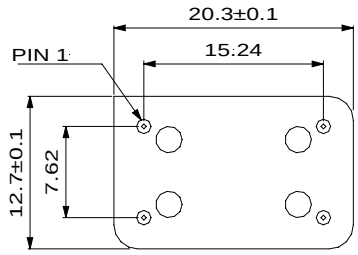
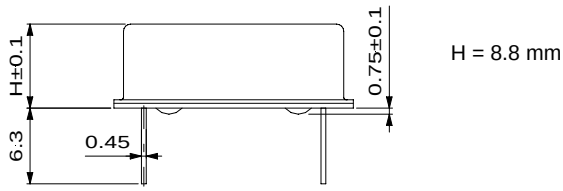
fordahl
FREQUENCY CONTROL PRODUCTS

DIL 14 MINIATURE OCXO

TYPES DFO 14-KH (5 V) & DFO 14-LH (3.3 V)

FEATURES
10 to 30 MHz
Small size and tight stability
APPLICATIONS
Instrumentation, reference





H = 8.8 mm

Function	DFO 14
N.C. or V. control	1
GND	7
Output	8
Vcc	14

TYPE	DFO 14-KH	DFO 14-LH
Frequency Range	10 to 30 MHz	
Standard frequencies	12.8, 16.384, 19.44 & 20 MHz	

ELECTRICAL SPECIFICATIONS			
supply voltage		5 V ± 5 %	3.3 V ± 5 %
supply current (no load) @ 25°C		≤ 250 mA	≤ 300 mA
supply current during warm up		≤ 500 mA	≤ 800 mA
output load		HCMOS 15 pF or 2 TTL	HCMOS 15 pF or 2 TTL
duty cycle @ 2.5 V		40/60...60/40 %	40/60...60/40 %
rise & fall times (10 to 90%)		≤ 10 ns	≤ 10 ns
high/low levels		≥ 4.5 V/≤ 0.5 V	≥ 2.7 V/≤ 0.5 V
SSB phase noise (1 Hz BW)	@ 10 Hz	-95 dBc/Hz	-95 dBc/Hz
(typical @ 12.8MHz)	@ 100 Hz	-120 dBc/Hz	-120 dBc/Hz
	@ 1kHz	-140 dBc/Hz	-140 dBc/Hz
	@ 10 kHz	-145 dBc/Hz	-145 dBc/Hz
	@100kHz	-150 dBc/Hz	-150 dBc/Hz
warm up time to reach ≤ 1 x 10E-7		≤ 5 min @ 25°C ref @ 1 hr frequency	≤ 5 min @ 25°C ref @ 1 hr frequency

FREQUENCY STABILITY			detailed tolerances				
type	temperature range	model code	stability versus : temperature	ageing/day	ageing/ 1st year	short term	Calibration @ 25°C
DFO 14	-20 to 70°C	C1727	≤ ± 1 x 10^E-7	≤ 1.5 x 10^E-8	≤ 2 x 10^E-7	≤ 1 x 10^E-10	≤ ± 0.5 x 10^E-6
	-20 to 70°C	C1757	≤ ± 1 x 10^E-7		≤ 5 x 10^E-7		
	-20 to 70°C	C2757	≤ ± 2 x 10^E-7		≤ 5 x 10^E-7		
stability versus supply voltage			≤ 1 x 10^E-8 for Vcc ± 5 %				

OPTIONS	CODE		
external voltage	V	2.5 V ± 2.25 V ≥ ± 2 ppm, positive slope	1.65 V ± 1.5 V ≥ ± 2 ppm, positive slope

ORDERING CODE	type + option code + frequency + model code + voltage value
Example	DFO 14-LH 20 MHz C1727