

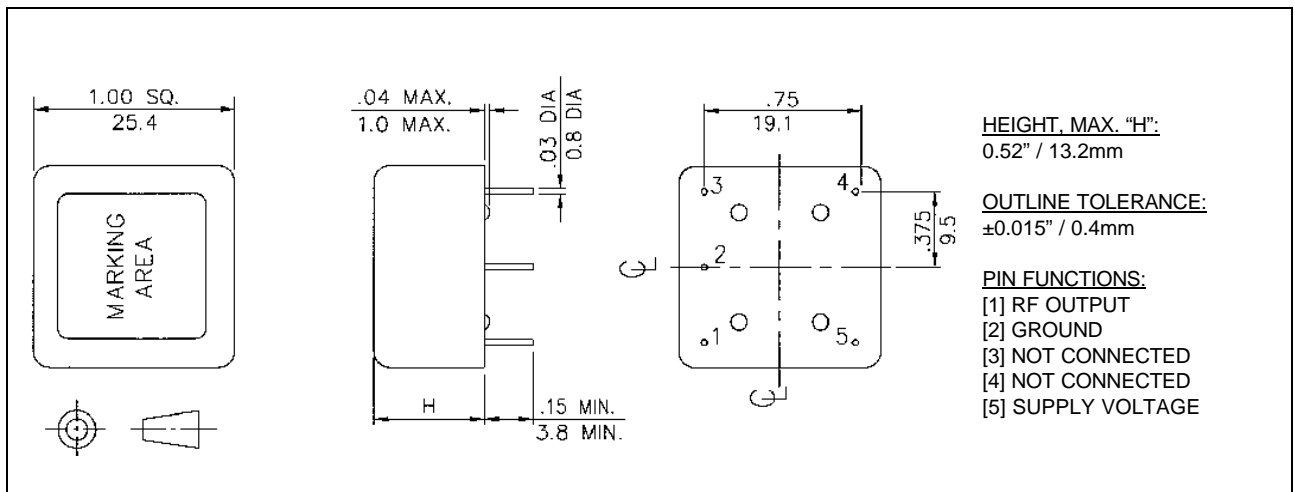
## OX4180A-LZ-1-12.800-SM

### REFERENCE OSCILLATOR TO SEMTEC ACS8530 STRATUM 3E SYNCHRONIZATION CHIP SET

#### APPROVALS

| RALTRON               | CUSTOMER              |
|-----------------------|-----------------------|
| Created by, date:     | Name (please print):  |
| Sales approval, date: | Title (please print): |
| Eng. approval, date:  | Signature, date:      |
| Revision:             |                       |

#### MECHANICAL SPECIFICATION



#### ELECTRICAL SPECIFICATION

| PARAMETER                          | SYMBOL       | CONDITIONS  | VALUE     | UNIT   |
|------------------------------------|--------------|---|-----------|--------|
| Supply voltage, nom.               | Vs           | Vs±5%   | 3.3       | V      |
| Power dissipation, max.            | Ps           | Vs, nom. / Ta=+25°C   | 1.3       | W      |
| Heat up power, max.                | Ps_heat      | Vs, nom. / Ta=+25°C   | 3.5       | W      |
| Heat up time, max.                 | t_heat (Ta)  | Vs, nom. / Ta=+25°C   | 5.0       | min    |
| Frequency nom.                     | fo           | -   | 12.800    | MHz    |
| Frequency calibration              | Δf/fo        | Ta=+25°C, Pre-Reflow  | ±1.5      | ppm    |
| Freq. stability vs. temperature    | Δf/fc (Ta)   | Ta=0°C...+70°C  | ±0.01     | ppm    |
| Freq. stability vs. supply voltage | Δf/fc (ΔVcc) | Per %change in voltage, max. : ±5%  | ±0.002    | ppm    |
| Total freq. stability              | Δf/fo        | over all causes including 20 year aging   | ±4.0      | ppm    |
| Drift                              | D            | for 24 hrs. in a ±3°C temperature range anywhere within the operating temperature range | ±0.04     | ppm    |
| Short term stability               | Δf/fc(Δt)    | Δt=1sec. (Allan variance)   | 10E-11    | .....  |
| Phase noise @ freq. offset         | £ (Δf)       | Δf=100Hz  | -130      | dBc/Hz |
|                                    | £ (Δf)       | Δf=1kHz   | -145      | dBc/Hz |
|                                    | £ (Δf)       | Δf=10kHz  | -150      | dBc/Hz |
|                                    | £ (Δf)       | Δf=100kHz   | -150      | dBc/Hz |
| HCMOS/TTL compatible output levels | VOH / VOL    | load=10pF; Vs, nom.   | 2.97/ 0.3 | V      |
| Duty cycle                         | DC           | load=10pF / @ 50% level   | 40...60   | %      |
| Rise- / fall time                  | tr / tf      | 10%~90% Vout, 90%~10% Vout  | 10.0      | ns     |
| Storage temperature range          | Tstg         | -   | -55...+90 | °C     |

3/12/2001 marketing-rfq. ocxo. OX80