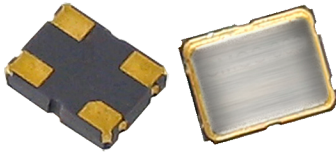


Temperature Compensated Crystal Oscillator 2.5 x 2.0mm

1.8V ~ 3.3VDC Clipped Sinewave TCXO

JT255


2.5 x 2.0mm Ceramic SMD

Product Features

- Low Current
- Tight temperature stability
- Clipped Sinewave output levels
- Excellent Phase Noise
- Industrial Temperature Range
- Pb-free and RoHS/Green compliant
- Fast lead time

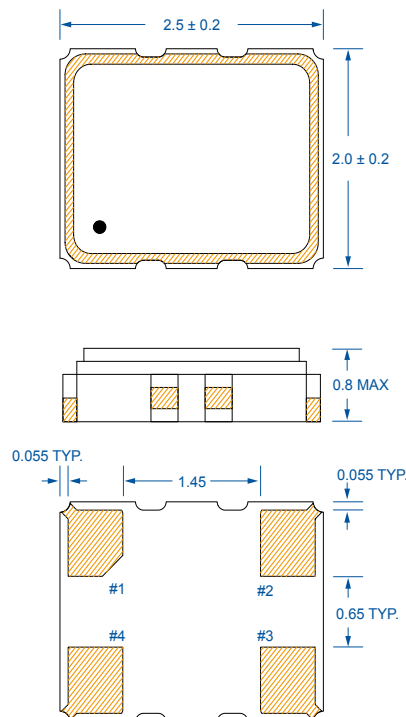
Product Description

The JT255 TCXO series is a high performance temperature compensated oscillator with a clipped sinewave output for a very low operating supply current. It supports various power supply voltages, stabilities and other features. It is designed to meet existing application requirements.

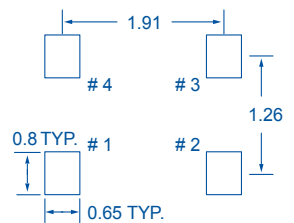
Applications

- Networking systems
- Networking
- GPS/Navigation
- Metering
- Mobile and wireless
- Handset

Package: (scale-none, dimensions in mm)



Recommended Land Pattern:



Pin Functions:

Pin	Function
1	Ground
2	Ground
3	Output
4	V _{DD}

Typical Frequencies available MHz:

16.367667	16.369	19.200
25.000	26.000	40.000

Part Ordering Information:

JT255 V X FFFF.FFFFFFFF
① ② ③
Voltage:

1 = +3.3V
2 = +2.5V
3 = +1.8V
4 = +1.5V
B = +3.0V
C = +2.8V
D = +2.7V
E = +2.85V
F = +2.75V
G = +2.4V

Stability and Temp Range:

Stability	Temp Range	-20/+70C	-30/+85C	-30/+75C	-40/+85C
A			F	K	P*
B			G	L	Q
C			H	M	R
D			I	N	S
E			J	O	T
W			X	Y	U

P* : This option is not available for all frequencies.
Please contact Pericom sales for your special needs.

Frequency:

FFFF.FFFFFFFF
MHz, "4 digits/decimal/6 digits" format

Following the above format, PSE Technology Corporation part numbers will be assigned upon confirmation of exact customer requirements.

Electrical Performance

Parameter		Min.	Typ.	Max.	Units	Notes
Output Frequency		10		52	MHz	
Supply Voltage		1.8		3.3	V	See ordering options, VDD ±5%
Supply Current				1.5	mA	Output Frequency ≤ 30 MHz
				2.0	mA	Output Frequency > 30 MHz
Output Voltage Level		0.8		1.4	V	Pk-Pk
Output Load	Resistance	9	10	11	kΩ	
	Capacitance	9	10	11	pF	
Frequency Stability	vs Temperature	±0.5		±5.0	ppm	See ordering options
	vs Load			±0.2	ppm	±10% load change
	vs Voltage			±0.1	ppm	±5% supply voltage change at typical load
Static Temperature Hysteresis				±0.6	ppm	
Frequency Aging				±1.0	ppm	First year, +25°C
Frequency Tolerance After Two Reflows				±2.0	ppm	@ +25°C±3°C after one hour recovery
Harmonics				-8	dBc	
Operating Temperature Range		-40		85	°C	See ordering options
Storage Temperature Range		-40		85	°C	
Phase Noise at 1KHz offset			-135	-140	dBc/Hz	At 26MHz
Start up Time				2	ms	

Notes:

1. For specifications other than those listed, please contact sales.
2. Not all combinations of V_{DD}, Operating Temperature Range, Frequency Stability and Output Frequency are available.
3. Frequency Stability vs. Temperature is reference to the mid-point between minimum and maximum frequency values over the specified Operating Temperature Range
4. Frequency Stability vs. Voltage and vs. Load changes are reference to the Nominal Frequency at 25°C

For the latest product information visit: <https://www.diodes.com/part/JT255>

For test circuit go to: https://www.diodes.com/assets/sre/TCXO_CLIPPEDSINE_RevB.pdf

For soldering reflow profile and reliability test ratings go to: <https://www.diodes.com/assets/sre/reflow.pdf>

For tape and reel information go to: <https://www.diodes.com/assets/sre/tr-2520-xo.pdf>



A product Line of
Diodes Incorporated



**Temperature Compensated Crystal
Oscillator (TCXO) 2.5 x 2.0 mm**

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