



# SMD Temperature Compensated Crystal Oscillator

## TCXO 5033

### Features

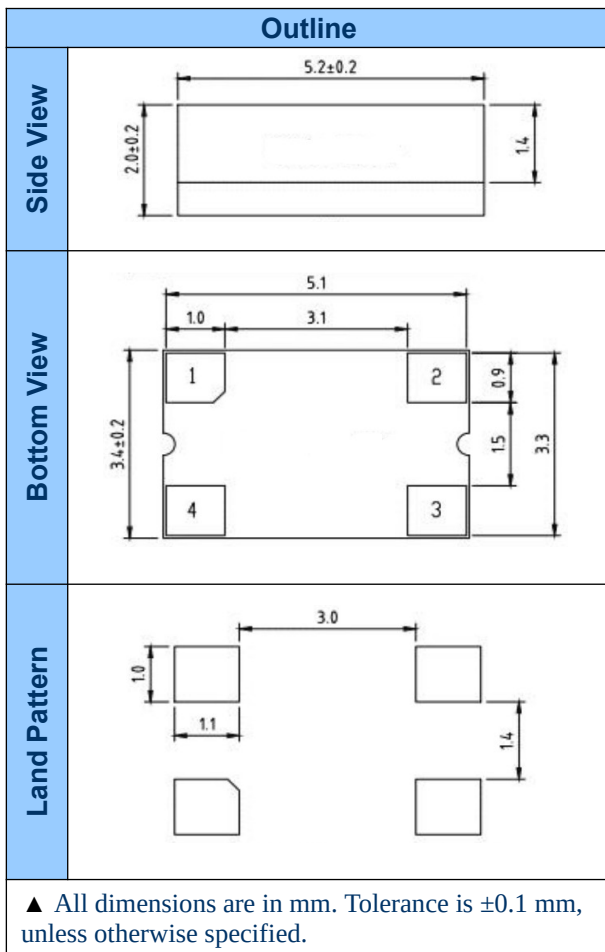
- Wide Frequency Range
- Metal Package
- RoHS compliant

Specifications		Option Codes
Frequency Range:		10 MHz ~ 52 MHz
Clipped Sine Wave	Output Level:	0.8 Volts [Peak-to-Peak] (min.)
	Load:	10 K Ohms // 10 pF $\pm$ 10%
HCMOS	V <sub>High</sub> :	2.4 V (min.)
	V <sub>Low</sub> :	0.4 V (max.)
	Duty Cycle:	45% to 55%
	Rise/ Fall Time:	6 ns (max.)
	Load:	15 pF $\pm$ 5%
Supply Voltage, V <sub>dd</sub> :		+3.3 V $\pm$ 5% +5 V $\pm$ 5%
Current Consumption:		10 mA (max.)
Supply Voltage Stability:		$\pm$ 0.1 ppm (max.)
Load Stability:		$\pm$ 0.2 ppm (max.)
Frequency Tolerance @ 25°C:		$\pm$ 1 ppm (max.)
Operating Temperature Range and Temperature Stability:		Select from Table 1
Frequency Adjustment Option:		External Control Voltage (1.5 V $\pm$ 1.0 V) None (Fixed Frequency)
Control Voltage Range:		1.5 V $\pm$ 1.0 V
Frequency Tuning Range:		$\pm$ 5 ppm (min.)
Frequency Tuning Slope:		Positive
Linearity:		10% (max.)
RMS Jitter:		1.3 ps (max.) [12 KHz ~ 5 MHz]
Aging @ +25°C:		$\pm$ 1 ppm (max.) per year
Storage Temperature Range:		-55°C to +125°C



# SMD Temperature Compensated Crystal Oscillator

## Mechanical Specifications



**Table 1**

OTR Code	Stability Codes			
	Y	Z	P	Q
	Temperature Stability			
	$\pm 1$ ppm	$\pm 1.5$ ppm	$\pm 2$ ppm	$\pm 2.5$ ppm
C	Operating Temperature Range	-20°C to +70°C		
H		-30°C to +85°C		
I		-40°C to +85°C		
L3		-50°C to +90°C		

Denotes Available Denotes not Available

**Table 2**  
Typical SSB Phase Noise @ 10 MHz

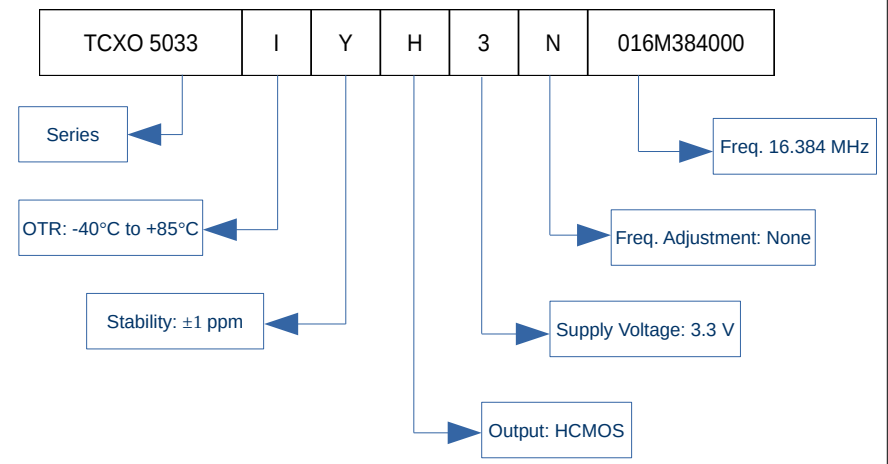
10 Hz offset	-92 dBc/Hz
100 Hz offset	-120 dBc/Hz
1 KHz offset	-140 dBc/Hz
10 KHz offset	-145 dBc/Hz
100 KHz offset	-150 dBc/Hz

### 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 notice

Rev. Date: 12<sup>th</sup> January 2022

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

Doc. No.: AE/DS/PS/009

ISSUE 01

REVISION 02

Page 2 of 2

Andhra Electronics Pvt. Ltd.

Plot No.: 34 & 35, IDA,

Kakinada-533 005

Andhra Pradesh, India

URL: [www.andhraelec.com](http://www.andhraelec.com)

Phone: +91 884 234 2203

Fax: +91 884 234 1145

e-mail: [info@andhraelec.com](mailto:info@andhraelec.com)