



## Dynamic Engineers Inc.

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### TCXO2522BJ-80MHz-B-V

High stability 80MHz TCXO

### Features and Benefits

Frequency range: 80MHz  
Supply voltage: 5.0V  
Steady current: 30mA Max  
Output waveform: Sinewave  
Frequency stability vs. operating temperature:  $\pm 1.0$ ppm  
Aging@40°C:  $\pm 1.0$ ppm/Year  
Phase noise@10KHz: -155dBc/Hz  
Operating temperature: -40°C -- +85°C  
Size: 25.4x22x11.5mm

### Typical Applications

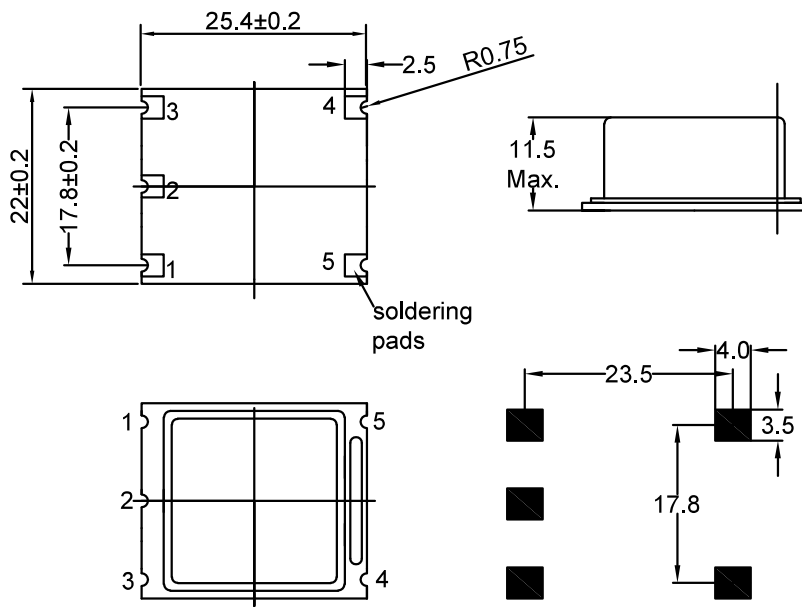
Repeater  
Link and micro cells  
Low noise microwave

### Description

TCXO2522BJ-80MHz-B-V offers wide temperature operation from -40°C to +85°C with outstanding frequency stability and low phase noise performance.

### Mechanical Drawing & Pin Connections

Drawing No: MD230028-1



Pin Function

Pin	Function
#1	Supply Voltage
#2	RF Output
#3	GND, Case
#4	Control Voltage
#5	GND, Case

Unit in mm  
1mm = 0.0394 inches



## Specifications

Oscillator Specification	Sym	Condition	Value			Unit	Note
			Min.	Typ.	Max.		
Operational Frequency	F <sub>nom</sub>		80			MHz	
Output			Sinewave				
Output level			+3			dBm	
Harmonic					-30	dBc	
Output load			50			ohm	
Power Supply							
Voltage	V <sub>cc</sub>	±5%		5.0		V	
Current Consumption					30	mA	
Frequency Adjustment Range							
Electronic Frequency Control (EFC)			±5			ppm	
EFC voltage	V <sub>c</sub>		0.5		4.5	V	
EFC Slope			positive				
EFC linearity			10			%	
Frequency Stability							
Versus temperature		-40°C to +85°C			±1.0	ppm	
Initial tolerance					±1.0	ppm	
24 hours after reflow		T <sub>peak</sub> =+260°C for 10sec Max			±1.5	ppm	
Versus ±5% change in supply voltage					±0.1	ppm	
Versus ±10% change in load					±0.1	ppm	
Aging per year		@ 40 °C			±1.0	ppm	
Low aging option (10 years)					±3.0	ppm	
RMS Jitter (12KHz to 20MHz)					0.1	pS	
Phase noise		10Hz		-90		dBc/Hz	
		100Hz		-125			
		1KHz		-140			
		10KHz		-155			
		100KHz		-170			
Environmental Conditions							
Operating temperature range	-40°C to +85°C						
Storage temperature range	-55°C to +105°C						