

FREQUENCY STABILITY	
OVER:	
OPERATING TEMP. RANGE :	see note 1
LONG TERM AGING 1ST YEAR:	< ±0.3 ppm *
10 YEARS:	< ±2.5 ppm *
SUPPLY VOLTAGE ±0.15 V	< ±0.1 ppm
LOAD ±10%:	< ±0.01 ppm
POWER SUPPLY	
SUPPLY INPUT:	V _{cc} = 3.3 V ± 0.15 V *
INPUT CURRENT :	< 110 mA @ +30 °C * < 170 mA @ -20 °C *
FREQUENCY CONTROL RANGE	
CONTROL VOLTAGE:	see note 2
FREQUENCY DEVIATION:	> ±2.5 ppm *
RESPONSE SLOPE:	positive
OUTPUT	
OUTPUT SIGNAL:	Sine wave
HARMONICS:	-10 dBc *
SPURIOUS:	-70 dBc *
OUTPUT IMPEDANCE:	50Ω
LEVEL / LOAD:	≤ 20MHz ≥ 4 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 (see packaging info)
WARM-UP	
ΔF/F:	within spec after 120s @ 30 °C *
CURRENT:	< 250 mA during 30s
MISCELLANEOUS	
SHORT TERM STABILITY:	< 1 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 *	SCOCXOWS-AR1, AV3 0 to +60 °C
STABILITY *	±0.05 ppm (0.1 ppm peak to peak)
TEMP. RANGE *	SCOCXOWS-BR1, BV3 -20 to +70 °C
STABILITY *	±0.075 ppm (0.15 ppm peak to peak)
TEMP. RANGE *	SCOCXOWS-CR1, CV3 -40 to +85 °C
STABILITY *	±0.1 ppm (0.2 ppm peak to peak)

NOTE 2	
ADJUSTMENT WITH RESISTOR (connected to ground)	SCOCXOWS-AR1, BR1, CR1 0 to 10 kΩ
INPUT IMPEDANCE	> -4.7 kΩ
ADJUSTMENT WITH VOLTAGE	SCOCXOWS-AV3, BV3, CV3 0 to 3.3 V
INPUT IMPEDANCE	> 47 kΩ

MARKING EXAMPLE			
Micro Crystal		Micro Crystal	
SCOCXOWS-BV3		Type	Spec No.
20.000 MHz	09.25	Frequency	Date Code
○	12	○ (PIN 1)	Piece No.

ORDERING INFORMATION EXAMPLE			
S C O C X O W S - B V 3 20 MHz x x x			
Oscillator Type	SCOCXO = Low g sensitivity Oven Controlled Crystal Oscillator		N° of customer spec.
Oscillator Version	W = low power voltage 3.3V S = sine wave	Oscillator output frequency	
Temperature Range	A = 0 to +60 °C; +/-0.025ppm B = -20 to +70 °C; +/-0.05ppm C = -40 to +85 °C; +/-0.1ppm X = custom spec.	Frequency Adjustment	R1 = external resistor V3 = voltage 3.3V Y = custom spec.

STANDARD FREQUENCIES (MHz)					
10.0000	12.8000	16.0000	16.3840	19.4400	20.0000

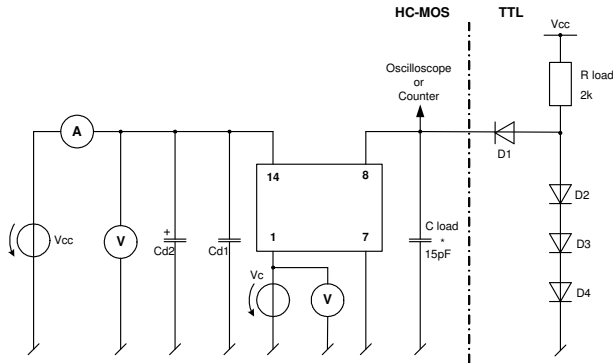
DATE:	July 2010	Revision No.: 2
-------	-----------	-----------------

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.

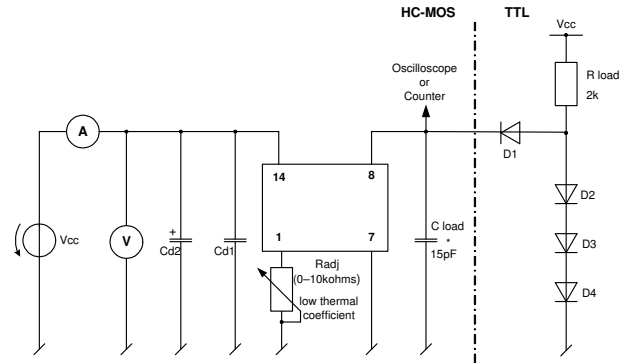
Headquarters:	Micro Crystal AG Mühlestrasse 14 CH-2540 Grenchen Switzerland	Tel.	+41 32 655 82 82
		Fax	+41 32 655 80 90
		Internet	www.microcrystal.ch
		Email	sales@microcrystal.ch

Application and Test Circuit:

Adjustment with voltage



Adjustment with resistor



DATE:	July 2010	Revision No.: 2
		Page 2/2

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