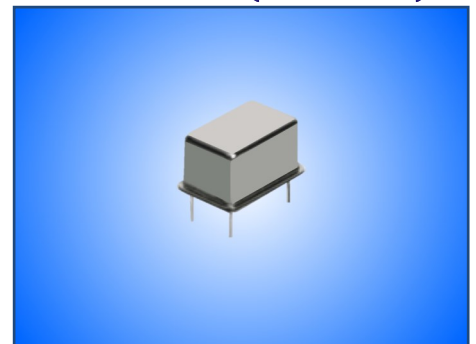


**OVEN CONTROLLED CRYSTAL OSCILLATOR UNIT IN DIP-14 METAL CAN PACKAGE.**
**PRODUCT FEATURES**

- High accuracy OCXO 20x13x10 with 4 leads.
- Various frequency stabilities being available.
- Excellent low aging and short term stability.
- Output signal with very low phase noise.
- Optional control voltage and reference voltage.

**PRODUCT PHOTO (NOT IN SCALE)**

**APPLICATIONS**

- Base station
- Telecom equipment
- Satellite equipment
- Test equipment

**PRODUCT SPECIFICATIONS**

PARAMETER	<b>OD14H4 / OD14S4 / OD14T4</b>	CONDITIONS / REMARKS
Nominal frequency range	5 ~ 100MHz	See Note
Supply voltage	3.3V <sub>DC</sub> / 5.0V <sub>DC</sub> / 12.0V <sub>DC</sub>	–
Power consumption (warm up)	<3.0W	May vary depending on supply voltage used.
(steady state)	<1.5W	
Operating temperature range	-40 to +70°C or -40 to 85°C	Other options available.
Output waveform HCMOS	V <sub>OH</sub> ≥90%V <sub>CC</sub> / V <sub>OL</sub> ≤10%V <sub>CC</sub>	Model <b>OD14H4</b>
Output waveform SINEWAVE	≥6dBm / ≤10dBm	Model <b>OD14S4</b>
Output waveform TTL	V <sub>OH</sub> ≥2.4V / V <sub>OL</sub> ≤0.4V	Model <b>OD14T4</b>

Note: Typical frequencies 10MHz, 16.384MHz, 19.44MHz, 20MHz, 25MHz, 26MHz, 38.88MHz, 50MHz, 100MHz

**FREQUENCY SPECIFICATIONS (dependent on crystal type)**

PARAMETER	<b>for SC-cut crystal</b>	<b>for AT-cut crystal</b>
Frequency tolerance (@+25°C)	±100ppb ~ ±500ppb	EOL
Frequency stability (Note 1)	±1ppb / ±5ppb / ±10ppb	
Short term stability	±0.05ppb/s	
Stability versus voltage	±3ppb	
Aging rate DAILY	±1ppb / ±3ppb / ±10ppb	
ANNUALLY	±30ppb / ±50ppb / ±300ppb	
Frequency adjustment (Note 2)	0.5 ~ 2.0ppm	
Phase noise @10Hz	-92dBc/Hz	
Example for sinewave @100Hz	-123dBc/Hz	
Output 100MHz unit @1kHz	-152dBc/Hz	
@10kHz	-165dBc/Hz	
@100kHz	-165dBc/Hz	

Note 1: Frequency stability is the frequency deviation over operating temperature range.

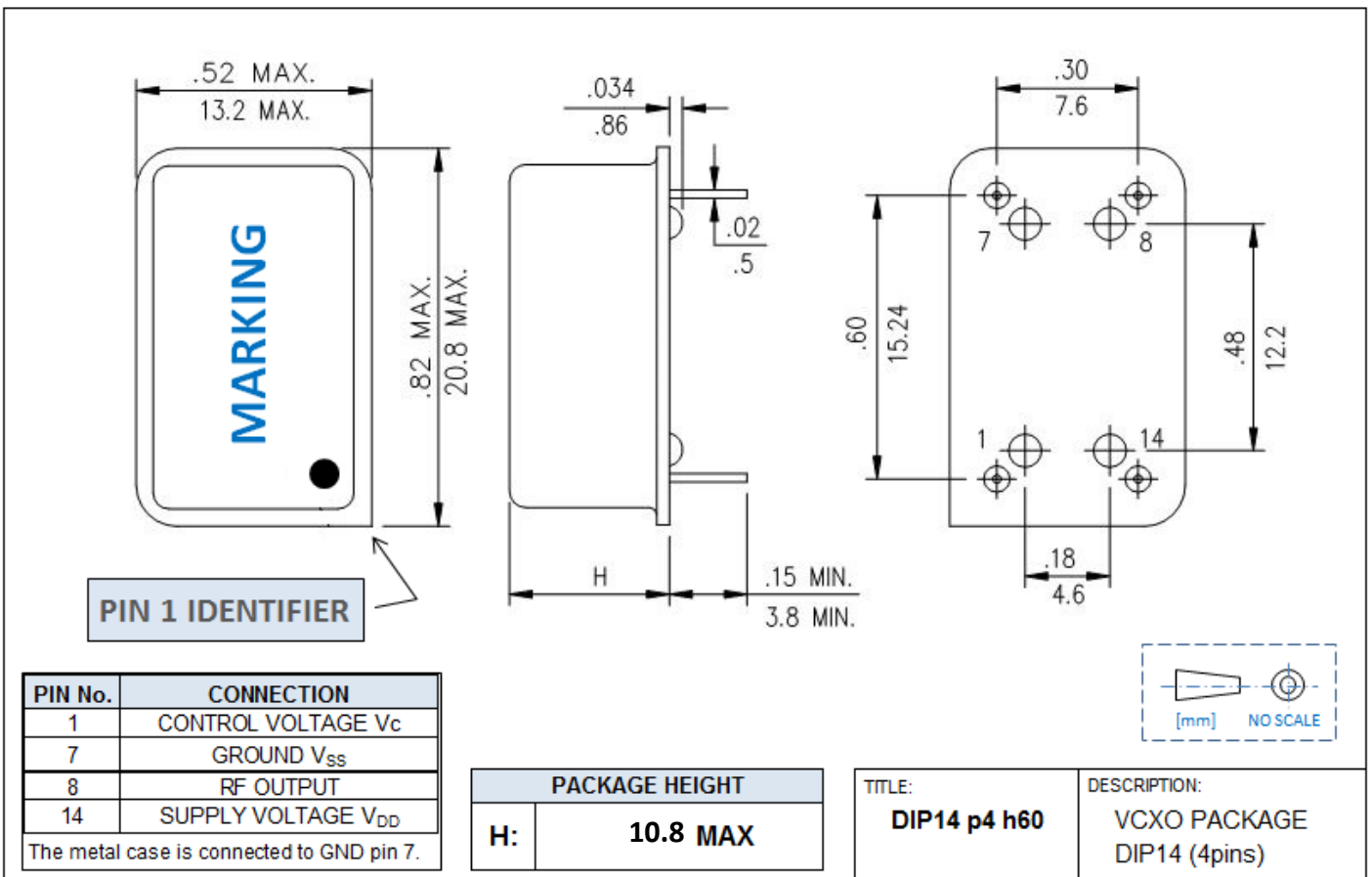
Note 2: Frequency adjustment applies for the option with control voltage function, refer to page 2.

**OVEN CONTROLLED CRYSTAL OSCILLATOR UNIT IN DIP-14 METAL CAN PACKAGE.**
**AVAILABLE OPTIONS**

PARAMETER	for 3.3V		for 5.0V		for 12.0V
Control voltage range (Note 1)	0~2.8V <sub>DC</sub>	0~3.3V <sub>DC</sub>	0~4.0V <sub>DC</sub>	0~5.0V <sub>DC</sub>	0~5.0V <sub>DC</sub>
Frequency stability (Note 1)	1.4V <sub>DC</sub>	1.65V <sub>DC</sub>	2.0V <sub>DC</sub>	2.5V <sub>DC</sub>	2.5V <sub>DC</sub>
Reference voltage (Note 2)	N/A	N/A	N/A	N/A	N/A

Note 1: Applies for option with a Control Voltage Input.

Note 2: Applies for option with a Reference Voltage output.

**PACKAGE OUTLINE / DIMENSIONS**

**PACKAGING INFORMATION**

- Packaging in antistatic foam tray.
- QTY per tray: 50~100pcs

**ENVIRONMENTAL COMPLIANCE INFORMATION**

- Product is RoHS and RoHS 2 compliant.
- Product is built using a LEAD-FREE solder alloy, if required a high melting point solder alloy can be used as well.