Dynamic Engineers Inc.

TCXO5300BJ-STR3-25MHz-A

Features and Benefits

Frequency range:25MHz
Supply voltage: 3.3V
Steady current: 8.0mA Max
Output waveform: HCMOS
Frequency stability vs. operating temperature: 0.28ppm
Aging: 0.02ppm 24 hours aging @ 25 °C after 10days' continuous operation
Phase noise@10KHz: -150dBc/Hz
Operating temperature: -40°C --+85°C
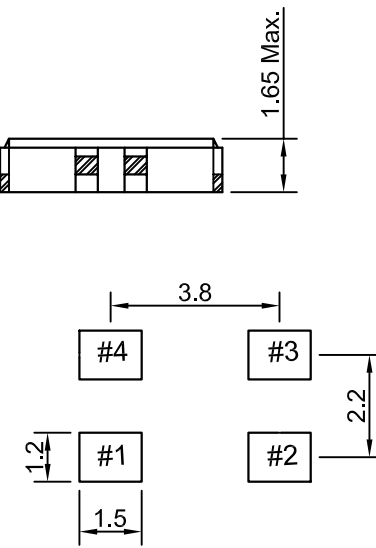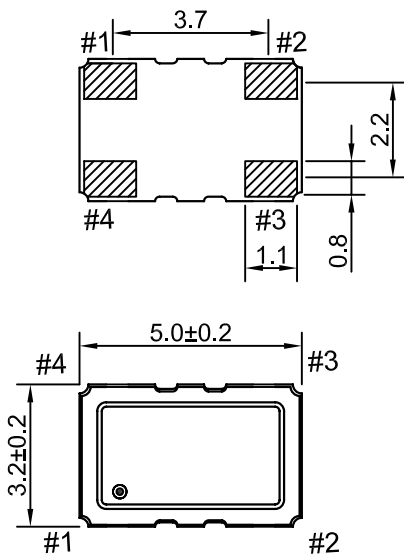Size: 5x3.2x1.65mm

Typical Applications

Repeater
Link and micro cells
Low noise microwave

Description

TCXO5300BJ-STR3-25MHz-A 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: MD210010-1

Recommended soldering pattern

PIN FUNCTIONS

Pin	Function
#1	N.C.
#2	GND
#3	Output
#4	V_{DD}

Unit in mm
1mm = 0.0394 inches

Specifications

Oscillator Specification	Sym	Condition	Value			Unit	Note
			Min.	Typ.	Max.		
Operational Frequency	F$_{nom}$			25		MHz	
Output				HCMOS			
Output level				VOL ⩽ 10% Vcc VOH ⩾ 90% Vcc			
Output load				1K ohm // 15 pF			
Power Supply							
Voltage	V$_{cc}$	±5%		3.3		V	
Current Consumption					8.0	mA	
Frequency Stability							
Versus temperature		-40°C to +85°C			±0.28	ppm	
Overall stability		incl. nominal frequency tolerance, frequency stab. vs. temp., vs. supply voltage, vs. load changes and 20 years aging			±4.6	ppm	
Versus ±5% change in supply voltage					±0.3	ppm	
Versus ±10% change in load					±0.2	ppm	
Aging		24 hours aging @ 25 °C after 10 days continuous operation			±0.02	ppm	
Phase noise		100Hz		-117		dBc/Hz	
		1KHz		-137			
		10KHz		-150			
Environmental Conditions							
Operating temperature range		-40°C to +85°C					
Moisture Sensitivity Level		(IPC/JEDEC J-STD-020E): MSL 1					
ESD Protection Level		(ANSI/ESD STM5.2):HBM: Class 2; MM: Class M2					