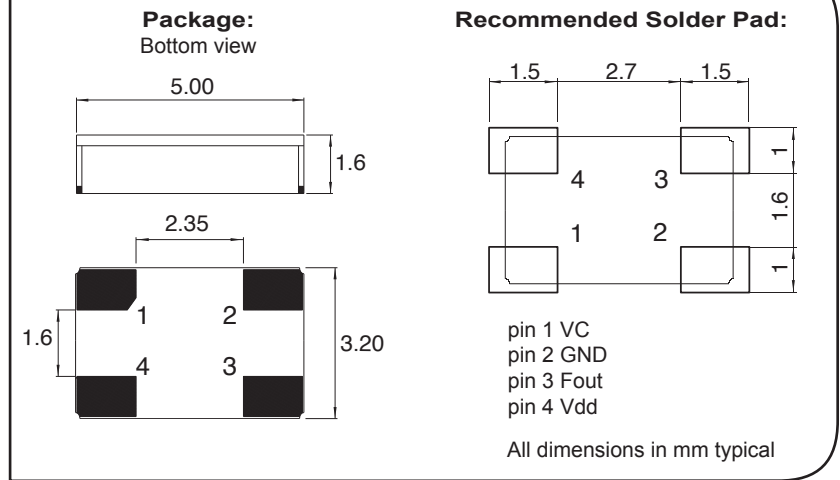


VCXO2E family package 5×3.2 mm

T range up to 210°C 5 to 40MHz



DIMENSIONS



- SMT Voltage control oscillator in ceramic package
- Fundamental quartz mode frequency
- High shock and vibration resistance
- Wide temperature range
- Low aging
- Ultra low 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)*	ΔF/F	ppm
Temperature range B= -40 to 85°C C= -55 to 125°C E= -10 to 150°C D= -10 to 175°C G= -10 to 210°C		$\leq \pm 130$ $\leq \pm 110$ $\leq \pm 90$ $\leq \pm 50$ $\leq \pm 30$
Supply voltage $\pm 5\%$ 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"		$< 0.4 > V_{dvd} - 0.5$ V
Start-up time	t	< 5 ms
Load min / max		3/47 pF

* 1) C = 47nF ceramic must be connected between GND & Vdd

* 2) APR is inclusive of frequency deviation due to stability adjustment at +25°C,
long term aging 1 year
over supply voltage $\pm 5\%$
over load min to max
frequency stability over T range

**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			

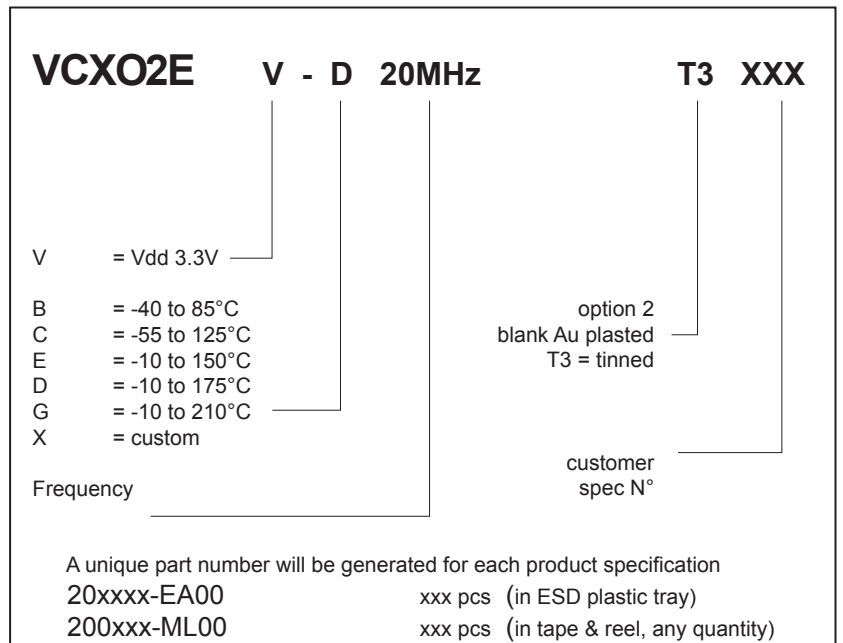
ENVIRONMENTAL CHARACTERISTICS:

Storage temp. range	-55 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
Terminations option T3 on request (not available on G temperature range)	with tinned Ag/Cu/Zn

PRODUCT DESCRIPTION AND ORDERING INFORMATION:



All specifications subject to change without notice.



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