

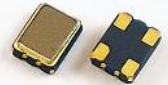
## ULTRA MINIATURE SMD TCXO (3.2 x 2.5 x 1.0mm)

**FEATURES:**

- CMOS OUTPUT
- ENABLE / DISABLE OUTPUT CONTROL
- 1.8V TO 3.3V SUPPLY VOLTAGE

**APPLICATIONS:**

- WiMAX, Wi-Fi, Wi-LAN, Wireless Communications
- Base Stations, Point to point radios
- Broadband Access, Test Equipment, Networking

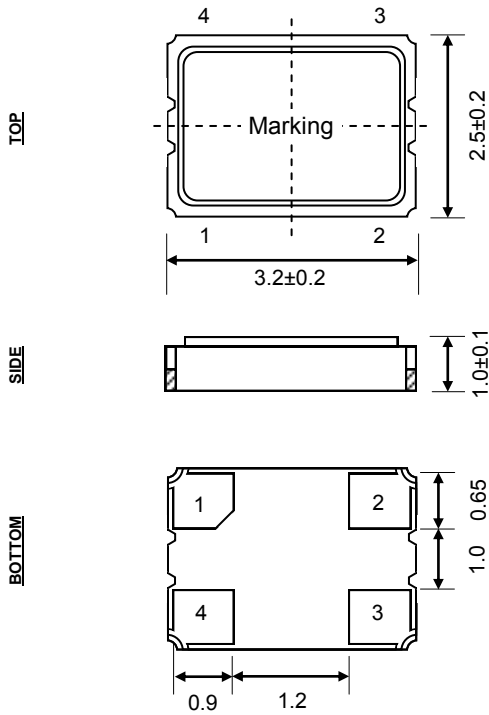


### ■ SPECIFICATION

PARAMETER		MIN.	TYP.	MAX.	UNIT	NOTE	
FREQUENCY RANGE		4		54	MHz		
STANDARD FREQUENCIES		10.000MHz, 12.000MHz, 16.000MHz, 20.000MHz, 20.480MHz, 24.000MHz, 32.000MHz, 40.000MHz, 48.000MHz					
FREQUENCY TOLERANCE				±1.0	ppm	@ V <sub>c</sub> = 1/2V <sub>DD</sub> DC @ 25°C ± 2°C	
FREQUENCY STABILITY	vs. TEMPERATURE RANGE			±5.0	ppm	See P/N guide for other options	
	vs. LOAD ± 10%			±0.2	ppm		
	vs. SUPPLY VOLTAGE ± 5%			±0.2	ppm		
	vs. AGING			±1.0	ppm/year		
OPERATING TEMPERATURE RANGE		-30		75	°C	Contact Transko for extended temp.	
STORAGE TEMPERATURE RANGE		-40		125	°C		
SUPPLY VOLTAGE ±5%		1.8		3.3	V	See P/N guide for other options	
SUPPLY CURRENT		<b>+1.8V</b>	<b>+2.5V</b>	<b>+2.8V</b>	<b>+3.3V</b>		
	4MHz ≤ f ≤ 10MHz	3.1	3.1	3.4	4.0		
	10MHz < f ≤ 20MHz	3.7	3.7	4.1	4.8		
	20MHz < f ≤ 30MHz	4.2	4.2	4.7	5.5		
	30MHz < f ≤ 40MHz	4.6	4.6	5.2	6.0		
	40MHz < f ≤ 54MHz	5.5	5.5	6.0	7.0		
OUTPUT	LOGIC FAMILY		CMOS				
	LOAD		15pF				
	LEVEL	V <sub>OH</sub>	0.9 x V <sub>DD</sub>			V	
		V <sub>OL</sub>			0.1 x V <sub>DD</sub>	V	
	SYMMETRY (DUTY CYCLE)		45		55	%	
	RISE AND FALL TIME (Tr/Tf)				5	nS	
START-UP TIME				10	mS		
STAND-BY VOLTAGE	ENABLE (V <sub>IH</sub> )	0.8 x V <sub>DD</sub>			V	Or OPEN	
	DISABLE (V <sub>IL</sub> )			0.2 x V <sub>DD</sub>	V		
ENABLE DELAY TIME				10	mS		
DISABLE DELAY TIME				200	nS		
PHASE NOISE	10kHz		-145		dBc/Hz	@ 26.000MHz	

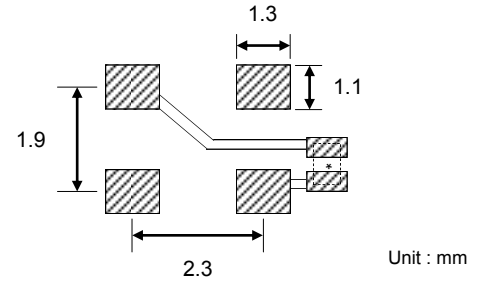
Transko Electronics, Inc reserves the right to make changes to the product (s), service (s), and specification (s) described herein without notice. See "Terms of Sale" for details on our website.

## PACKAGE DIMENSIONS



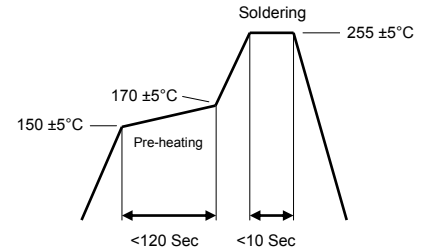
Pin Configuration	
1	En/Dis
2	GND
3	Output
4	V <sub>DD</sub>

## SOLDER PATTERN



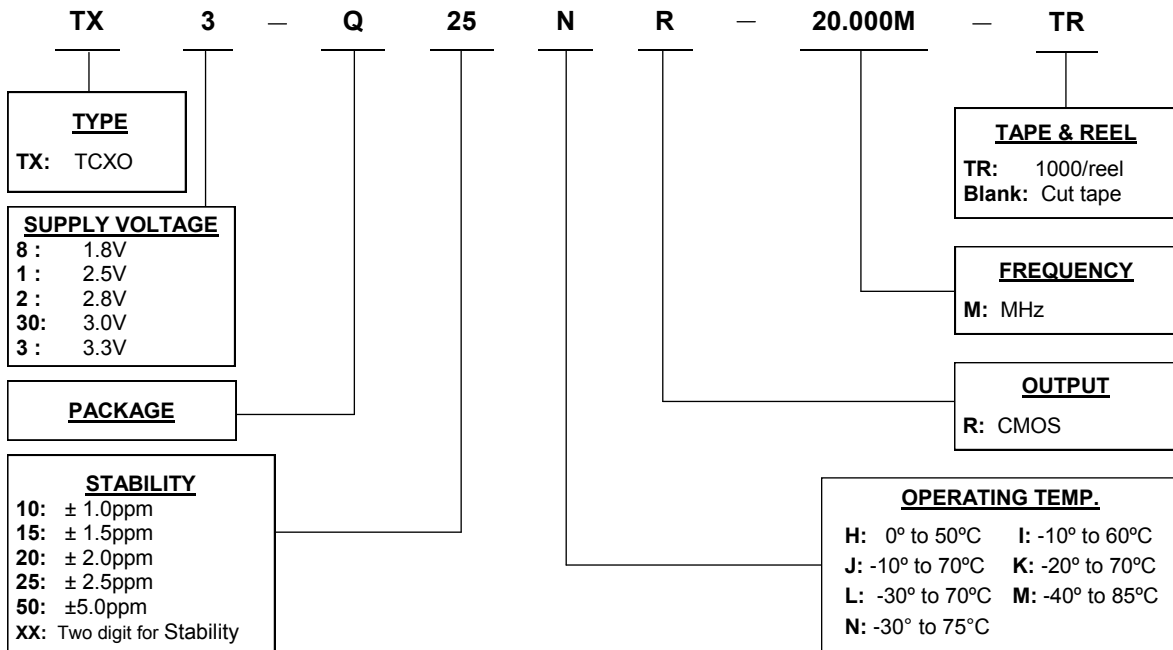
\*0.01μF to 0.1μF bypass capacitor recommended

## REFLOW PROFILE



Note: Consult factory for detail

## PART NUMBERING GUIDE



Transko Electronics, Inc reserves the right to make changes to the product (s), service (s), and specification (s) described herein without notice. See "Terms of Sale" for details on our website.