

# 1.8V ~ 3.3VDC Clipped Sinewave TCXO

**JT255** 



2.5 x 2.0mm Ceramic SMD

Proc	luct	Fee	atu	ires

- 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**

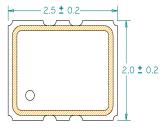
The JT255 TCXO series is a high performance temperature compensated oscillator with a clipped sinewave output for a very low operating supply current. It supports various power supply voltages, stabilties and other features. It is designed to meet existing application requirements.

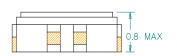
#### **Applications**

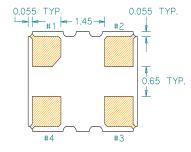
- Networking systems
- Networking
- GPS/Navigation
- Metering
- Mobile and wireless
- Handset

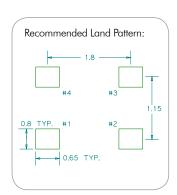
#### Typical Frequencies available MHz: 16.367667 16.369 19.200 25.000 26.000 40.000

#### Package: (scale-none, dimensions in mm)





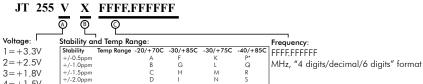




#### **Pin Functions:**

Pin	Function		
1	Ground		
2	Ground		
3	Output		
4	$V_{\mathrm{DD}}$		

#### **Part Ordering Information:**



4 = +1.5VB = +3.0VC = +2.8V $\mathsf{P}^*$  : This option is not available for all frequencies. D = +2.7V

Please contact Pericom sales for your special needs.

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

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E = +2.85VF = +2.75VG = +2.4V





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

#### **Electrical Performance**

Parameter		Min.	Тур.	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:

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

For the latest product information visit: http://www.pericom.com/products/crystals-and-crystal-oscillators/tcxo/?part=JT255

For test circuit go to: http://www.pericom.com/assets/sre/TCXO CLIPPEDSINE RevB.pdf

For soldering reflow profile and reliability test ratings go to: http://www.pericom.com/assets/sre/reflow.pdf

For tape and reel information go to: http://www.pericom.com/assets/sre/tr 2520 xo.pdf



2

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