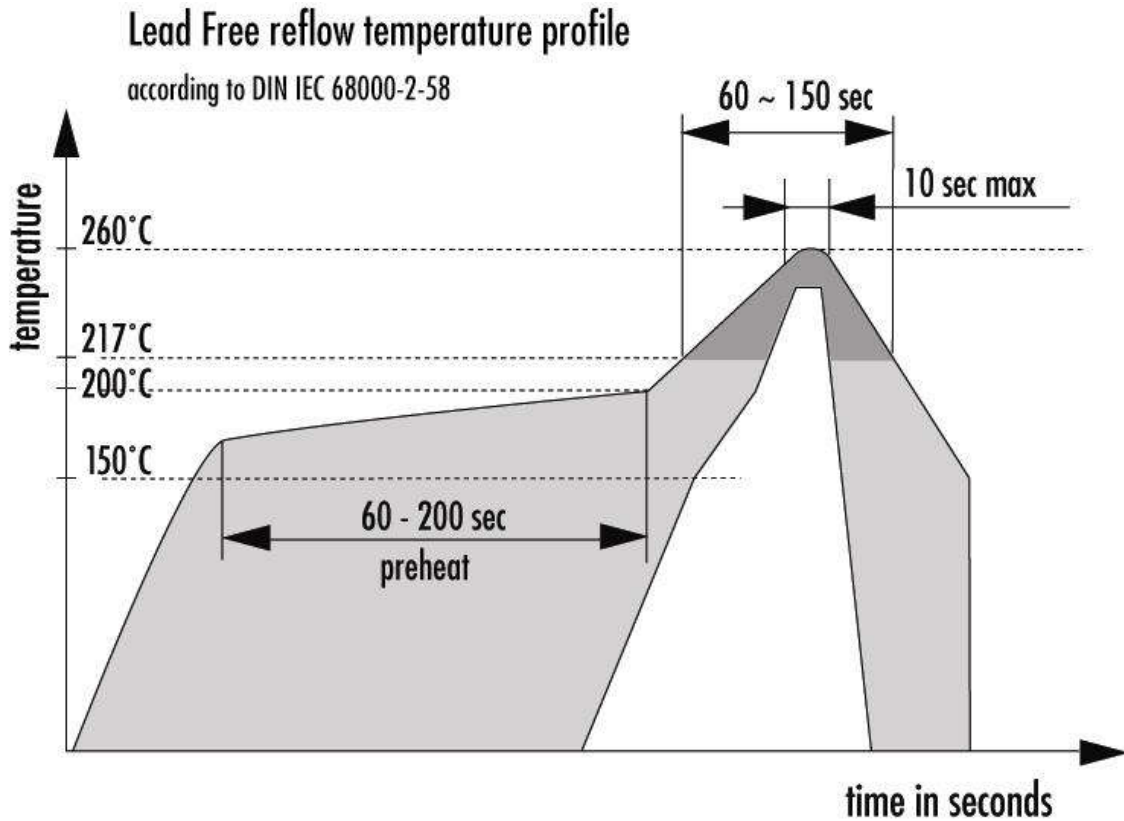


Pin configuration

1. Control voltage V_C
2. E/D control input V_{ED}
3. Ground, Case
4. RF output
5. Compl. RF output
6. Supply voltage V_S

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ED	Description	Date	Name	

5. Reflow soldering profile



6. Ordering Information

Type & Package code	Supply voltage	Temperature range LOW/HIGH	Frequency stability	Output voltage	RoHS compl.	Nominal frequency
V-75: BF189-2.0B	A: 3.3 V H: 2.5 V	2070: -20 / +70 °C 4085: -40 / +85 °C 40125: -40 / +125 °C	D: ± 25 ppm F: ± 50 ppm G: ± 75 ppm	P: LVPECL L: LVDS	-LF	- XXX.YYY MHz

Example: V-75A40125GL-LF-150.000MHz

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