

PIN	CONNECTION
1	Freq adjust CW
2	Fine adjust
3	Freq adjust CCW
4	Isolated RF output
5	Isolated RF output
6	+ Supply
7	DO NOT USE
8	- Supply
9	Case

Scale 1:2





Specifications

HCD145L: AT cut crystal, low phase noise

HCD145SC: SC cut crystal for enhanced performance

Parameters	Variant		Option Codes
	L	SC	
Frequency: 10.0MHz	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Frequency stability: $\pm 1 \times 10^{-9}$ / day at despatch $\pm 2 \times 10^{-10}$ / day at despatch $\pm 1 \times 10^{-7}$ / year max $\pm 2 \times 10^{-8}$ / year max $\pm 3 \times 10^{-9}$ per 10% change in V_{DD} $\pm 1 \times 10^{-9}$ per 10% change in load	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Short term stability (1 sec): $\pm 5 \times 10^{-11}$ $\pm 1 \times 10^{-11}$	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Temperature stability: $\pm 1 \times 10^{-8}$ over -20 to +70°C $\pm 3 \times 10^{-9}$ over -20 to +70°C	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Operating temperature range: -20 to +70°C Other options from -40°C	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	specify
Storage temperature range: -40 to +90°C	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Output waveform: 0.25V RMS (+1dBm) into 50Ω	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Frequency adjustment: $\pm 1 \times 10^{-6}$ typ (electrical) $\pm 5 \times 10^{-6}$ typ (mechanical) $\pm 5 \times 10^{-7}$ typ (electrical) $\pm 2 \times 10^{-6}$ typ (mechanical)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Supply voltage (V_{DD}): +12.0V (± 0.5 V) Other options from 12~30V	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	specify
Power consumption: 5.0W max at switch on 2.0W typ when stabilised at 25°C	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Warm up: $\pm 2 \times 10^{-8}$ after 20mins at +25°C $\pm 1 \times 10^{-8}$ after 20mins at +25°C	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Phase noise (@ 10.0MHz): < -120 dBc/Hz @ 10Hz < -130 dBc/Hz @ 100Hz < -140 dBc/Hz @ 1kHz < -155 dBc/Hz @ 10kHz < -120 dBc/Hz @ 10Hz < -140 dBc/Hz @ 100Hz < -150 dBc/Hz @ 1kHz < -158 dBc/Hz @ 10kHz	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Connections: 9 way 'D' with locks Straight or 90° header PCB mount	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	specify
Additional RF output: None SMA, SMB or SMC	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	specify
Shock: IEC 68-2-27 Test Ea 50G for 11ms	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Vibration: IEC 68-2-06 Test Fc 10-55Hz, 1.5mm. 55-500Hz, 10G	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	

Features

-  **Chassis mounted**
-  **AT or SC cut overtone crystal**
-  **High performance**
-  **Custom options available**

Ordering Information

Product name + variant + frequency

eg: **HCD145L 10.0MHz**

HCD145SC 10.0MHz

Option code X (eg HCD145L/X) denotes a custom spec.