



ROHS-Compliant Product

XO-53000 Series



1. Specification

Type:	XO-53500	XO-53330	XO-53250	XO-53180
Supply Voltage V_s :	+5.0 V $\pm$ 5%	+3.3 V $\pm$ 5%	+2.5 V $\pm$ 5%	+1.8 V $\pm$ 5%
Nominal frequency range:	12kHz ... 125MHz	12kHz...160MHz	12kHz ... 160MHz	12kHz ... 125MHz
Frequency stability options: +25 ppm: +50 ppm: +100 ppm:	XO-53501 XO-53502 XO-53503	XO-53331 XO-53332 XO-53333	XO-53251 XO-53252 XO-53253	XO-53181 XO-53182 XO-53183
Frequency stability is considered as the overall stability including nominal frequency tolerance at +25°C, frequency stability vs. temperature, vs. load changes ($\pm$ 5%), vs. supply voltage changes ($\pm$ 5%) and 1 st year aging.				
Temp. range Options -20 °C to +70 °C: -40 °C to +85 °C:	S E			
Tri-State Options:	F : Fixed Frequency without Tri-State T : Tri-State function			
Tri-State Function:	Logic High or NC: Output Enable Logic Low: Output Disable			
Current consumption (with 15 pF load):	$\leq 10\text{mA} < 20\text{MHz}$ $\leq 30\text{mA} < 50\text{MHz}$ $\leq 40\text{mA} > 70\text{MHz}$ $\leq 50\text{mA} < 125\text{MHz}$	$\leq 7\text{mA} < 20\text{MHz}$ $\leq 20\text{mA} < 50\text{MHz}$ $\leq 30\text{mA} < 100\text{MHz}$ $\leq 40\text{mA} < 125\text{MHz}$ $\leq 45\text{mA} < 160\text{MHz}$	$\leq 7\text{mA} < 20\text{MHz}$ $\leq 15\text{mA} < 50\text{MHz}$ $\leq 20\text{mA} < 70\text{MHz}$ $\leq 30\text{mA} < 125\text{MHz}$ $\leq 35\text{mA} < 160\text{MHz}$	$\leq 5\text{mA} < 20\text{MHz}$ $\leq 15\text{mA} < 50\text{MHz}$ $\leq 20\text{mA} < 70\text{MHz}$ $\leq 25\text{mA} < 125\text{MHz}$
Output voltage : level : load : duty cycle:	HCMOS low < 10% V_s , high > 90% V_s 1 kOhm // 15 pF 45% / 55% for f < 100 MHz 40% / 60% for f > 100 MHz			
Phase jitter: (12 kHz to 20 MHz BW)	< 1 ps rms			

2. Environmental conditions

According to KVG Product Qualification Procedure AA-QM-200

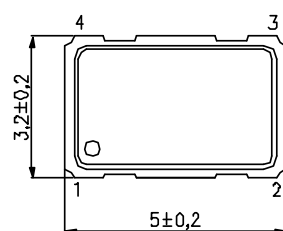
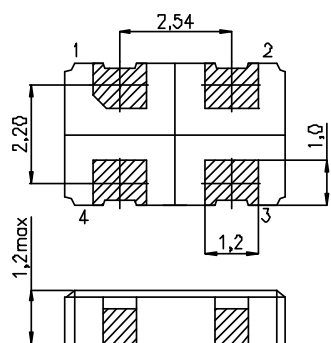
3. Marking

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

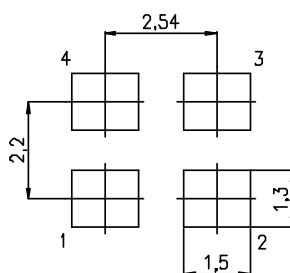
				KVG Quartz Crystal Technology GmbH
				P.O.Box 61
				D-74924 Neckarbischofsheim
		22.04.10	M. Zupan	Tel. +49 (0) 7263 / 648-0
ED	Description	Date	Name	Fax. +49 (0) 7263 / 6196

4. Case

Case Style : 193-1.2A



Recommended soldering pattern



1.Pin configuration

1. Tri-State Control Input or N.C.
2. Ground (case)
3. RF Output
4. Supply Voltage V_s

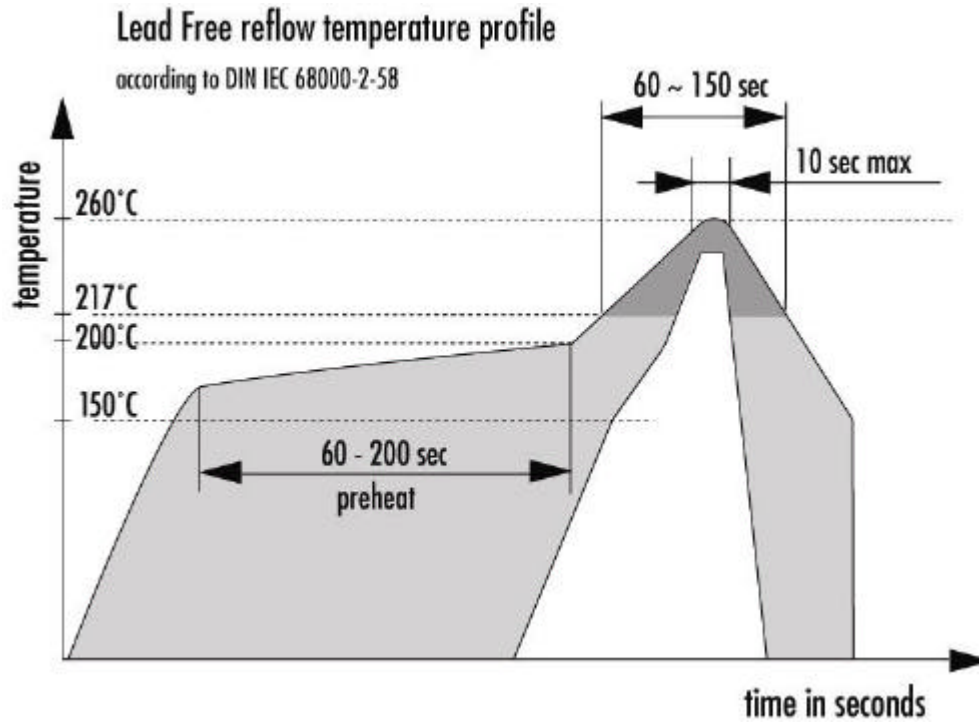
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5. Reflow Soldering Profile



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