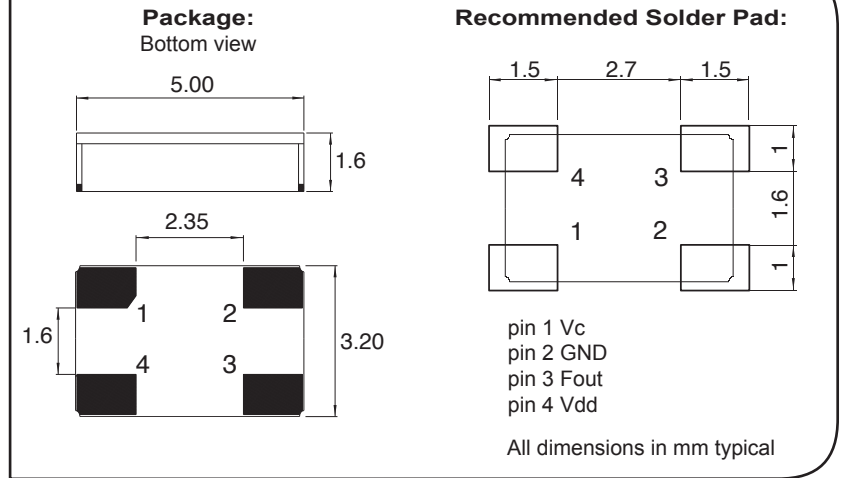


DIMENSIONS



SMT Voltage control oscillator in ceramic package
Fundamental quartz mode frequency
High shock and vibration resistance
Wide temperature range
Low aging
Ultra low internal MSL
Very fast start-up
Excellent solderability
Swiss made quality
Customer specification on request

DESCRIPTION:

This SMD oscillator in ceramic package has been specially designed for surface mount using infrared, vapor phase or epoxy techniques.

APPLICATIONS:

- Downhole and Well drilling equipments
- Avionics
- Airbone equipments
- Geothermal equipments
- Fire fighter equipments

The VCXO2E's are supplied on trays (128 pcs / tray)
 For pick-and-place equipment, the parts are available in 12mm tapes
 with 250 parts min
 1000 parts min

ELECTRICAL CHARACTERISTICS AT +25°C

Absolute Frequency Pulling range APR (Minimum frequency deviation including 2)*				
Temperature range B= -40 to 85°C C= -55 to 125°C R= -10 to 150°C S= -10 to 175°C T= -10 to 210°C		$\Delta F/F$	± 130 ± 110 ± 90 ± 50 ± 30	ppm
Supply voltage ± 5%	1)*	Vdd	3.3	V
Input current		Idd	see table 1	
Output signal			HC-MOS compatible	
Symmetry at Vdd/2			40 / 60	%
Rise & fall time (load 15pf 20% to 80%)			≤5	ns
Level "0" & "1"			<0.4>Vdvd-0.5	V
Start-up time		t	<5	ms
Load min / max			3/47	pF

**TABLE 1: Idd
(Without load)**

Frequency	F=< 10MHz	≤ 20MHz	40MHz
V=Vdd = 3.3V	< 4mA	< 5mA	< 20mA

FREQUENCY CONTROLE RANGE:

Vc (Voltage control range)	0 to 3.3V
Response Slope	positive
frequency bandwich	≤10kHz
Input impedance	≥100kohm

STANDARD FREQUENCIES:

Frequency «MHz»			
10	12.288	12.8	20
24	24.576	25.6	
Other frequencies on request			

**ENVIRONMENTAL
CHARACTERISTICS:**

Storage temp. range	-65 to +125°C
Vibration resistance	10 to 2000Hz / 40g
Shocks resistance	10000g / 0.3ms / ½ sine

**TERMINATIONS AND
PROCESSING:**

Reflow soldering	260°C / 10s max
Package	Ceramic 5 x 3.2 x 1.6mm
Lids	Ceramic (Kovar on version T)
Terminations option T3 on request (not available on T temperature range)	with tinned Ag/Cu/Zn

**PRODUCT DESCRIPTION AND
ORDERING INFORMATION:**

VCXO2E V - D 20MHz T3 XXX

V = Vdd 3.3V

B = -40 to 85°C
C = -55 to 125°C
R = -10 to 150°C
S = -10 to 175°C
T = -10 to 210°C
X = custom

option 2
blank Au plated
T3 = tinned

customer
spec N°

Frequency _____

A unique part number will be generated for each product specification
 20xxxx-EA00 xxx pcs (in ESD plastic tray)
 200xxx-ML00 xxx pcs (in tape & reel, any quantity)

All specifications subject to change without notice.

