

1.8V ~ 3.3VDC Clipped Sinewave TCXO

JT255



2.5 x 2.0mm Ceramic SMD

Pro	du	ct	Fe	atı	ıres

- 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

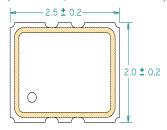
The JT255 TCXO series is a high performance temperature compensated oscillator with a clipped sinewave output for a very low operating supply current. It supports various power supply voltages, stabilties and other features. It is designed to meet existing application requirements.

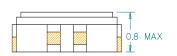
Applications

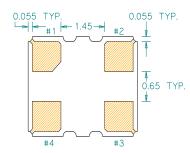
- Networking systems
- Networking
- GPS/Navigation
- Metering
- Mobile and wireless
- Handset

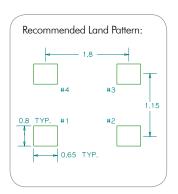
Typical Frequencies available MHz: 16.367667 16.369 19.200 25.000 26.000 40.000

Package: (scale-none, dimensions in mm)









Pin Functions:

FFFFFFFF

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

Part Ordering Information:

JT 255 V X FFFF.FFFFF

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Voltage: 1	Stability a	nd Temp Ra					Frequency:
1 = +3.3V	Stability	Temp Range	-20/+70C	-30/+85C	-30/+75C	-40/+85C	FEEEEFFE
2 = +2.5V	+/-0.5ppm		A	F	K	P*	MHz, "4 d
	+/-1.0ppm		В	G	L		MITZ, 4 a
3 = +1.8V	+/-1.5ppm		Ċ	Н	M	R	
4 = +1.5V	+/-2.0ppm		D	1	Ν	S	
	+/-2.5ppm		E	J	0	T	
B = +3.0V	+/-5.0ppm		W	Х	Υ	U	
$C = \pm 2.8 \text{V}$,

P*: This option is not available for all frequencies.

D = +2.7VPlease contact Pericom sales for your special needs. E = +2.85VF = +2.75V

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

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MHz, "4 digits/decimal/6 digits" format



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 I and	Resistance	9	10	11	kΩ	
Output Load	Capacitance	9	10	11	pF	
	vs Temperature	±0.5		±5.0	ppm	See ordering options
Frequency Stability	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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