

FREQUENCY STABILITY	
OVER:	
OPERATING TEMP. RANGE :	<i>see note 1</i>
LONG TERM AGING 1ST YEAR:	< ±0.7 ppm *
10 YEARS:	< ±4.0 ppm *
SUPPLY VOLTAGE ± 0.2 V	< ±0.1 ppm *
LOAD ±10%:	< ±0.01 ppm
POWER SUPPLY	
SUPPLY INPUT:	V _{cc} = 5 V ±0.2 V *
INPUT CURRENT :	< 80 mA @ +30 °C *
INPUT CURRENT :	< 120 mA @ -20 °C *
FREQUENCY CONTROL RANGE	
CONTROL VOLTAGE:	<i>see note 2</i>
FREQUENCY DEVIATION:	> ±4 ppm *
RESPONSE SLOPE:	positive
OUTPUT	
OUTPUT SIGNAL:	Sine wave
HARMONICS:	-10 dBc *
SPURIOUS:	-70 dBc *
OUTPUT IMPEDANCE:	50Ω
LEVEL / LOAD:	≤ 20MHz ≥ 4 dBm / 50Ω
	> 20MHz ≥ 0 dBm / 50Ω
ENVIRONMENT	
OPERABLE TEMP. RANGE:	-40 to +85 °C
STORAGE TEMP. RANGE:	-65 to +125 °C
VIBRATION:	10 to 2000 Hz / 10 g
SHOCK:	2000 g, 0.3 ms, ½ sine
PACKAGE:	DIL 14, 4 pins, GND to case
PACKAGE HEIGHT:	8 mm (packaging info)
WARM-UP	
ΔF/F:	within spec after 30s @ 0 °C *
CURRENT:	< 250 mA during 10s
MISCELLANEOUS	
SHORT TERM STABILITY:	< 5 E-10 0.1 s to 30 s Typical 5 E-11 @ 1 s
PHASE NOISE (BW = 1Hz):	10 Hz: -110 dBc / Hz
(typical, @ 10MHz in static conditions)	100 Hz: -135 dBc / Hz
	1 KHz: -145 dBc / Hz
	10 KHz: -150 dBc / Hz
* Customer's specification on request	

NOTE 1	
TEMP. RANGE *	OCXOVS-AR1, AV5 0 to +60 °C
STABILITY *	±0.075 ppm (0.15 ppm peak to peak)
TEMP. RANGE *	OCXOVS-BR1, BV5 -20 to +70 °C
STABILITY *	±0.15 ppm (0.3 ppm peak to peak)
TEMP. RANGE *	OCXOVS-CR1, CV5 -40 to +85 °C
STABILITY *	±0.25 ppm (0.5 ppm peak to peak)

NOTE 2	
ADJUSTMENT WITH RESISTOR (connected to ground)	OCXOVS-AR1, BR1, CR1 0 to 10 kΩ
INPUT IMPEDANCE	> -4.7 kΩ
ADJUSTMENT WITH VOLTAGE	OCXOVS-AV5, BV5, CV5 0.5 to 5 V
INPUT IMPEDANCE	> 47 kΩ

MARKING EXAMPLE			
Micro Crystal		Micro Crystal	
OCXOVS-BV5		Type	Spec No.
20.000 MHz	09.25	Frequency	Date Code
○	12	○ (PIN 1)	Piece No.

ORDERING INFORMATION EXAMPLE			
O C X O V S - B V 5 20 MHz x x x			
Oscillator Type	OCXO = oven controlled Crystal Oscillator	Oscillator output frequency	N° of customer spec.
Oscillator Version	V = low power voltage 5V S = sine wave		
Temperature Range	A = 0 to +60°C; +/-0.075ppm B = -20 to +70°C; +/-0.15ppm C = -40 to +85°C; +/-0.25ppm X = custom spec.	Frequency Adjustment	R1 = external resistor V5 = voltage 5V Y = custom spec.

STANDARD FREQUENCIES (MHz)					
10.0000	12.8000	16.0000	16.3840	19.4400	20.0000
40.0000	50.0000	52.0000			

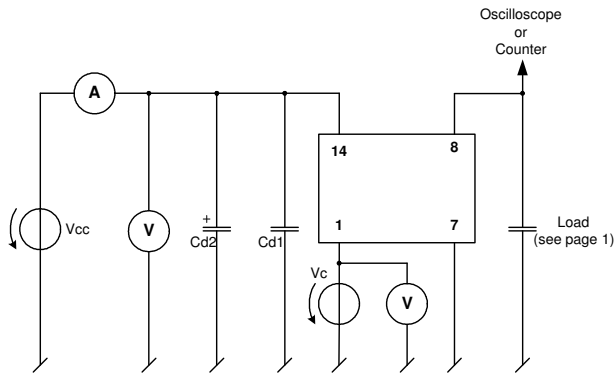
DATE:	October 2009	Revision No.: 9
Page 1/2		

In accordance with our policy of continuous development and improvement, we reserve the right to modify the design or the specifications of our products without prior notice.

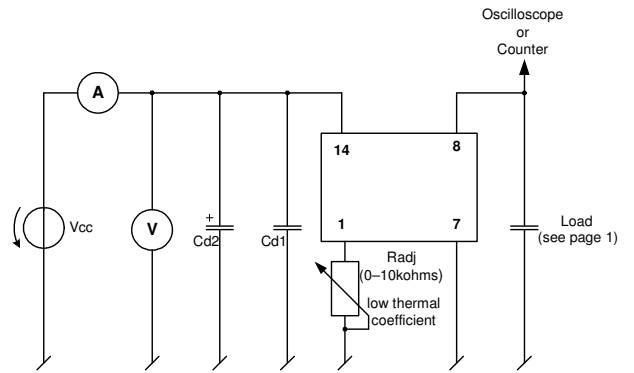
Headquarters: Micro Crystal AG Mühlestrasse 14 CH-2540 Grenchen Switzerland	Tel. +41 32 655 82 82 Fax +41 32 655 80 90 Internet www.microcrystal.ch Email sales@microcrystal.ch
--	--

Application and Test Circuit:

Adjustment with voltage



Adjustment with resistor



In accordance with our policy of continuous development and improvement, we reserve the right to modify the design or the specifications of our products without prior notice.