

TX7-503-SQ-ST3

High precision analogue compensated
STRATUM III SMD TCXO

QuartzCom
the communications company

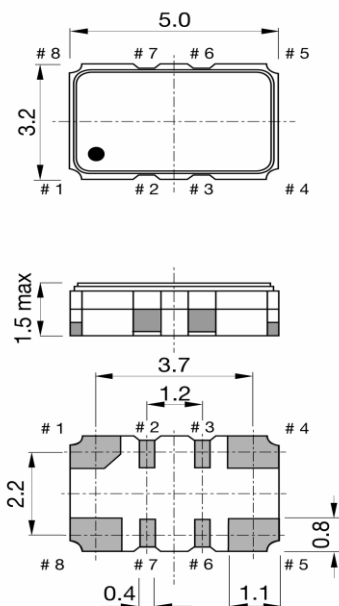


Features

- Applications: transmission, TDM networks, SDH, SONET, wireless communications, IEEE 1588v2, SyncE, STRATUM III, wireless backhaul, metro carrier Ethernet, femtocells, picocells
- Holdover stability: ± 0.37 ppm over 24 h
- Overall stability: ± 4.60 ppm including 20 years aging
- Output signal: CMOS

Parameter	Specification	
Frequency range	10.0 ~ 40.0 MHz	
Standard frequencies	10.0, 12.80 16.0, 16.384, 19.20, 20.0, 25.0, 26.0, 40.0, & 50.0 MHz	
Frequency stability:	$\leq \pm 4.60$ ppm	overall inclusive
Overall inclusive frequency stability vs. temperature, tolerance, aging over 20 years, supply & load variation		
vs. temperature	$\leq \pm 0.28$ ppm	-40 ~ +85 °C
vs. aging	$\leq \pm 3.0$ ppm	20 years
Holdover stability ⁽¹⁾	$\leq \pm 0.37$ ppm	over 24 hours
Frequency tolerance ex. factory	$\leq \pm 0.50$ ppm	@ +25 °C
Supply voltage	+3.3 V or +5.0 V	± 5 %
Supply current	< 6 mA	
Output signal	clipped sine wave	CMOS
Output level	> 0.8 V _{p-p}	V _{OH} > 0.9 x V _{dcc} / V _{OL} < 0.1 x V _{dcc}
Output load	10 k Ω // 10 pF	15 pF
Tri-state function	pin #6 high or open pin #6 low	pin #5 → oscillation pin #5 → high impedance
Phase noise @ 20.0 MHz carrier frequency	-145 dBc/Hz	@ 10 kHz
Operating temperature range	-20 ~ +70 °C -40 ~ +85 °C	indoor use outdoor use
Storage temperature range	-55 ~ +125 °C	
Packaging units	tape & reel	500 or 1'000 pieces
Customer specifications on request		

⁽¹⁾ Including: frequency stability, vs temperature, supply change of ± 5 % and aging over 24 hours



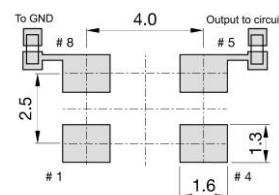
Pin function

- # 1 GND
- # 4 GND
- # 5 OUTPUT
- # 8 V_{dcc}

5 External de-coupling capacitor.
Recommended Cap = 1'000 pF

8 External bypass Cap = 100 nF

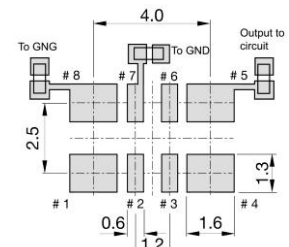
2 & # 3 not connected



Pin function optional

Phase noise reduction

- # 6 Tri-state
- # 7 External capacitor
Reduce phase noise
Cap = 33 pF



Reflow conditions per JEDEC J-STD-020, 260 °C maximum

2011/65/EU RoHS compliant

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