



V-9300/9500 Series

1. Specification		
Type:	V-9300	V-9500
Power supply voltage V_B :	+3.3 V \pm 10%	+5.0 V \pm 10%
Frequency Range Standard Type S :	1.5 MHz ... 155.52 MHz	1.5 MHz ... 80 MHz
Frequency Range Multiplier Type M :	50 MHz ... 155.52 MHz	50 MHz ... 155.52 MHz
Power supply current f < 20 MHz: f < 50 MHz: f < 80 MHz: f > 80 MHz:	10 mA 20 mA 30 mA 40 mA	15 mA 30 mA 35 mA N.A.
Overall stability ⁽¹⁾ \pm 70 ppm: \pm 50 ppm: \pm 25 ppm (case by case -40/+85°C):	V-9370 V-9350 V-9325	V-9570 V-9550 V-9525
Temperature range options -10 °C to +60°C: -20°C to +70°C: -40°C to +85°C:	B C E	B C E
Control voltage range V_C :	+0.3 V to +3.0 V	+0.5 V to +4.5 V
Control voltage input impedance:	\geq 50 kOhm	
Pulling range:	$>$ \pm 100 ppm	
Linearity:	$<$ \pm 10%	
Tri-State options:	O	S
Tri-State function:	Pin 2: E/D Pin 5: NC	Pin 5: E/D Pin 2: NC
Output signal: level : load : duty cycle :	(LV)HCMOS low < 10% V_S , high > 90% V_S 1 kOhm // 15 pF (option H : 50 pF case by case) 40 / 60% (option T : 45 / 55% case by case)	
Rise time, fall time (20% / 80%): f < 20 MHz f < 50 MHz f > 50 MHz	< 10 nsec < 6 nsec < 5 nsec	< 8 nsec < 5 nsec < 5 nsec
Start-up time:	< 10 ms	
RMS Phase Jitter (12 kHz – 20 MHz)	Standard Type S < 1 ps rms Multiplier Type M < 3 ps rms	

5	Multiplier Version	24.11.09	Zupan	KVG Quartz Crystal Technology GmbH P.O.Box 61 D-74924 Neckarbischofsheim Tel. +49 (0) 7263 / 648-0 Fax. +49 (0) 7263 / 6196
4	Package Dimensions	20.08.09	Zupan	
3	Output voltage level added	23.04.09	Kuntz	
2	+25ppm overall stability -40/+85°C	30.05.07	Rudolph	
ED	Description	Date	Name	



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Storage Temperature Range::	-55 °C ... +125 °C
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Note 1: overall 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

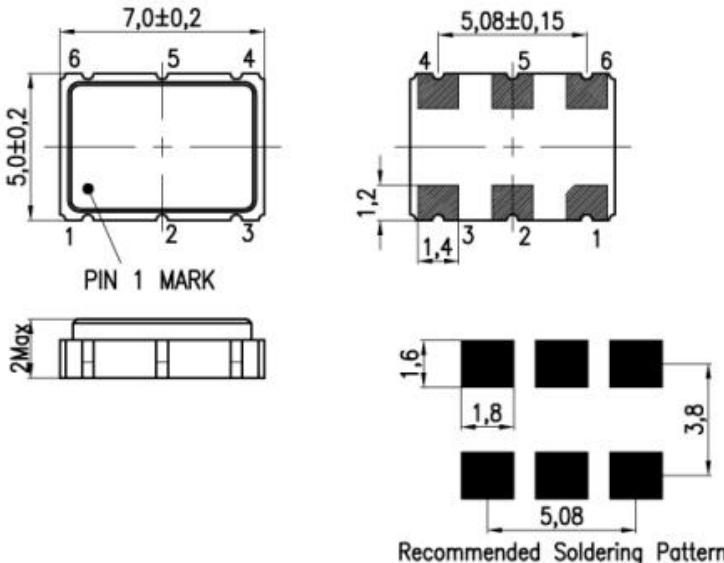
According to KVG Product Qualification Procedure AA-QM-200

3. Marking

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

4. Case

Case style: BF-189-2.0B



1.Pin configuration

1. Control voltage V_C
2. Tri State Control Input/NC
3. Ground, Case
4. RF output
5. Tri State Control Input/NC
6. Supply voltage V_B

6. Ordering Information

Package Code	Supply Voltage	Overall Stability	Type	Temp. Range	TriState Option	Load	Duty Cycle	ROHS Status	Nominal Frequency
7.0 x 5.0 mm	3.3 V	± 50 ppm	Multiplier Jitter <3ps	-40°C to +85°C	Pin5: E/D Pin2: NC	1 kOhm // 15pF	45 / 55%		100.0 MHz
V-9	3	50	M	E	S		T	-LF	- 100.0MHz

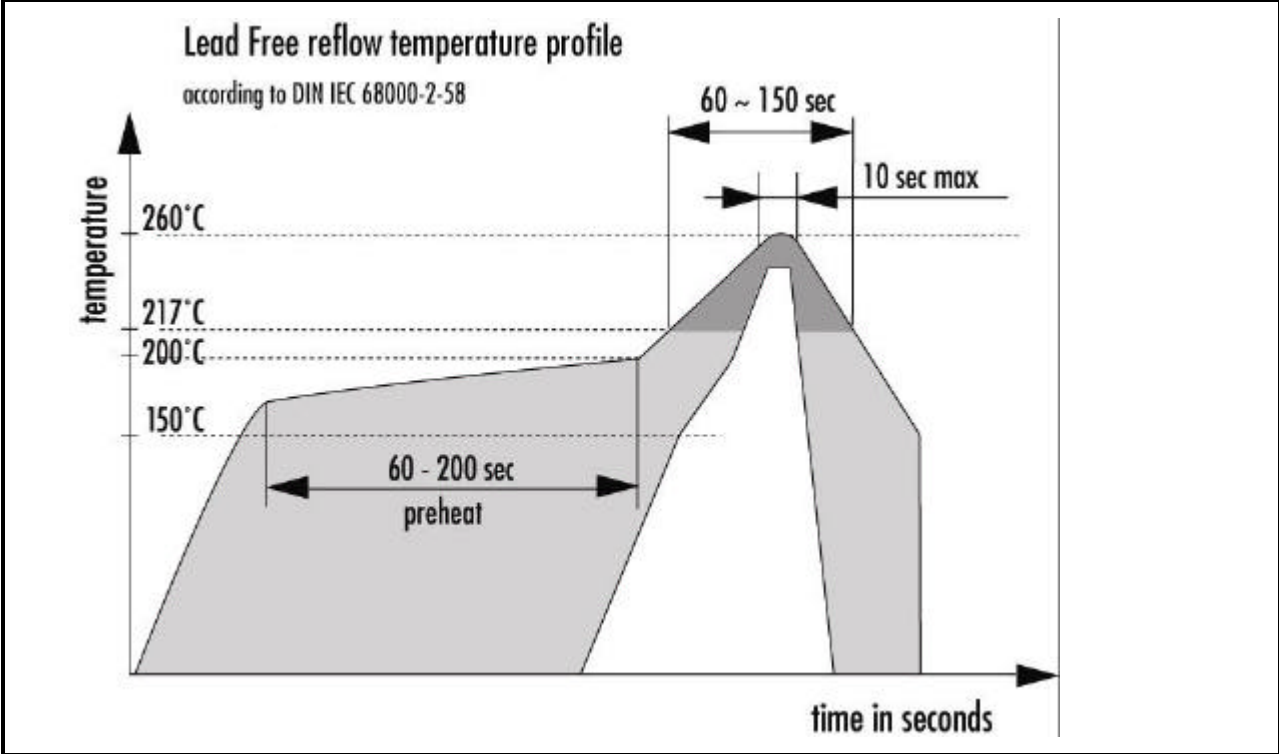
Example: V-9350MEST-LF-100.0 MHz

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5. Reflow Soldering Profile



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