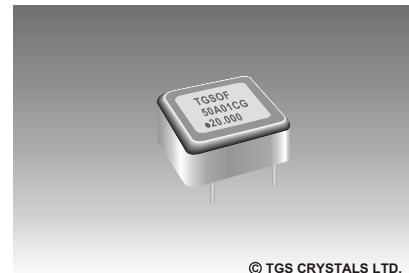


FEATURES

- Stability up to ±0.003ppm
- Low Aging
- Compact Package

APPLICATIONS

- PCS Base Stations
- Cellular Base Stations
- Synthesizer
- Measurement Equipment
- Digital Switching



© TGS CRYSTALS LTD.

SPECIFICATION \*

Parameters	Product	Option Code
	OCXO	O
Frequency Range: 1.0 ~ 160.0MHz	△	Specify
Dimensions: 30.0X30.0X22.0mm	△	G
Oscillation Mode:	AT Cut	△
	SC Cut	△
Supply Voltage(V <sub>DD</sub> ):	+3.0VDC	△
	+5.0VDC	△
	+12.0VDC	△
		30
Frequency Stability vs Temp. :		
See Table 1	△	Specify
Operating Temp. Range: See Table 1	△	Specify
Storage Temp. Range: -40°C ~+100°C	▲	
Frequency Accuracy: ±0.05ppm(Center control voltage)	▲	
Phase Noise:	1Hz,-80dBc/Hz	▲
	10Hz,-115dBc/Hz	▲
	100Hz,-135dBc/Hz	▲
	1KHz,-145dBc/Hz	▲
	10KHz,-150dBc/Hz	▲
Adjustable Frequency Range:	AT Cut:±7.0ppm	▲
	SC Cut:±1.0ppm	▲
Output Wave From & Load Characteristics:		
See Table 2	△	Specify
Frequency Stability vs. Load: ±0.02ppm vs. ±10% load change	▲	
Frequency Stability vs. Voltage: ±0.02ppm vs. ±5% voltage change	▲	
Control Voltage Range: 0~5V	▲	
Slope: Positive	▲	
Linearity: ±10%	▲	
Supply Consumption:	3.6W(Max.)when warm-up	▲
	1.2W(Max.)when static	▲
Warm-up Temp: AT Cut:±0.2ppm,<1m.		▲
	SC Cut:±0.05ppm,<1m.	▲
Aging:	AT Cut: First year±0.1ppm	▲
	10year±1ppm	▲
	SC Cut: First year±0.1ppm	▲
	10year±0.5ppm	▲
Package: Bulk	▲	

▲ Standard \* Specifications Subject to Change Without Notice  
 △ Optional: please specify required code when inquiring or ordering

PACKAGE

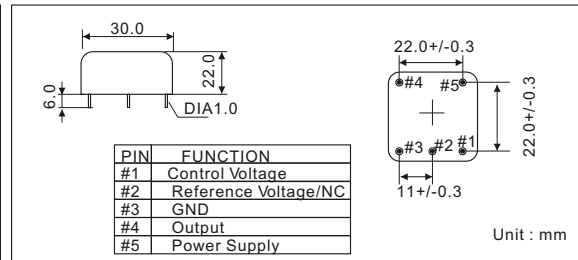
- Standard package in Bulk & Packed in box.

PART NUMBER GUIDE

TGS	O	G	50	A	01	C	-38M880
Mark	OCXO	Dimensions	Supply Voltage	Oscillation Mode	See Table 1	See Table 2	Frequency Range

e.g. Full P/N.: TGS OG50A01C - 38M880

DIMENSIONS \*



\* Available in Special Dimension Requested by Customer

FREQUENCY STABILITY VS TEMPERATURE Table 1

Code	Frequency Stability Vs Temp.	Temp. Range
01	±0.01ppm (AT Cut) Max.	0 °C~+50 °C
02	±0.003ppm (SC Cut) Max.	0 °C~+50 °C
03	±0.03ppm (AT Cut) Max.	-20 °C~+70 °C
04	±0.01ppm (SC Cut) Max.	-20 °C~+70 °C
05	±0.05ppm (AT Cut) Max.	-40 °C~+75 °C
06	±0.03ppm (SC Cut) Max.	-40 °C~+75 °C

OUTPUT WAVEFORM & LOAD CHARACTERISTICS Table 2

Output Waveform	Output Characteristics	Option Code
Clipping Sine Wave	Load: 10KΩ/10pF Output level: >1Vp-p	C
TTL	Load: Max. 10 low power consumption TTL gates " 1 " level: >+2.4VDC " 0 " level: <+0.2VDC Duty Cycle: 45/55 Rise/fall time: <6ns	D
HCMOS	Load: Max. 10 low power consumption TTL/HCMOS " 1 " level: >+4.5VDC " 0 " level: <+0.5VDC Duty Cycle: 45/55 Rise/fall time: <6ns	E
ACMOS	Load: Max. 10 low power consumption TTL/ACMOS " 1 " level: >+4.5VDC " 0 " level: <+0.5VDC Duty Cycle: 45/55 Rise/fall time: <6ns	F
Sine Wave	Load: Nominal value 50Ω Output level: >2dBm Harmonic Attenuation: <-25dBc Noise Attenuation: <-75dBc	G

STANDARD FREQUENCIES

Frequency in MHz

10.00000	20.48000	40.00000	77.76000
12.28800	28.32200	50.00000	80.00000
14.40000	30.00000	60.00000	90.00000
20.00000	38.88000	70.00000	100.0000

