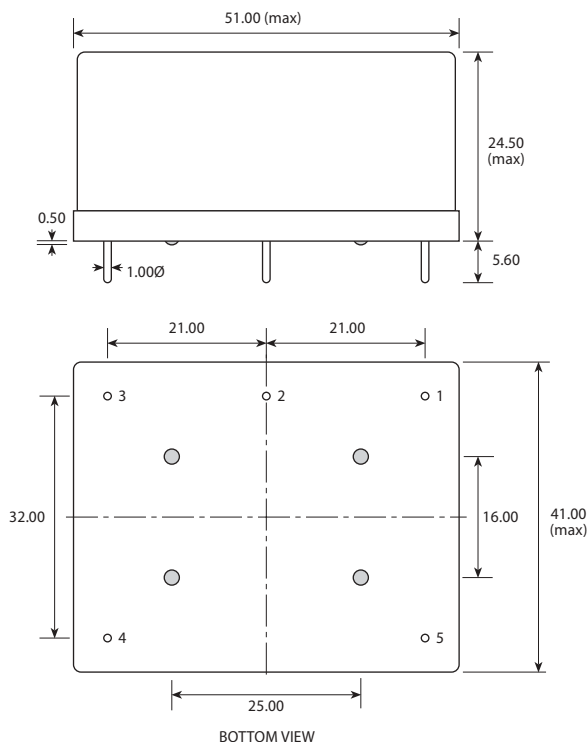
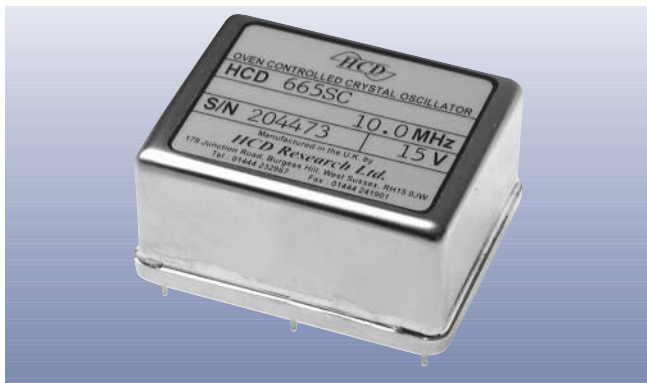
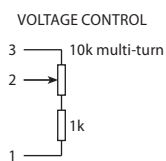




PIN	CONNECTION
1	Ground
2	Freq adjustment
3	Ref voltage out
4	Supply
5	RF output



Scale 1:1

Features

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

Specifications

HCD665SC: Sine wave output

HCD666SC: HCMOS / TTL output

Parameters	Product		Option Codes
	665SC	666SC	
Frequency range: 5.0 ~ 20.0MHz (5.0 & 10.0MHz are standard)	■	■	
Frequency stability: $\pm 2 \times 10^{-10}$ / day at despatch $\pm 2 \times 10^{-8}$ / year max $\pm 1 \times 10^{-9}$ per 10% change in V_{DD} $\pm 5 \times 10^{-10}$ per 10% change in load	■ ■ ■ ■	■ ■ ■ ■	
Short term stability (1 sec): $\pm 5 \times 10^{-12}$ (5.0MHz) $\pm 1 \times 10^{-11}$ (10.0MHz)	■ ■	■ ■	
Temperature stability: $\pm 3 \times 10^{-9}$ 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 (± 1 dBm) into 50Ω Other options to +13dBm into 50Ω HCMOS / TTL compatible	■ □	■	specify
Frequency adjustment: $\pm 5 \times 10^{-7}$ typ, +0.5 to +7.0V (sufficient for 10 years ageing min) Stabilised +7.0V supply provided	■	■	
Supply voltage (V_{DD}): +12.0V (± 0.5 V) Other options from 12~30V	■ □	■ □	specify
Power consumption: 10.0W max at switch on 1.3W typ when stabilised at 25°C	■ ■	■ ■	
Warm up: $\pm 1 \times 10^{-8}$ after 4.5mins at -20°C $\pm 1 \times 10^{-8}$ after 2.25mins at +25°C	■ ■	■ ■	
Phase noise (@ 10.0MHz): < -130 dBc/Hz @ 10Hz < -145 dBc/Hz @ 100Hz < -155 dBc/Hz @ 1kHz < -158 dBc/Hz @ 10kHz < -160 dBc/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

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.