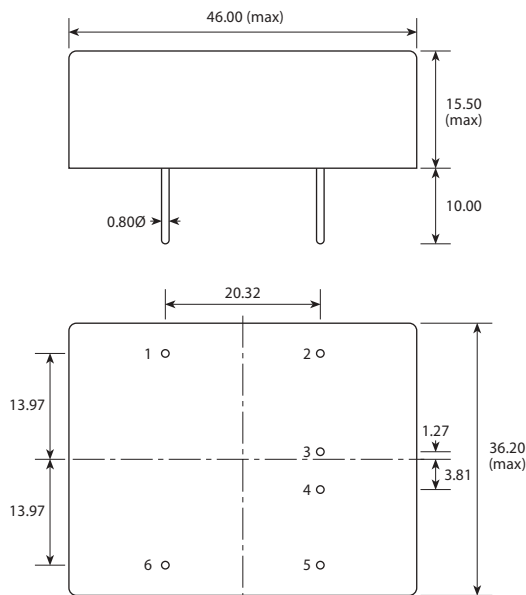
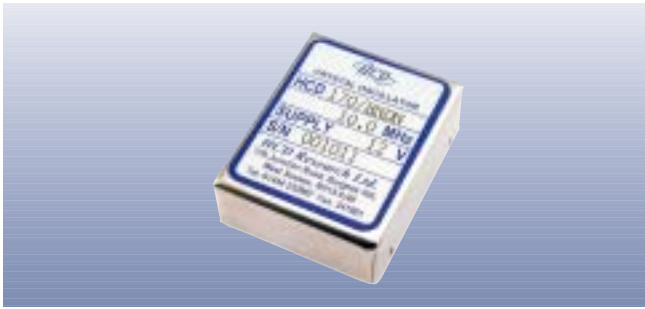


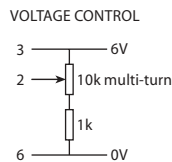
HCD71 OBSOLETE - DO NOT USE

OCXO Sine Output

HCD71 & HCD170



PIN	CONNECTION
1	Case
2	Freq Adjustment
3	+6V output
4	RF output
5	Supply
6	Ground



Scale 1:1

Specifications

HCD71: Low profile, cost effective, sine output

HCD170: High performance version of HCD71

Parameters	Product		Option Codes
	HCD71	HCD170	
Frequency range: 5.0 ~ 60.0MHz	■	■	
Ageing per day (at despatch): $< \pm 1 \times 10^{-8}$ $< \pm 5 \times 10^{-9}$	■	□	A B
Frequency stability: $\pm 7.5 \times 10^{-7}$ / year max $\pm 5 \times 10^{-7}$ / year max $\pm 1 \times 10^{-7}$ per 5% change in V_{DD}	■	■	
Temperature stability: $< \pm 2 \times 10^{-7}$ $< \pm 1 \times 10^{-7}$ $< \pm 5 \times 10^{-8}$	■	□	L M N
Operating temperature range: 0 to +50°C -20 to +60°C -20 to +70°C	□	□	A D F
Storage temperature range: -40 to +90°C	■	■	
Output waveform: Sine wave, 1.5V p-p $\pm 0.5V$ into 50Ω	■	■	
Frequency adjustment: $\pm 2 \times 10^{-5}$ typ (10MHz), +0.5 to +6.0V (sufficient for 10 years ageing min) Stabilised +6.0V supply provided	■	■	
Supply voltage (V_{DD}): +12.0V ($\pm 0.5V$) Other options from 10~30V	■	□	N specify
Power consumption: 4.5W max at switch on 1.2W typ when stabilised at 25°C 1.0W typ when stabilised at 25°C	■	■	
Warm up: $\pm 5 \times 10^{-8}$ after 10mins at +25°C	■	■	
Phase noise (@ 10.0MHz): $< -110\text{dBc/Hz}$ @ 10Hz $< -130\text{dBc/Hz}$ @ 100Hz $< -145\text{dBc/Hz}$ @ 1kHz $< -150\text{dBc/Hz}$ @ 10kHz	■	■	
Shock: IEC 68-2-27 Test Ea 50G for 11ms	■	■	
Vibration: IEC 68-2-06 Test Fc 10-55Hz, 1.5mm. 55-500Hz, 10G	■	■	

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

Features

- ▶ Low profile package
- ▶ Wide frequency range
- ▶ Single 12V supply (10V ~ 30V optional)
- ▶ Custom options available
- ▶ Simple upgrade path (HCD71 to HCD170)

Standard Models

Freq	Specification	Ageing per day	Temperature stability	Part No
5.0MHz	HCD71/ALDN	$\pm 1 \times 10^{-8}$	$\pm 2 \times 10^{-7}$ -20+60°C	MA05200
10.0MHz	HCD71/ALDN	$\pm 1 \times 10^{-8}$	$\pm 2 \times 10^{-7}$ -20+60°C	MS06020
5.0MHz	HCD170/BNDN	$\pm 5 \times 10^{-9}$	$\pm 5 \times 10^{-8}$ -20+60°C	MS08226
10.0MHz	HCD170/BNDN	$\pm 5 \times 10^{-9}$	$\pm 5 \times 10^{-8}$ -20+60°C	MA05201

Ordering Information

Part No, or product name + option codes + frequency

eg: **HCD71/ALDN 10.0MHz**
HCD170/BNDN 16.3840MHz

Option code X (eg HCD71/X) denotes a custom specification.