



# SMD Temperature Compensated Crystal Oscillator

## TCXO 7055

### Features

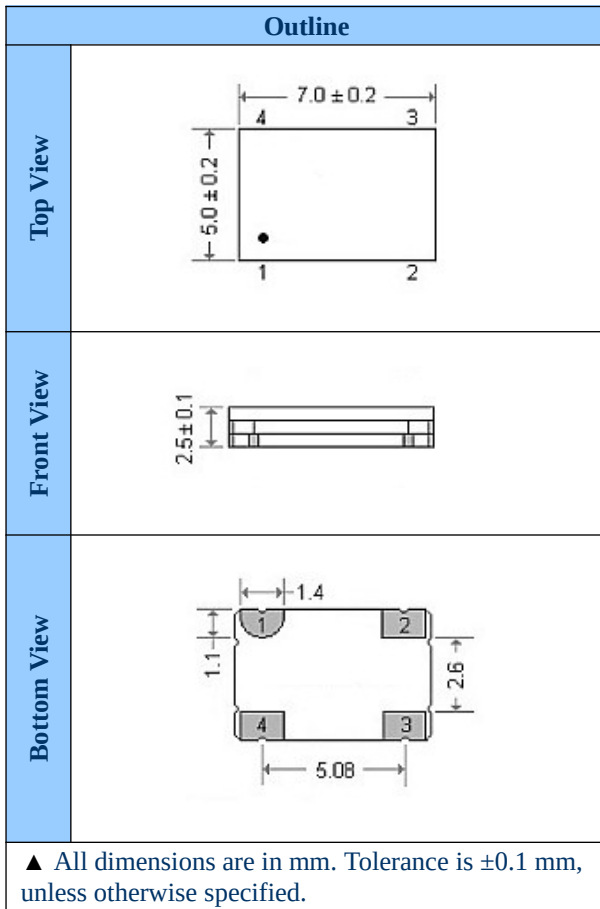
- High Frequency Range
- 1.5 ps Phase Jitter
- MSL 1

Specifications		Option Codes
Frequency Range:	10 MHz ~ 250 MHz	
Output Drive:	HCMOS Compatible, Square wave	H
Output Load:	15 pF ± 5%	
Output Level:	$V_{Low}: 0.1 V_{dd} (max.)$ $V_{High}: 0.9 V_{dd} (min.)$	
Current Consumption:	<b>+2.5 V</b>	<b>+3.3 V</b>
	≤ 50 MHz 24 mA	26 mA
	≤ 125 MHz 28 mA	30 mA
	≤ 200 MHz 30 mA	34 mA
Rise/ Fall Time:	3 ns (max.) [10% to 90% of the waveform]	
Duty Cycle:	45% to 55%	
Start-up Time:	5 ms (max.)	
Supply Voltage, V <sub>dd</sub> :	+2.5 V ± 5%	2
	+3.3 V ± 5%	3
Supply Voltage Stability:	± 0.2 ppm (max.)	
Load Stability:	± 0.2 ppm (max.)	
Frequency Tolerance @ 25°C:	± 2 ppm (max.)	
Operating Temperature Range (OTR) and Temperature Stability:	Select from Table 1	
Frequency Adjustment Option:	External Control Voltage	V
	None (Fixed Frequency)	N
Control Voltage Range:	1.5 V ± 1.0 V	
Frequency Tuning Range:	± 8 ppm (min.)	
Frequency Tuning Slope:	Positive Slope	
Linearity:	10% (max.)	
Output Enable Voltage:	0.7 V <sub>dd</sub> (min.)	
Output Disable Voltage:	0.3 V <sub>dd</sub> (max.)	
Output Enable Time:	200 nS (max.)	
Output Disable Time:	50 nS (max.)	
Integrated Phase Jitter:	1.2 pS (typ.) [12 KHz to 20 MHz]	
Aging @ 25°C:	± 2 ppm (max.) for First Year; ± 1 ppm (max.) per Year, thereafter	
Storage Temperature Range:	-55°C to +150°C	



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## Mechanical Specifications



**Table 1**

OTR Codes	Stability Codes			
	X	Y	P	Q
	Temperature Stability			
	$\pm 0.5$ ppm	$\pm 1$ ppm	$\pm 2$ ppm	$\pm 2.5$ ppm
A	Operating Temperature Range	0°C to +50°C		
C		-20°C to +70°C		
H		-30°C to +85°C		
I		-40°C to +85°C		

Denotes Available  Denotes not Available

**Table 2**  
Typical SSB Phase Noise @ 125 MHz

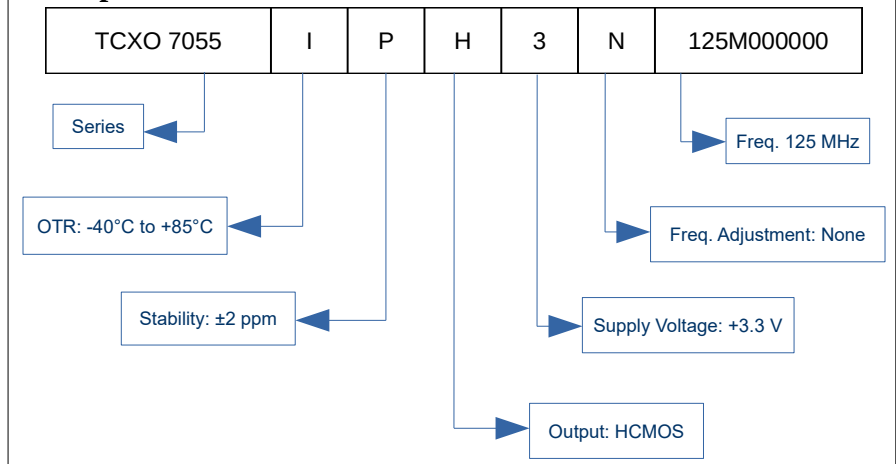
10 Hz offset	-50 dBc/Hz
100 Hz offset	-93 dBc/Hz
1 KHz offset	-110 dBc/Hz
10 KHz offset	-123 dBc/Hz
100 KHz offset	-125 dBc/Hz

### Pad Configuration:

Pad	Option N	Option V
1	No Connection	Control Voltage
2	Ground	Ground
3	Output	Output
4	Supply Voltage	Supply Voltage

### Ordering Information

#### Example



Specifications subject to change without prior

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Note: Not all combination of options are available. Other specifications may be available upon request.

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Page 2 of 2

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