



SMT STRATUM 3 DIGITAL TCXO 101 SERIES

FEATURES:

- Fully meeting free run frequency accuracy and 24 hours maximum frequency drift requirements for STRATUM 3 according to Telecordia GR-1244-CORE (Issue 2)*
- Very low power consumption suitable for portable and/or battery operated equipment

ELECTRICAL SPECIFICATION**

PARAMETER	SYMBOL	CONDITIONS	VALUE	UNIT
Supply voltage, nom.	Vs	Vs±5%	3.0 5.0	V
Supply current, max.	Is	Vs, nom. / Ta=25°C	2.0 to 15.0	mA
Frequency, nom.	fo	-	10.000 to 40.000	MHz
Overall frequency stability over 10 years of operation including Initial Frequency Calibration	Δfc/fo	Ta=-40°C to +85°C	±4.6	ppm
Frequency drift during 24 hours of continuous operation, max (See note 1)	Δfc/fo	Ta=-40°C to +85°C or Ta 0°C to +70°C	±0.37	ppm
Temperature Stability (See note 2)		Ta=-40°C to +85°C	±0.30	ppm
		Ta=0°C to +70°C	±0.28	ppm
Control voltage range (see note 3)	Vc	-	+0.25...+2.25	V
Frequency Adjustment Range (see note 3)	Δf/fo (Vc)	Vc= 0.25V	-5 ...-10	PPM
		Vc= Vs-0.25V	+5 ...+10	PPM
Voltage control (pin 1) input impedance, min. (see note 3)	Zin	-	100	kΩ
Jitter (peak to peak), max (Fnom = 20 MHz)	J(f)	Offset Δf = 12kHz to 20MHz	10	ps
Phase noise SSB @ freq.offset, max (Fnom = 20 MHz)	£ (Δf)	Δf=10Hz	-80	dBc/Hz
		Δf=100Hz	-110	dBc/Hz
		Δf=1kHz	-130	dBc/Hz
		Δf ≥ 10kHz	-145	dBc/Hz
HCMOS output levels Clipped Sine	VOH/VOL	Load = 15pF	0.9Vcc / 0.1Vcc	V
	Vout	Load=10 kΩ 20pF	0.7	Vp-p

ENVIRONMENTAL SPECIFICATION

Storage temperature range	-	-45°C....+85°C	
Vibration	-	IEC 68-2-6, test Fc: 10..500 Hz, 10g, 2 h, 3 directions	All parameters within initial limits
Mechanical shocks	-	IEC 68-2-27, test Ea: 100g, ½ sine, 3 bumps, 6 directions	All parameters within initial limits

Notes:

1. The 24 hours drift can be measured any time after minimum 1 hour from initial turn on. Please contact factory for details.
 2. The Temperature Stability is calculated with regard to frequency reading at 25°C±1°C.
 3. Parameter relevant only to products with TY prefix.
- * Telecordia is a trademark of Telecordia Technologies
** This specification is typical. Other frequencies, output types and custom parameters are available. Please, contact factory for details.

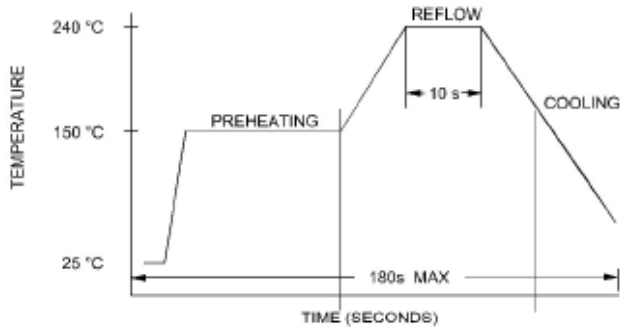
中國 • 香港 • 九龍官塘開源道 55 號 開聯工業中心 7 字樓 A 座 1-2 號
Block A, Flat 1-2, 7/F, Hoi Yuen Road, Kwun Tong, Kln, Hong Kong, China

Tel: 852-23899201 Fax: 852-23410001 E-mail: info@nkg.com.hk



中川電子有限公司
Nakagawa Electronics Limited

REFLOW PROFILE

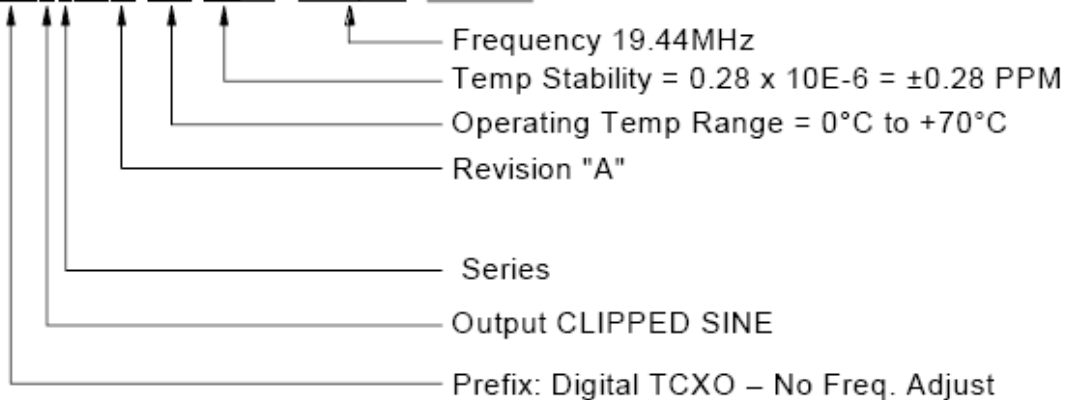


HOW TO ORDER (PART NUMBER)

Prefix	Output Type	Series	Revision	Temperature Range	Stability	Frequency
TU; No Freq. Adjust option TY; With Freq Adjust	0: CLIPPED SINE 2:HCMOS 4:LVC MOS	101	A	First letter Lowest Temperature, Second letter Highest Temperature: LZ: +0°C to +70°C D3: -40°C to +85°C	Value x 10E-6 Example 0.28= 0.28PPM 0.5= 0.5PPM	In MHZ

Example:

TU0101A-LZ-0.28-19.440-STR3 ← Stratum 3



中國 • 香港 • 九龍官塘開源道 55 號 開聯工業中心 7 字樓 A 座 1-2 號
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■ MECHANICAL SPECIFICATION

