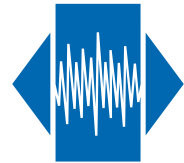


TX7-705CM-SQ-CoSa

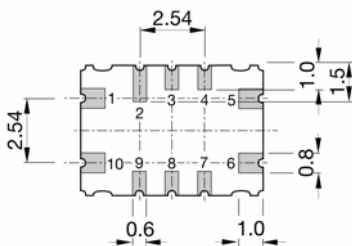
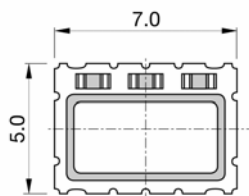
Analogue compensated high accurate and reliable
CMOS SMD TCXO

QuartzCom
the communications company



Application **COSPAS-SARSAT emergency beacon Class 1 & 2**

Nominal Frequency Fo	10.000, 12.688375, 12.688656 MHz 12.800, 12.688750, 16.384, 20.000 MHz		
Frequency stability:			
vs. operating temperature range	$\leq \pm 0.2$ ppm $\leq \pm 0.2$ ppm	-40 ~ +55 °C -20 ~ +55 °C	Class 1 beacon Class 2 beacon
vs. supply voltage	$\leq \pm 0.03$ ppm	± 5 %	
vs. load	$\leq \pm 0.01$ ppm	± 5 %	
vs. aging	$\leq \pm 1.0$ pm $\leq \pm 3.0$ pm	1 st year 10 years	
Allan variance (ADEV)	$1E^{-9}$	@ $\tau = 0.1$ s	
Medium-term stability: Mean slope $\Delta F/dt$ after 15 min power-up: steady state during temperature ramp Residual ΔF (r.m.s.) from slope	$\leq \pm 0.7$ ppb/min. $\leq \pm 1.7$ ppb/min. ≤ 3.0 ppb	T = const. $\Delta T/dt = \pm 5$ °C/hour over 18 points	
Supply voltage	+3.3 V	± 5 %	
Supply current	4 mA	Max.	
Output signal	HCMOS		
Output level	$V_{OH} > 0.9$ Vdc	$V_{OL} < 0.1$ Vdc	
Output load	15 pF		
Symmetry (Duty)	45 ~ 55 %	@ $\frac{1}{2}$ Vdc	
Tri-state function (optional)	pin # 9 high or open pin # 9 low	pin # 6 → oscillation pin # 6 → high Impedance	
Operating temperature range	-40 ~ +55 °C -20 ~ +55 °C	Class 1 beacon Class 2 beacon	
Storage temperature range	-55 ~ +125 °C		
Marking	QCOM (date code) frequency code		

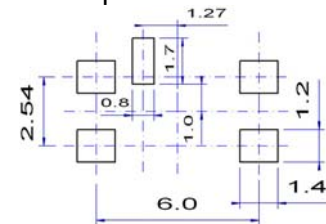


Pin function

- # 1 GND or not connected
- # 5 GND
- # 6 Output
- # 9 Tri-state
- # 10 Vdc

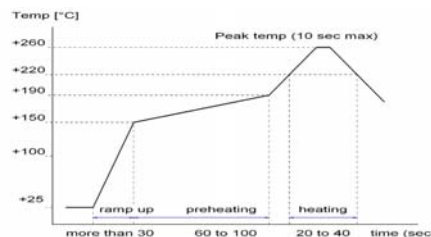
Do not connect: #2, #3, #4, #7 & #8

Solder pattern



Do not design any conductive path between the pattern

IR reflow soldering temperature



TX7-705CM-SQ-CoSa

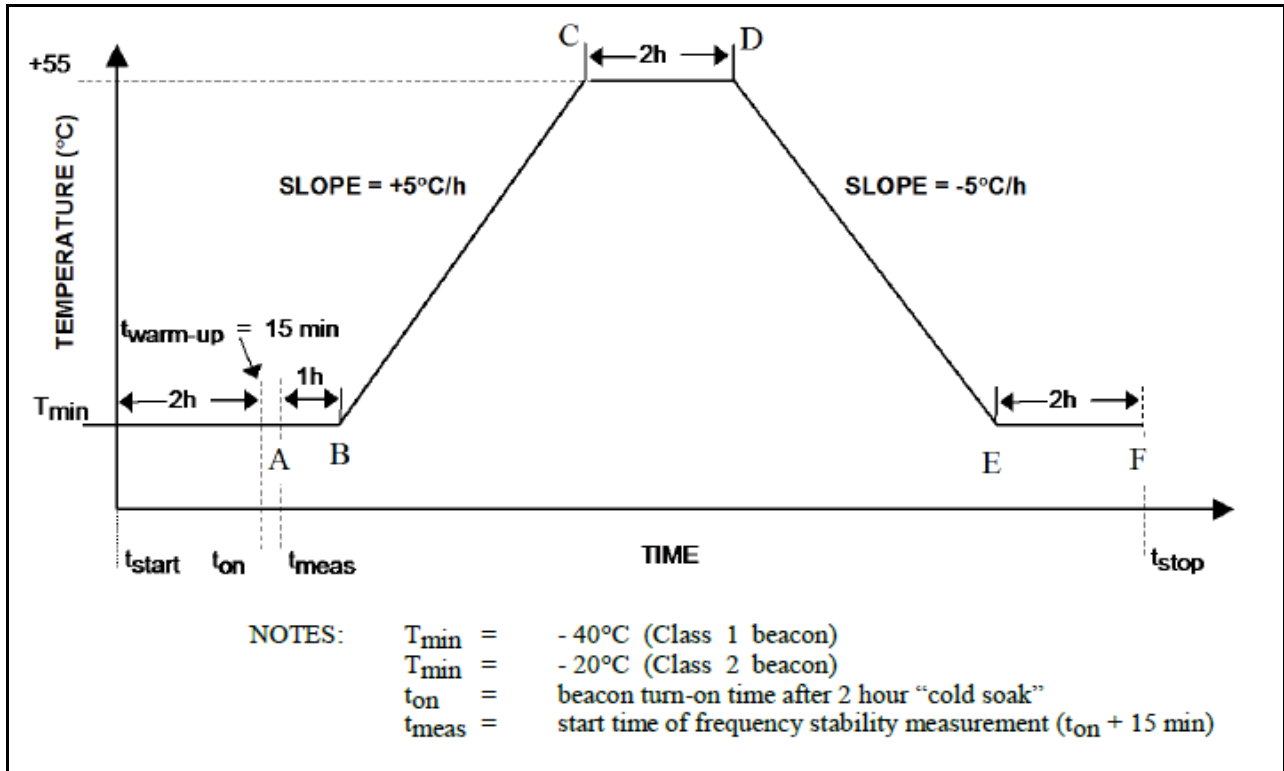
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Application **COSPAS-SARSAT emergency beacon Class 1 & 2**

Medium term stability

Frequency stability measurement procedure according the COSPAS/SARSAT T0.007



Note: The 2h and 1h warm-up and stabilisation times are for type approval test of complete beacon. For testing of TCXO these times may be shortened accordingly.

Environmental	Reference STD.		Test condition
Vibration sinusoidal	IEC 60028-2-6	IEC 60679-1-5.6.7	Test Fc, 30 min per axis 10 Hz – 55 Hz 0.75mm, 55 Hz – 2 kHz 10 g
Shock	IEC 60028-2-27	IEC 60679-1-5.6.8	Test Ea, 3 x per axes 100 g, 6 ms half-sine pulse
Solderability	IEC 60028-2-20 IEC 60028-2-58	IEC 60679-5.6.3	Test Ta (235 ±2) °C Method 1 Test Tb Method 1A, 5s