



# V-53000 Series



1. Specification		
Type:	V-53B	V-53A
Frequency range:	1.544 MHz ... 170.00 MHz	
Power supply voltage $V_B$ :	+5.0 V $\pm$ 10%	+3.3 V $\pm$ 10%
Current consumption:	< 60 mA	
Temperature range options -20 °C to +70 °C: -40 °C to +85 °C:	<b>2070</b> <b>4085</b>	
Frequency stability options <sup>(1)</sup> $\leq \pm 25$ ppm (n.a. for - 40 °C to + 85 °C): $\leq \pm 50$ ppm: $\leq \pm 70$ ppm:	<b>B</b> <b>F</b> <b>H</b>	
Control voltage range $V_C$ :	+0.5 V to +4.5 V	+0.3 V to +3.0 V
Frequency pulling range:	$\geq \pm 100$ ppm	
Control voltage input impedance:	$\geq 50$ kOhm	
Transfer function / Linearity:	< 10% / Positive	
TriState function:	Logic low: Disable Logic high or not connected: Enable	
Output voltage : load : duty cycle :	HCMOS 1 kOhm // 15 pF 40%...60% (option J: 45% / 55%)	LVHCMOS 1 kOhm // 15 pF 40%...60% (option J: 45% / 55%)
Jitter (12 kHz to 20 MHz):	< 1ps rms	
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		

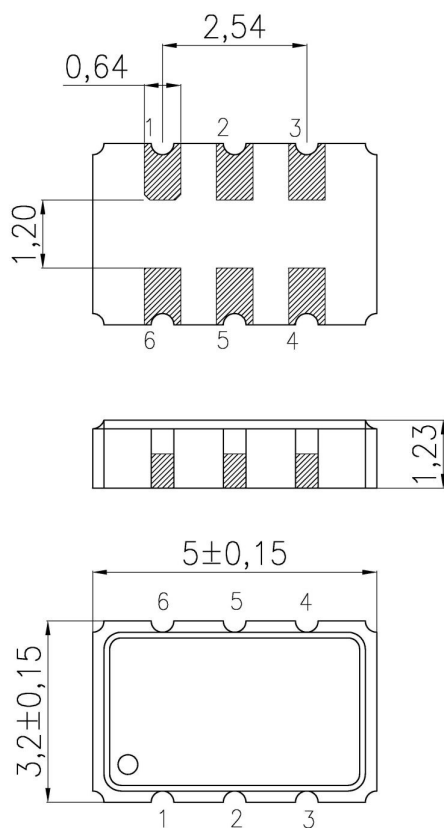
4				<b>KVG Quartz Crystal Technology GmbH</b> <b>P.O.Box 61</b> <b>D-74924 Neckarbischofsheim</b> Tel. +49 (0) 7263 / 648-0 Fax. +49 (0) 7263 / 6196
3				
2	Frequency range extended	13.12.2016	Rudolph	
1		09.02.2007	Zupan	
ED	Description	Date	Name	

### 3. Marking

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

### 4. Case

Case style: **BF-193-1.2B**



#### 1.Pin configuration

1. Control voltage  $V_C$
2. Tri State
3. Ground, Case
4. RF-output
5. N.C.
6. Supply voltage  $V_B$

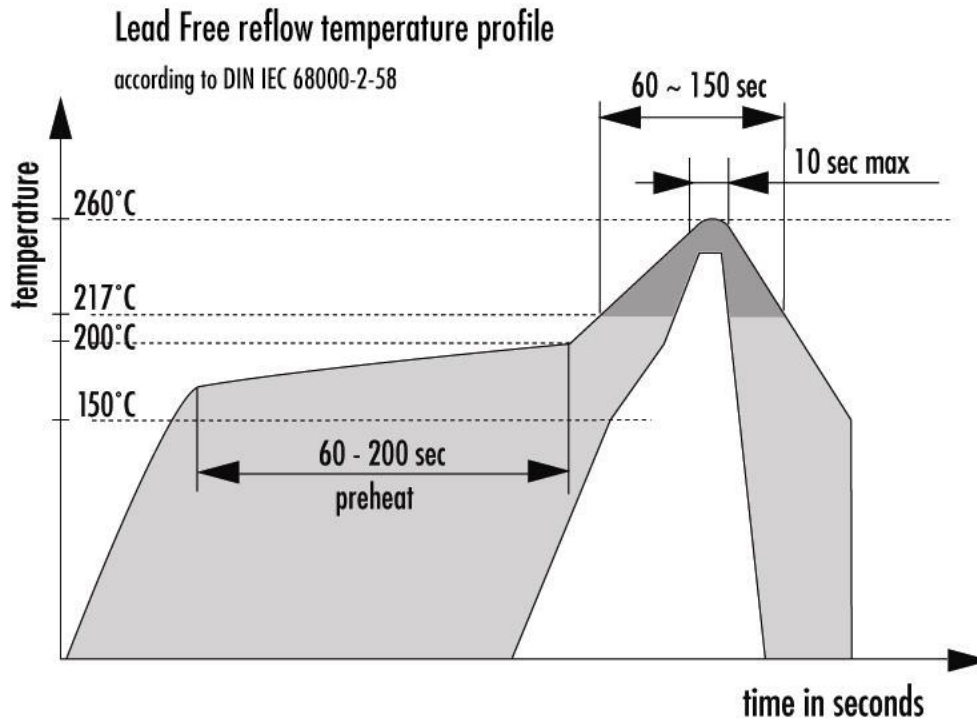
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## 5. Reflow Soldering Profile



## 6. Ordering Information

Type & Package code	Supply voltage	Temperature range LOW/HIGH	Frequency stability	Duty cycle option	RoHS compl.	Nominal frequency
<b>V-53:</b> BF193-1.2B	<b>A:</b> 3.3 V <b>B:</b> 5.0 V	<b>2070:</b> -20 / +70 °C <b>4085:</b> -40 / +85 °C	<b>B:</b> ± 25 ppm <b>F:</b> ± 50 ppm <b>H:</b> ± 70 ppm	<b>K:</b> 40%/60% <b>J:</b> 45%/55%	<b>-LF</b>	- XX.YYY MHz

Example: V-53A2070FJ-LF-50.000MHz

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