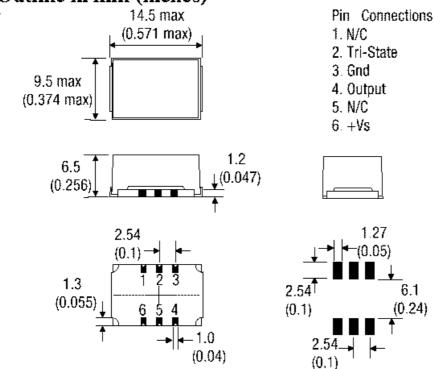


# Oscillator Specification: N2636 Issue E, 8<sup>th</sup> February 2001

### Outline in mm (inches)



#### Marking:

Marking shall include as a minimum:

- 1) Manufacturer (CMAC)
- 2) Device number (N2636)
- 3) Frequency (MHz)
- 4) Date Code (YYWW)
- 5) Antistatic symbol (Δ, denotes pin 1)

#### **Electrical:**

Frequency (f<sub>O</sub>)

Supply Voltage, Vs	$3.3 \text{ V} \pm 5\%$
Input Current	≤ 15.0 mA
Output:	
Туре	HCMOS
Load	15 pF
Vol	≤ 10% Vs
Voh	≥ 90% Vs
Duty Cycle	40 to 60%

12.8 MHz



## Oscillator Specification: N2636 Issue E, 8<sup>th</sup> February 2001

HOLDOVER STABILITY<sup>1)</sup>

 $\leq$  ± 4.6 ppm

incl. Temperature, -40°C to 85°C Supply Voltage, 3.3V ± 5% and Ageing 24 hours (≤ ±0.5ppm).

FREE-RUN ACCURACY<sup>1)</sup>

 $\leq$  ± 20 ppm ref. f<sub>O</sub>

incl. Calibration @ 25 °C,

Temperature, -40°C to 85°C, Supply Voltage, 3.3V ± 5%, Load, 15pF±10% Reflow soldering and Ageing, 20 years

Note 1) FREE-RUN ACCURACY AND HOLDOVER STABILITY ARE COMPLIANT WITH THE **S**ONET **M**INIMUM **C**LOCK SPECIFICATION ACCORDING TO BELLCORE STANDARD GR-253.

Tri-state Control Pin 2 > 70% Vs (logic 1) or left open Output Active

Pin 2 < 20% Vs (logic 0) Output Disabled (tri-stated)

#### **Environmental:**

Storage temperature range: -55 to 90°C

Vibration IEC 68-2-6 Test Fc Procedure B4, 10 - 58 Hz 1.5mm pk-pk displacement,

58 - 500 Hz at 100 ms<sup>-2</sup>, 30 minutes in each of three mutually perpendicular

planes at 1 octave per minute.

Shock IEC 68-2-27 Test Ea, 1000ms<sup>-2</sup> acceleration for 6ms duration, half sine,

3 shocks in each direction along 3 mutually perpendicular axes.

SMD Infra-red (class C, test category 1 as defined in classification BS CECC

0802; 1994). Profile in accordance with figure 3. Testing to be performed in

accordance with BS CECC 00802, IEC 68-2-20 and IEC 68-2-58.

Sealing Non hermetic package

Marking Label, resistant to all common solvents.

<sup>&</sup>quot;Samples supplied according to this specification are supplied from our development or pre-production programme and as such are not qualification approved products. No condition warranty or representation regarding quality, suitability, performance, life or continuation of supply is given or implied and Guarantee in clause 6a of our standard conditions is not applicable. The right is reserved to change the design or specification or cease supply without notice." C-MAC QUARTZ CRYSTALS LTD