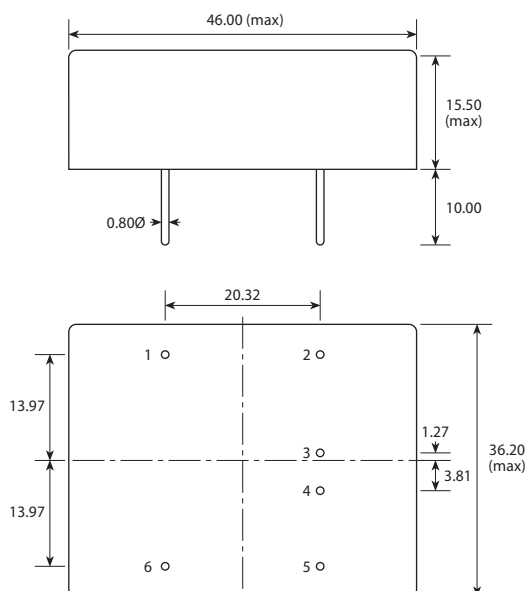
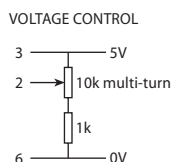




PIN	CONNECTION
1	Case
2	Freq Adjustment
3	Osc supply +5V
4	RF output
5	Oven supply
6	Ground



Scale 1:1

Features

- ▶ HCMOS / TTL compatible output
- ▶ Low profile package
- ▶ Separate oven & oscillator supplies
- ▶ Custom options available
- ▶ High performance version of HCD81

Standard Models

Freq	Specification	Ageing per day	Temperature stability	Part No
5.0MHz	HCD180/BNDN	$\pm 5 \times 10^{-9}$	$\pm 5 \times 10^{-8}$ -20+60°C	MS08424
10.0MHz	HCD180/BNDN	$\pm 5 \times 10^{-9}$	$\pm 5 \times 10^{-8}$ -20+60°C	MA05202

Specifications

HCD180: 5.0 ~ 16.0MHz

HCD181: 30.0kHz ~ 5.0MHz

Parameters	Product		Option Codes
	HCD180	HCD181	
Frequency range: 30.0kHz ~ 5.0MHz 5.0 ~ 16.0MHz	■	■	
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: $< \pm 1 \times 10^{-7}$ $< \pm 5 \times 10^{-8}$	□ ■	□ ■	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: HCMOS / TTL compatible	■	■	
Frequency adjustment: $\pm 2 \times 10^{-5}$ typ, +0.5 to +5.0V (sufficient for 10 years ageing min)	■	■	
Oscillator supply voltage (V_{DD}): +5.0V (± 0.5 V)	■	■	
Oven supply voltage: +12.0V (± 0.5 V) Other options from 9~30V	■ □	■ □	N specify
Oscillator power consumption: 40mA max	■	■	
Oven power consumption: 4.5W max at switch on 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 dBc/Hz @ 10Hz < -130 dBc/Hz @ 100Hz < -145 dBc/Hz @ 1kHz < -150 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

Ordering Information

Part No, or product name + option codes + frequency

eg: **HCD180/BNDN 10.0MHz**

Option code X (eg HCD180/X) denotes a custom specification.