



## Features

- ▶ Temperature stability down to 20ppb
- ▶ Single 5V oven & oscillator supply
- ▶ Standard European IEC CO-08 pin-out
- ▶ Custom options available

## Specifications

| Parameters                    | Product  | Option Codes |
|-------------------------------|--|--------------|
|                               | HCD350   |              |
| Frequency range:              | 5.0 ~ 20.0MHz  |              |
| Ageing per day (at despatch): | $< \pm 1 \times 10^{-9}$ <input checked="" type="checkbox"/><br>$< \pm 5 \times 10^{-10}$ <input checked="" type="checkbox"/><br>$< \pm 2 \times 10^{-10}$ <input type="checkbox"/>  | D<br>E<br>F  |
| Frequency stability:          | $< \pm 5 \times 10^{-8}$ per year <input checked="" type="checkbox"/><br>$< \pm 1 \times 10^{-9}$ per 10% change in $V_{DD}$ <input checked="" type="checkbox"/>   |              |
| Short term stability:         | $< \pm 1 \times 10^{-12}$ over 1 sec   |              |
| Temperature stability:        | $< \pm 2 \times 10^{-8}$ <input checked="" type="checkbox"/><br>$< \pm 1 \times 10^{-8}$ <input checked="" type="checkbox"/><br>$< \pm 5 \times 10^{-9}$ <input type="checkbox"/>  | P<br>R<br>S  |
| Operating temperature range:  | 0 to +50°C <input type="checkbox"/><br>-10 to +60°C <input type="checkbox"/><br>-20 to +70°C <input checked="" type="checkbox"/>   | A<br>C<br>F  |
| Storage temperature range:    | -40 to +90°C   |              |
| Output waveform:              | Sine wave, 7dBm ( $\pm 2$ dBm) into 50 $\Omega$  |              |
| Frequency adjustment:         | $\pm 5 \times 10^{-7}$ (typ) over +0.5 to +4.0V (sufficient for 10 years ageing min) Stabilised +4.0V supply provided  |              |
| Supply voltage ( $V_{DD}$ ):  | +5.0V ( $\pm 0.5$ V)   | L            |
| Power consumption:            | 5.0W max at switch on <input checked="" type="checkbox"/><br>1.2W typ when stabilised at 25°C <input checked="" type="checkbox"/>  |              |
| Warm up:                      | $< \pm 2 \times 10^{-8}$ after 8mins at +20°C  |              |
| Phase noise (@ 10.0MHz):      | $< -95$ dBc/Hz @ 1Hz <input checked="" type="checkbox"/><br>$< -130$ dBc/Hz @ 10Hz <input checked="" type="checkbox"/><br>$< -140$ dBc/Hz @ 100Hz <input checked="" type="checkbox"/><br>$< -150$ dBc/Hz @ 1kHz <input checked="" type="checkbox"/><br>$< -155$ dBc/Hz @ 10kHz <input checked="" type="checkbox"/><br>$< -155$ dBc/Hz @ 100kHz <input checked="" type="checkbox"/> |              |
| Harmonics:                    | $< -30$ dB wrt carrier   |              |
| Shock:                        | IEC 68-2-27 Test Ea<br>50G for 11ms  |              |
| Vibration:                    | IEC 68-2-06 Test Fc<br>10-55Hz, 1.5mm. 55-500Hz, 10G   |              |

■ Standard. □ Optional - Please specify required code(s) when ordering

## Ordering Information

Part No, or product name + option codes + frequency

eg: HCD350/ERFL 10.0MHz

HCD350/DPFL 5.0MHz

Option code X (eg HCD350/X) denotes a custom specification.