



XO-9700/9400 Series



1. Specification		
Frequency Range:	38.88 MHz to 250 MHz	
Standard frequencies:	77.760; 100.000; 106.250; 125.000; 155.52; 156.250; 159.375; 161.1328125; 164.355469; 212.500 MHz	
Type:	XO-9700	XO-9400
Supply voltage U_B :	+3.3 V \pm 5 %	+2.5 V \pm 5 %
Current consumption:	\leq 80 mA	\leq 50 mA
Frequency stability (1) < \pm 25 ppm < \pm 50 ppm < \pm 100 ppm	XO-9710 XO-9720 XO-9730	XO-9410 XO-9420 XO-9430
Operating temperature Options -20 °C to +70 °C: -40 °C to +85 °C:	S E	
Output E/D options: E/D Control Input at Pin 1: E/D Control Input at Pin 2:	R T	
Output disabled => E/D Control Input: Output enabled => E/D Control Input:	\leq +0.5 V \geq +2.5 V or n.c.	\leq +0.5 V \geq +2.0 V or n.c.
Output options:		
LVPECL: P level ($U_B = +3.3$ V): level ($U_B = +2.5$ V): load: duty cycle: rise time, fall time 20% to 80%:	High \geq 2.275 V, Low \leq 1.68 V High \geq 1.475 V, Low \leq 1.095 V 50 Ohm 45/55 % \leq 1.0 nsec	
LVDS: L level ($U_B = +3.3$ V): level ($U_B = +2.5$ V): load: duty cycle: rise time, fall time 20% to 80%:	247 mV < V_{OD} < 454 mV 247 mV < V_{OD} < 454 mV 100 Ohm 45/55 % 1.76 nsec	
Phase jitter (12 kHz to 20 MHz):	\leq 1 ps RMS	
Start-up time:	\leq 5 ms	
Storage Temperature range	-55 °C ... +125 °C	

(1) including initial tolerance, frequency stability vs. temperature, vs. supply voltage changes $U_B \pm 5$ %, vs. load changes ± 5 % and 1st year aging.

4	XO-9400 (+2.5 V) added	22.07.05	Rudolph	KVG Quartz Crystal Technology GmbH P.O.Box 61 D-74924 Neckarbischofsheim Tel. +49 (0) 7263 / 648-0 Fax. +49 (0) 7263 / 6196
3	Output Option LVDS	06.12.04	Zupan	
6	Package dimensions	20.08.09	Zupan	
5	E/D Control Voltage	13.06.08	Rudolph	
ED	Description	Date	Name	



ROHS-Compliant Product

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2. Environmental conditions

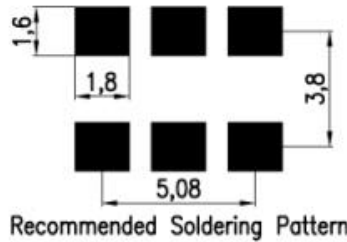
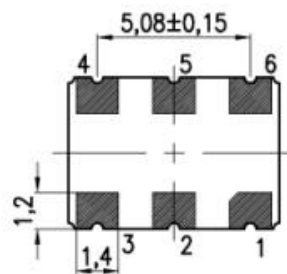
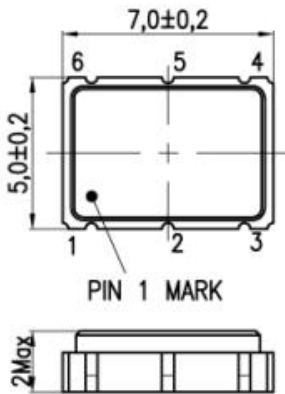
According to KVG Product Qualification Procedure AA-QM-200

3. Marking

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

4. Case

Case style: BF-189-2.0B



1.Pin configuration

1. N.C./Tristate Control Input
2. Tristate Control Input/N.C.
3. Ground case
4. RF Output
5. Complementary RF Output
6. Supply voltage U_B

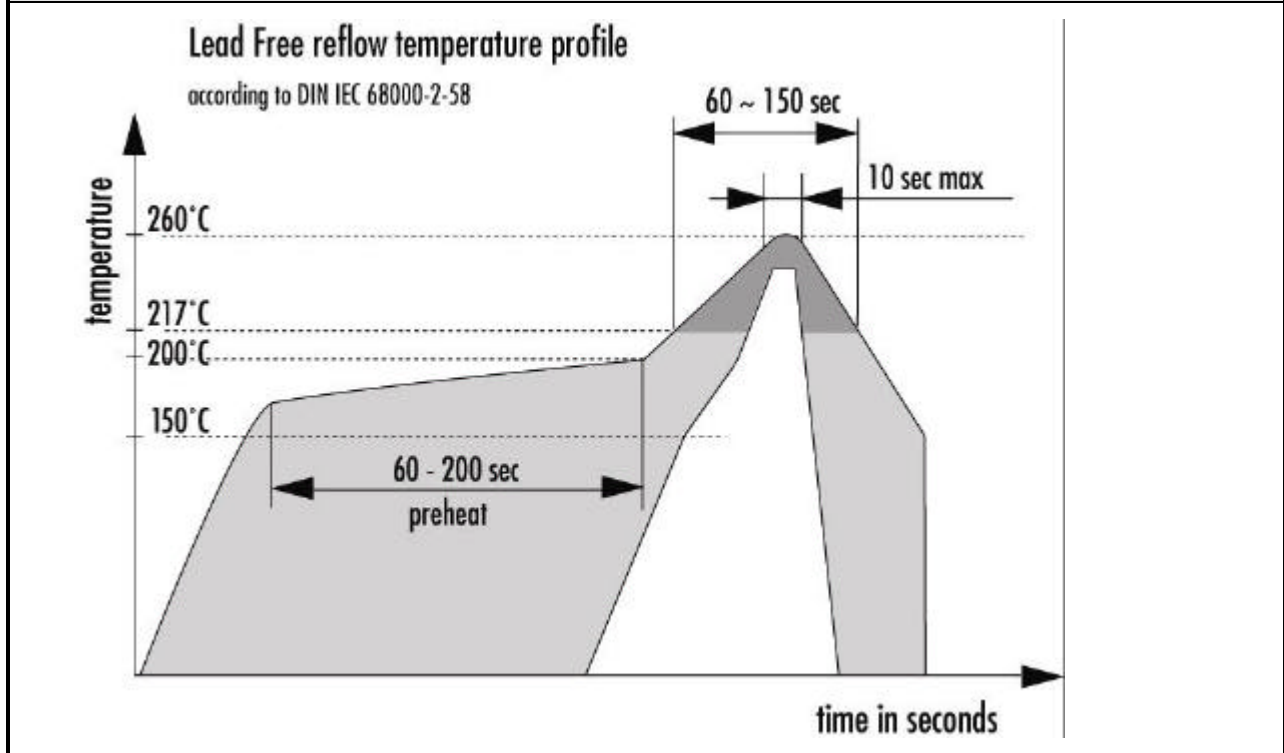
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5. Reflow Soldering Profile



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