



Features and Benefits

- Frequency range: 25MHz
- Supply voltage: 3.3V
- Current: 10mA Max.
- Frequency stability vs. temperature: ± 2.5 PPM
- Aging: ± 1 PPM first year
- Operating temperature: -40°C to $+85^{\circ}\text{C}$
- Size: 2.5x2.0x0.85 mm

Typical Applications

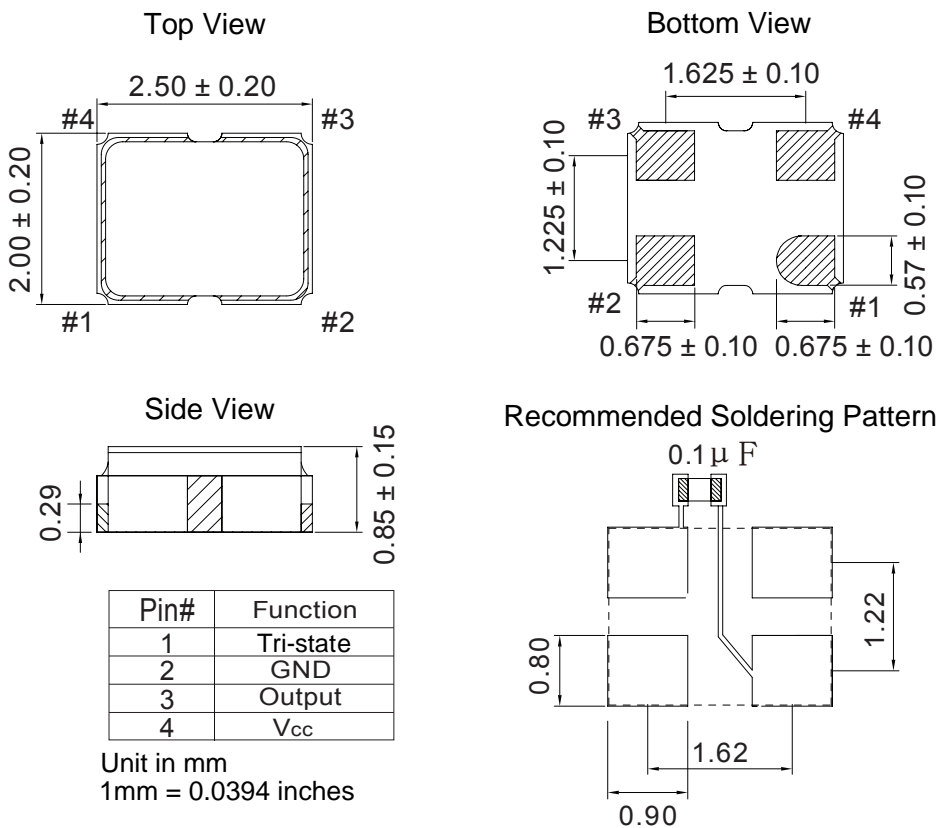
- RTC Reference Clock
- Smart Grid
- Mobile Phones

Description

TCXO2520BM-25MHz-A is the small size and low phase noise TCXO. The frequency stability can be less than ± 2.5 PPM. It can be widely used in the portable communication equipment.

Mechanical Drawing & Pin Connections

Drawing No: MD220022-2



To ensure optimal oscillator performance, place a by-pass capacitor of 0.1uF as close to the part as possible between Vcc and GND PAD



Specifications

Oscillator Specification	Sym	Condition	Value			Unit	Note
			Min.	Typ.	Max.		
Operational Frequency	f ₀			25		MHz	
RF Output							
Output Waveform			CMOS				
Output Level High			2.97			V	
Output Level Low					0.33	V	
Duty Cycle			45		55	%	
Rise & Fall Time		measured between 10% and 90% of V _{cc}			8	ns	
Startup Time					5	ms	
Tri-State (Input to Pin1)		Enable (High voltage or floating)	2.31			V	
		Disable (Low voltage or GND)			0.99	V	
Power Supply							
Voltage	V _{cc}		3.135	3.3	3.465	V	
Current					10	mA	
Frequency Stability							
Vs. Temperature		-40°C to +85°C			±2.5	ppm	
Aging@+25°C		1 st year			±1.0	ppm	
Phase Noise		@10Hz		-83		dBc/Hz	
		@100Hz		-110		dBc/Hz	
		@1KHz		-135		dBc/Hz	
		@10KHz		-148		dBc/Hz	
		@100KHz		-152		dBc/Hz	
Environmental Conditions							
Operating temperature range		-40°C to +85°C					
Storage temperature range		-55°C to +125 °C					