



## Features

-  **5V supply**
-  **Standard European IEC CO-08 pin-out**
-  **Cost effective**
-  **AT cut crystal**
-  **Custom options available**

## Specifications

**HCD300: Sine output**

**HCD301: HCMOS / TTL compatible output**

Parameters	Product		Option Codes
	HCD300	HCD301	
<b>Frequency range:</b> 4.5 ~ 50.0MHz 4.0 ~ 60.0MHz	■	■	
<b>Frequency stability:</b> ±5x10 <sup>-9</sup> / day at despatch ±5x10 <sup>-7</sup> / year max ±5x10 <sup>-8</sup> per 5% change in V <sub>DD</sub>	■	■	
<b>Temperature stability:</b> ±5x10 <sup>-8</sup> over -20 to +60°C	■	■	
<b>Operating temperature range:</b> -20 to +60°C Other options from -40°C	■	■	specify
<b>Storage temperature range:</b> -40 to +90°C	■	■	
<b>Output waveform:</b> Sine wave, 1.5V p-p ±0.5V into 50Ω HCMOS / TTL compatible	■	■	
<b>Frequency adjustment:</b> ±5x10 <sup>-6</sup> typ (10MHz), +0.5 to +4.0V (sufficient for 10 years ageing min) Stabilised +4.0V supply provided	■	■	
<b>Supply voltage (V<sub>DD</sub>):</b> +5.0V (±0.25V)	■	■	
<b>Power consumption:</b> 4.5W max at switch on < 1.0W typ when stabilised at 25°C	■	■	
<b>Warm up:</b> ±5x10 <sup>-8</sup> after 10mins at +25°C	■	■	
<b>Phase noise (@ 10.0MHz):</b> < -105dBc/Hz @ 10Hz < -125dBc/Hz @ 100Hz < -145dBc/Hz @ 1kHz < -150dBc/Hz @ 10kHz < -150dBc/Hz @ 50kHz	■	■	
<b>Shock:</b> IEC 68-2-27 Test Ea 50G for 11ms	■	■	
<b>Vibration:</b> IEC 68-2-06 Test Fc 10-55Hz, 1.5mm. 55-500Hz, 10G	■	■	

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

## Ordering Information

Product name + variant + frequency

eg: **HCD300 10.0MHz**

**HCD301 5.0MHz**

Option code X (eg HCD301/X) denotes a custom specification.