



# OVEN CONTROLLED CRYSTAL OSCILLATOR UNIT IN THRU-HOLE 25x25MM METAL CAN PACKAGE.

### **PRODUCT FEATURES**

- High accuracy OCXO 25x25x12 with 5 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.

#### APPLICATIONS

• Base station

- Satellite equipment
- Telecom equipment
- Test equipment

### PRODUCT SPECIFICATIONS

PARAMETER	OD25H5 / OD2585 / OD25T5	CONDITIONS / REMARKS	
Nominal frequency range	10 ~ 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	
(steady state)	<1.5W	supply voltage used.	
Operating temperature range	-20 to +70°C or -40 to 85°C	Other options available.	
Output waveform HCMOS	$V_{OH} \geq 90\% V_{CC}$ / $V_{OL} \leq 10\% V_{cc}$	Model OD25H5	
Output waveform SINEWAVE	≥6dBm / ≤10dBm	Model OD25S5	
Output waveform TTL	$V_{OH} \geq 2.4V$ / $V_{OL} \leq 0.4V$	Model <b>OD25T5</b>	

Note: Typical frequencies 10MHz, 15.36MHz, 16.384MHz, 19.44MHz, 20MHz, 25MHz, 26MHz, 38.88MHz, 50MHz.

## FREQUENCY SPECIFICATIONS (dependent on crystal type)

PARAMETER		for SC-cut crystal	for AT-cut crystal		
Frequency tolerance (@+25°c)		±200ppb ~ ±500ppb	±200ppb ~ ±500ppb		
Frequency stability (Note 1)		±3ppb / ±5ppb / ±10ppb	±30ppb / ±50ppb / ±100ppb		
Short term stability		±0.01ppb/s	±0.1ppb/s		
Stability versus voltage		±0.5ppb	±5ppb		
Aging rate DAILY		±0.3ppb / ±0.5ppb / ±1.0ppb	±3ppb / ±5ppb / ±10ppb		
ANNUALLY		±30ppb / ±50ppb / ±100ppb	±300ppb / ±500ppb / ±1ppm		
Frequency adjustment (Note 2)		0.5 ~ 1.0ppm	5 ~ 10ppm		
Phase noise	@10Hz	-92dBc/Hz	Don't have		
Example for Sinewave	@100Hz	-127dBc/Hz	Don't have		
Output 100MHz unit	@1kHz	-152dBc/Hz	Don't have		
	@10kHz	-165dBc/Hz	Don't have		
@100kHz		-168dBc/Hz	Don't have		

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 THRU-HOLE 25x25MM METAL CAN PACKAGE.

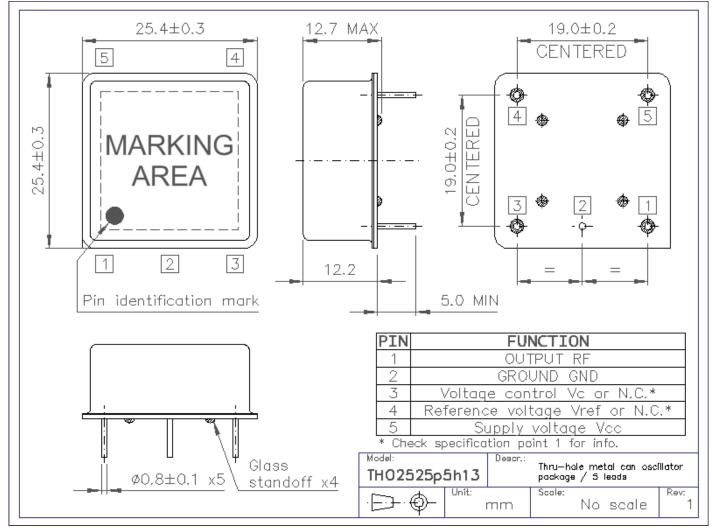
#### AVAILABLE OPTIONS

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)	2.8V <sub>DC</sub>	N/A	4.0V <sub>DC</sub>	N/A	5.0V <sub>DC</sub>

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: 20pcs

## 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.