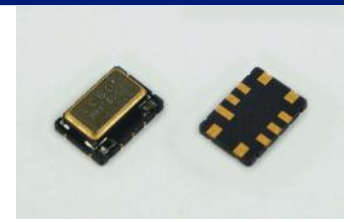


COSPAS-SARSAT BEACONS CERAMIC SMD TCXO (7.0 x 5.0 x 2.0mm)

FEATURES

- Designed for Cospas-Sarsat Beacon application
- Frequency stability $\pm 0.20\text{ppm}$
- LVCMOS or Clipped sinewave output

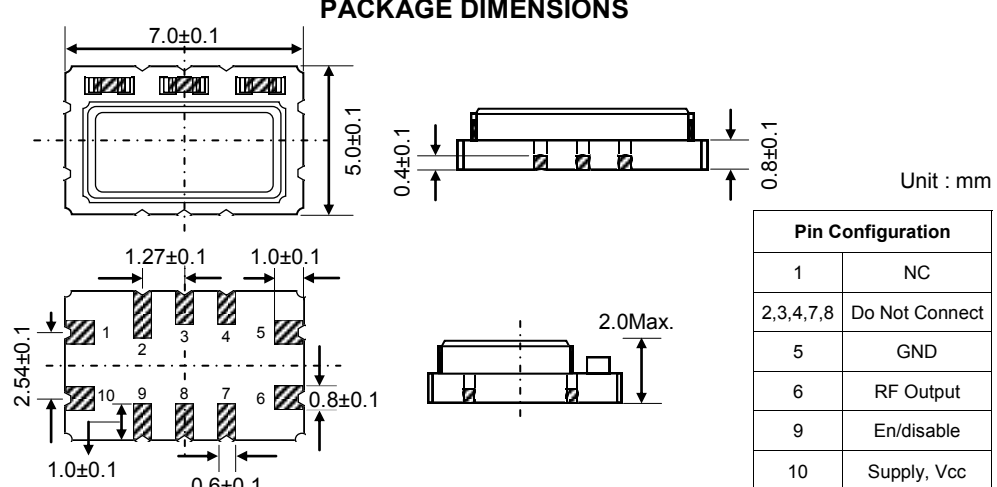


MODEL		TXCS-H(x)	TXCS-P(x)
Nominal Frequency		10.000MHz, 12.688750MHz, 12.688375MHz, 12.688656MHz, 16.367MHz	
Supply Voltage		3.3V $\pm 10\%$	
Input Current		6.0 mA max	
Operating Temperature		(x) = A: -20°C to 55°C or (x) = B: -40°C to 55°C	
Storage Temperature		-55 °C to 125 °C	
Output	Type	LVCMOS	Clipped sine wave
	Load	15pF*	10Kohm // 10pF*
	Output Level	10% / 90% Vcc	0.8Vp-p min.
	Duty Cycle @ 50%	45% TO 55%	-
	Rise and fall Time	8.0nS max.	-
Frequency Stability	Calibration Tolerance @ 25 °C	$\pm 0.5\text{ppm max.}$	
	Temperature, -20 °C to 55 °C	$\pm 0.2\text{ppm max. reference to } (F_{\text{MAX}} + F_{\text{MIN}})/2$	
	Supply Voltage	$\pm 0.1\text{ppm max.}$	
	Output Load	$\pm 0.1\text{ppm max.}$	
	Allan Variance (tau=100ms)	$\pm 1.0\text{ppb max.}$	
Mean Slope dF/dt	Steady State Conditions	$\pm 0.7\text{ppb / minute max.}$	
	During and 15Min. After variable temperature conditions	$\pm 1.7\text{ppb / minute max.}$	
Residual dF from slope		$\pm 2.0\text{ppb max.}$	
Reflow soldering		$\pm 1.0\text{ppm max.}$	
Aging, first year		$\pm 1.0\text{ppm max.}$	
Aging, 10 year		$\pm 3.0\text{ppm max.}$	
Tri-State	Enable Voltage (HIGH)	70% Vcc min.**	
	Disable Voltage (LOW)	30% Vcc max.	
Phase Noise (typical values)		-90dBc/Hz @ 10Hz	
		-115dBc/Hz @ 100Hz	
		-127dBc/Hz @ 1KHz	
		-137dBc/Hz @ 10KHz	
		-143dBc/Hz @ 100KHz	

*To achieve an optimal frequency stability, the circuit connected to TCXO must have the correct input capacitance that is specified by the load capacitance.

**Oscillator and compensation circuits are active when output is disabled during tri-state. The output is enabled with no connection on pin #9. Supply current is ~1mA when output is disabled.

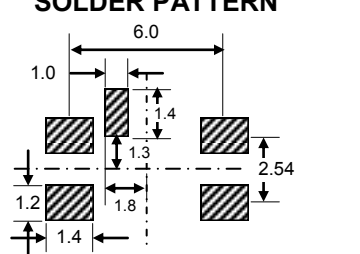
PACKAGE DIMENSIONS



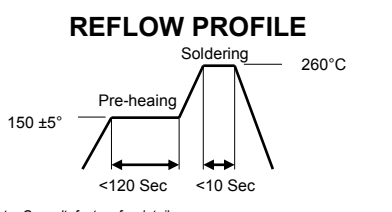
Unit : mm

Pin Configuration	
1	NC
2,3,4,7,8	Do Not Connect
5	GND
6	RF Output
9	En/disable
10	Supply, Vcc

SOLDER PATTERN



REFLOW PROFILE



Note: Consult factory for details

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