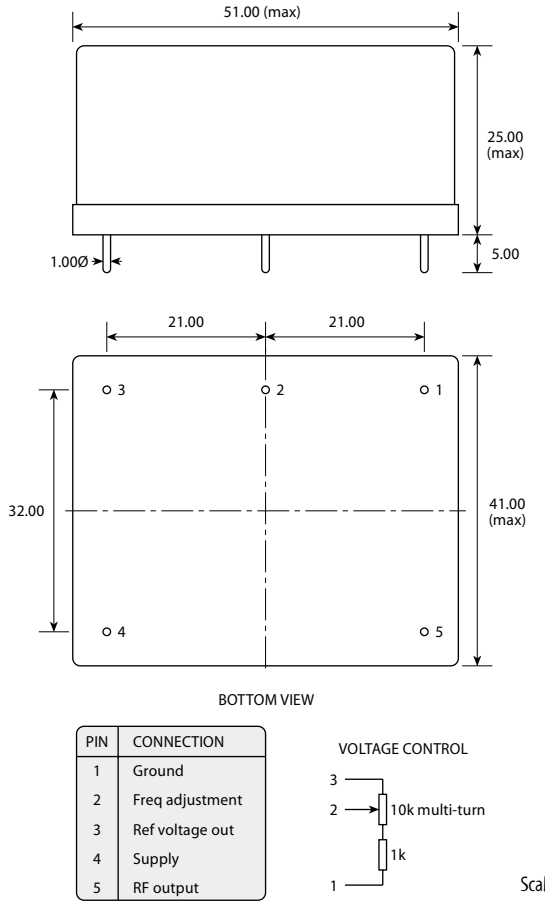
12V OCXO Fast Warm Up

HCD665SC & HCD666SC



BOTTOM VIEW

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

VOLTAGE CONTROL

Scale 1:1

Features

- **Fast warm up**
- **Standard European pin-out**
- **High performance**
- **SC cut overtone crystal**
- **Custom options available**

Ordering Information

Product name + option codes (if any) + frequency

eg: **HCD665SC 10.0MHz**
HCD666SC 5.0MHz

Option code X (eg HCD665SC/X) denotes a custom spec.

Specifications

HCD665SC: Sine wave output

HCD666SC: HCMOS / TTL output

Parameters	Product		Option Codes
	665SC	666SC	
Frequency range: 4.0 ~ 16.0MHz (5.0 & 10.0MHz are standard)	■	■	
Frequency stability:			
$\pm 2x10^{-10}$ / day at despatch	■	■	
$\pm 2x10^{-8}$ / year max	■	■	
$\pm 1x10^{-9}$ per 10% change in V_{DD}	■	■	
$\pm 5x10^{-10}$ per 10% change in load	■		
Short term stability (1 sec):			
$\pm 5x10^{-12}$ (5.0MHz)	■	■	
$\pm 1x10^{-11}$ (10.0MHz)	■	■	
Temperature stability:			
$\pm 3x10^{-9}$ over -20 to +70°C	■	■	
Operating temperature range:			
-20 to +70°C	■	■	
Other options from -40°C	□	□	specify
Storage temperature range:			
-40 to +90°C	■	■	
Output waveform:			
Sine wave, 7dBm (±1dBm) into 50Ω	■		
Other options to +13dBm into 50Ω	□		specify
HCMOS / TTL compatible		■	
Frequency adjustment:			
$\pm 5x10^{-7}$ typ, +0.5 to +7.0V (sufficient for 10 years ageing min) Stabilised +7.0V supply provided	■	■	
Supply voltage (V_{DD}):			
+12.0V (±0.5V)	■	■	
Other options from 12~30V	□	□	specify
Power consumption:			
10.0W max at switch on	■	■	
1.3W typ when stabilised at 25°C	■	■	
Warm up:			
$\pm 1x10^{-8}$ after 4.5mins at -20°C	■	■	
$\pm 1x10^{-8}$ after 2.25mins at +25°C	■	■	
Phase noise (@ 10.0MHz):			
< -130dBc/Hz @ 10Hz	■	■	
< -145dBc/Hz @ 100Hz	■	■	
< -155dBc/Hz @ 1kHz	■	■	
< -158dBc/Hz @ 10kHz	■	■	
< -160dBc/Hz @ 50kHz	■	■	
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

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