

LOW POWER HIGH STABILITY TCXO

SERIES „TX02520-30-0.5-K-32M-1-CSW“

TCXO SPECIFICATION

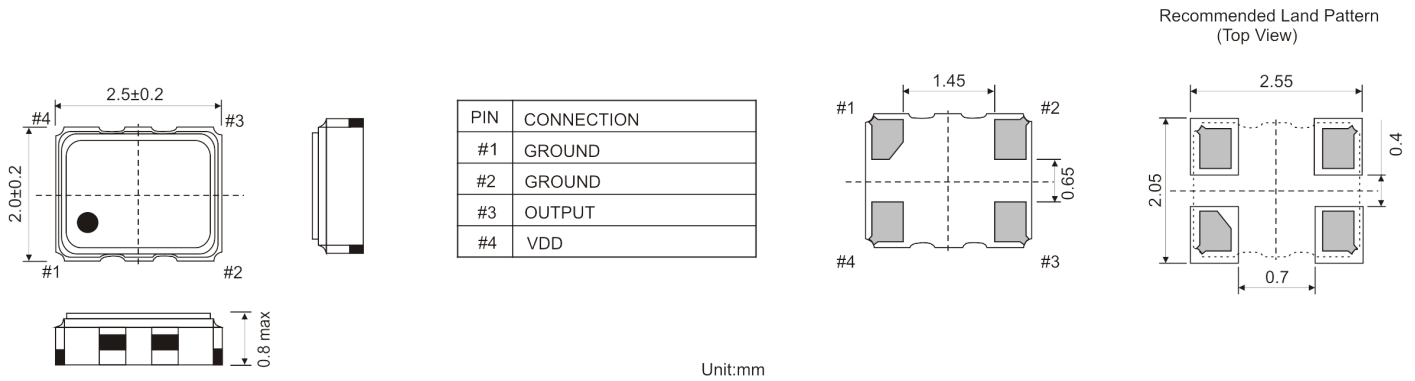
PARAMETER AND CONDITIONS	SYMBOL	MIN.	TYP.	MAX.	UNIT	CONDITION
FREQUENCY						
Nominal Frequency	f		32.000		MHz	
FREQUENCY STABILITY AND AGING						
Frequency Tolerance	f _{In.-T.}	-1.0	-	+1.0	ppm	At 25°C ±3°C refer nominal Frequency
Frequency Stability vs. Temperature	f _{Temp.}	-0.5	-	+0.5	ppm	Over -30/+85°C (ref. to +25°C)
Frequency Stability vs. Supply Voltage	f _{VDD}	-0.2	-	+0.2	ppm	3.0 VDC ±5% (ref. to +25°C)
Frequency Stability vs. Load Variation	f _{Load}	-0.2	-	+0.2	ppm	Load R/C=(10 kΩ//10pF)±5%
Frequency Stability vs. Aging	f _{Aging}	-1.0	-	+1.0	ppm	First year max. (ref. +25°C)
OPERATING TEMPERATURE RANGE						
Operating Temperature Range	T _{use}	-30	-	+85	°C	
Storage Temperature Range	T _{stor}	-40	-	+85	°C	
SUPPLY VOLTAGE AND CURRENT CONSUMPTION						
Operable Supply Voltage	V _{DD}	+2.85	+3.0	+3.15	VDC	Specified frequency tolerances are guaranteed for 3.0 VDC ±5%
Current Consumption	I _{DD}	-	-	+2.0	mA	Without load
CLIPPED SINE WAVE OUTPUT CHARACTERISTICS						
Output Level		0.8	-	-	Vp-p	Clipped Sine Wave
Load Impedance (resistance part)	Load _R	-	10	-	kΩ	
Load Impedance (parallel capacitance)	Load _C	-	10	-	pF	
PHASE NOISE						
Phase Noise / 1 kHz offset	SSB	-	-	-130	dBc/Hz	Relative to f ₀ offset 1 kHz
STARTUP TIMING						
Startup Time	T _{start}	-	-	2.0	ms	
ORDERING DATA						
RoHS		Lead free and RoHS compliant				
Delivery Form		Tape & Reel / 3.000 pcs per reel				
Ordering Code		TX02520-30-0.5-K-32M-1-CSW				
Marking		Line 1 = P32001 Line 2 = xxxx (xxxx = date code)				
Customer P/N						
PETERMANN-TECHNIK P/N		0EU90010120				

Note:

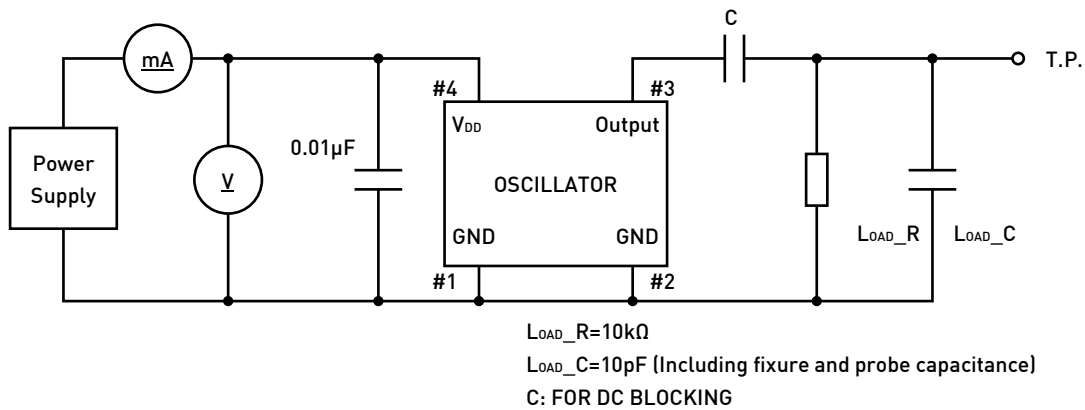
1. Reference Temperature for all parameters: +25°C
2. Do not use ground-line below oscillator.
3. Do not use cleaning baths operating at ultrasonic frequencies or ultrasonic welding processes.

DIMENSIONS AND PATTERNS

PACKAGE SIZE – DIMENSIONS (UNIT:MM)
 2.5 X 2.0 X 0.80 MM

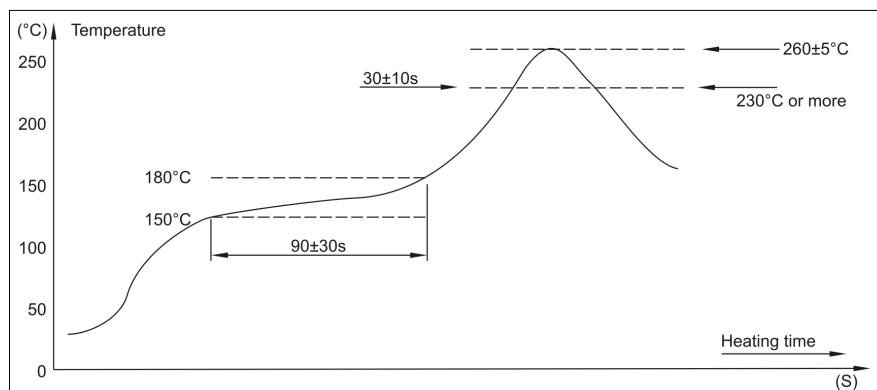


TEST CIRCUIT CLIPPED SINE WAVE OUTPUT



REFLOW SOLDER PROFILE

1. Peak: 260±5°C Soldering zone: 230°C or more, 30±10s
2. Pre-heating zone 1: 150~180°C, 90±30s





PREMIUM QUALITY BY PETERMANN-TECHNIK



OUR COMPANY IS CERTIFIED ACCORDING TO ISO 9001:2015 AND 14001:2015

THIS IS FOR YOU TO ENSURE THAT THE PRINCIPLES OF QUALITY MANAGEMENT ARE FULLY IMPLEMENTED IN OUR QUALITY MANAGEMENT SYSTEM AND QUALITY CONTROL METHODS ALSO DOMINATE OUR QUALITY STANDARDS.