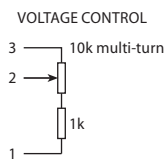







PIN	CONNECTION
1	Ground
2	Freq adjustment
3	Ref voltage out
4	Supply
5	RF output



Scale 1:1

## Features

-  **Fast warm up**
-  **Temperature stability down to 3ppb**
-  **Single 12V supply (12V ~ 30V optional)**
-  **Standard European pin-out**
-  **Custom options available**

## Standard Models

Freq	Specification	Ageing per day	Temperature stability	Part No
5.0MHz	HCD666/FTFN	< 2x10 <sup>-10</sup>	< 3x10 <sup>-9</sup> -20+70°C	MS06951
10.0MHz	HCD666/FTFN	< 2x10 <sup>-10</sup>	< 3x10 <sup>-9</sup> -20+70°C	MS06950

## Specifications

Parameters	Product	Option Codes
	HCD666	
Frequency range:	5.0 ~ 20.0MHz	
Ageing per day (at despatch):	< 1x10 <sup>-9</sup> <input type="checkbox"/> < 5x10 <sup>-10</sup> <input type="checkbox"/> < 2x10 <sup>-10</sup> <input checked="" type="checkbox"/>	D E F
Frequency stability:	< 2x10 <sup>-8</sup> per year <input checked="" type="checkbox"/> < 1x10 <sup>-9</sup> per 10% change in V <sub>DD</sub> <input checked="" type="checkbox"/> < 5x10 <sup>-10</sup> per 10% change in load <input checked="" type="checkbox"/>	
Temperature stability:	< 1x10 <sup>-8</sup> <input type="checkbox"/> < 5x10 <sup>-9</sup> <input type="checkbox"/> < 3x10 <sup>-9</sup> <input checked="" type="checkbox"/>	R S T
Operating temperature range:	0 to +50°C <input type="checkbox"/> -10 to +60°C <input type="checkbox"/> -20 to +70°C <input checked="" type="checkbox"/> -40 to +70°C <input type="checkbox"/>	A C F G
Storage temperature range:	-40 to +90°C	
Output waveform:	CMOS / TTL compatible	
Frequency adjustment:	±5x10 <sup>-7</sup> (typ) over +0.5 to +7.0V (sufficient for 10 years ageing min) Stabilised +7.0V supply provided	
Supply voltage (V <sub>DD</sub> ):	+12V (±0.5V) <input checked="" type="checkbox"/> +15V (±0.5V) <input type="checkbox"/> Other options from 12-30V <input type="checkbox"/>	N P specify
Power consumption:	10.0W max at switch on 1.3W typ when stabilised at 25°C	
Warm up:	< 1x10 <sup>-8</sup> after 2.25mins at +25°C	
Allan deviation (ADEV), 1 sec:	< 5x10 <sup>-13</sup> (5.0MHz) <input checked="" type="checkbox"/> < 1x10 <sup>-12</sup> (10.0MHz) <input checked="" type="checkbox"/>	
Close-in phase noise (@ 5.0MHz):	< -110 dBc/Hz @ 1Hz, < -135 @ 10Hz < -123 dBc/Hz @ 1Hz, < -140 @ 10Hz < -150 dBc/Hz @ 100Hz	Z
Close-in phase noise (@ 10.0MHz):	< -95 dBc/Hz @ 1Hz, < -130 @ 10Hz < -108 dBc/Hz @ 1Hz, < -135 @ 10Hz < -145 dBc/Hz @ 100Hz	Z
Far-out phase noise (all freqs):	< -155 dBc/Hz @ 1kHz < -157 dBc/Hz @ 10kHz < -157 dBc/Hz @ 100kHz	
Harmonics:	< -30dB wrt carrier	

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

## Ordering Information

Part No, or product name + option codes + frequency  
 eg: **HCD666/FTFN 10.0MHz**  
 Option code X (eg HCD666/X) denotes a custom specification.