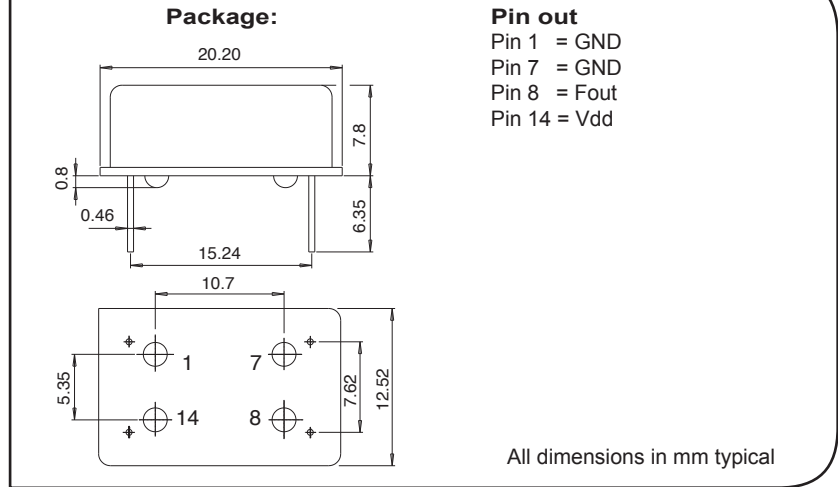




DIMENSIONS



Oven control quartz crystal oscillator
 Fundamental mode frequency
 High shock and vibration resistance
 Wide temperature range
 Low aging (sealed under vacuum)
 Customer specification on request
 Very fast warm up
 Low power consumption
 Swiss made quality

DESCRIPTION:

This DIL 14 package has been specially designed for the applications:

- Digital switching
- Telecom transmission
- Sonet / SDH / DWDM / FDM/36 / WIMAX
- Airborne equipments
- Instrumentation
- Radio Transceiver
- Battery operated systems

The OCXO are supplied on trays (50 pcs/tray).

ELECTRICAL CHARACTERISTICS AT 25°C

Frequency versus temperature D: 0 to +70°C C: -40 to +85°C	$\Delta F/F$	see table 1 (without air flow)		
Frequency long term aging 15 years, Overall Frequency Stability	$\Delta F/F$	± 4.6		ppm
Frequency calibration (pin 1 to GND)	$\Delta F/F$	$\leq \pm 1$		ppm
Supply voltage	Vdd	3.3 / 5		V
Input current	Idd	see table 2		
Output signal		HC MOS compatible		
Symmetry at Vdd/2		45 / 55		%
Rise & fall time (without load)		≤ 7		ns
Level "0" & "1"		$<0.4> V_{cc}-0.5$		V
Start-up time	t	$<5</math>$		ms
Load min / max		3/47		pF
Frequency stability versus load $\pm 10\%$	$\Delta F/F$	$\leq \pm 10$		ppb
Warm-up within ± 0.1 ppm at 25°C	Vdd	3.3	5	V
	t	120	60	s
Stability versus Vdd	$\Delta F/F$	$\leq \pm 0.1$		ppm
Short term stability 0.1 to 30s 5E-11 typ at 1s	Tau	$<5</math>$		E-10
Phase noise typical at 10 MHz Static conditions BW = 1Hz				dBc/ Hz
10Hz			-100	
100Hz			-130	
1 kHz			-140	
10 kHz			-145	

TABLE 1: Vdd = 3.3V

Operating Temperature range	Vdd = 3.3V ± 0.15V
D = 0 to +70°C	< ± 280 ppb < 560 ppb peak to peak
C = -40 to +85°C	

TABLE 1: Vdd = 5V

Operating Temperature range	Vdd = 5V ± 0.2V
D = 0 to +70°C	≤ ± 280 ppb < 560 ppb peak to peak
C = -40 to +85°C	

TABLE 2: Idd

Temperature	Vdd = 3.3V	Vdd = 5V
+25°C -20°C	≤ 120 mA ≤ 170 mA	≤ 80 mA ≤ 120 mA
start-up current at +25°C ≤ 300mA, duration	30 s	10s

STANDARD FREQUENCIES:

Frequency «MHz»					
12.8	20	25.6	40	51.2	
Other frequencies from 10 kHz up to 54 MHz on request					

ENVIRONMENTAL CHARACTERISTICS:

Storage temp. range	-55 to +125°C
Vibration resistance	10 to 2000Hz / 20g
Shocks resistance	5000g / 0.3ms / ½ sine

TERMINATIONS AND PROCESSING:

Pins soldering	+235°C / 10s max +260°C / 5s max
SMD version option D1 or D2 see application notes	Dil 14.4 pins GND to case height = 8mm

PRODUCT DESCRIPTION AND ORDERING INFORMATION:

OCXO V ST C 20MHz XXX

W = Vdd 3.3V
V = Vdd 5V
ST = Stratum 3
D = 0 to +70°C
C = -40 to +85°C
X = custom

Frequency _____ customer spec N° _____

A unique part number will be generated for each product specification, i.e:
20xxxx-EA00 (in ESD plastic tray)
 Please contact us.



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