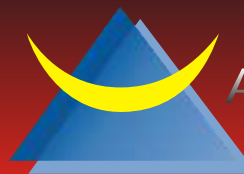


TG SERIES

- 3.2mm x 2.5mm Ceramic SMD 4 Pads VCTCXO
- 2.4 ~ 2.7 Volt and 2.8V ~ 3.3 Volt
- Clipped Sinewave
- Stability Down to $\pm 0.5\text{ppm}$



ASCEND

FREQUENCY DEVICES

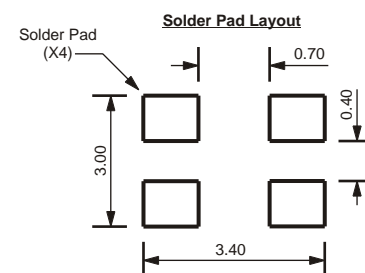
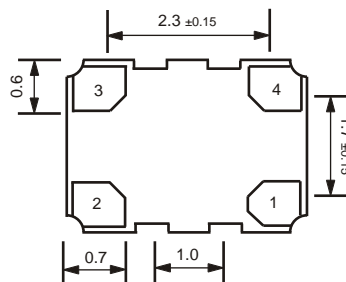
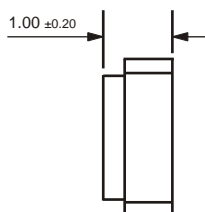
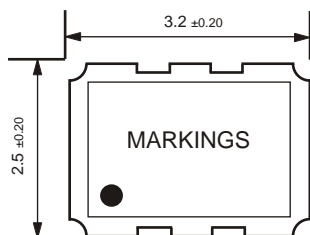
Electrical Specifications

Frequency Range:	-	10.000MHz to 40.000MHz
Temperature Stability:	-	See ordering options below
	Tolerance (25°C $\pm 2^\circ\text{C}$)	$\pm 0.5\text{ppm}$
	Vs. Supply Voltage ($\pm 5\%$)	$\pm 0.2\text{ppm}$
	Vs. Load ($\pm 10\%$)	$\pm 0.2\text{ppm}$
	Vs. Aging	$\pm 1.0\text{ppm/yr}$
Operating Temperature Range:	-	See ordering options below
Storage Temperature Range:	-	-55°C to +125°C
Supply Voltage (Vdd):	($\pm 5\%$)	2.8Vdc or 3.0Vdc
Supply Current:	-	10MHz ~ 15MHz = 1.5mA Max, 15MHz ~ 26MHz = 2.0mA Max, 26MHz ~ 40MHz = 2.5mA Max
Output Level:	Clipped Sinewave	0.8Vp-p minimum
Control Voltage:	2.8V	Vc = 1.40Vdc (0.40Vdc to 2.40Vdc)
	3.0V	Vc = 1.50Vdc (0.50Vdc to 2.50Vdc)
Output Load:	-	10K Ohms // 10pF
Frequency Tuning Range:	-	$\pm 8\text{ppm}$ to $\pm 12\text{ppm}$
Phase Noise:	-	-80dBc/Hz at 10Hz, -115dBc/Hz at 100Hz, -135dBc/Hz at 1kHz, -148dBc/Hz at 10kHz

Environment / Mechanical

Shock:	MIL-STD-833, Method 2002, Condition B
Solderability:	MIL-STD-833, Method 2003
Solvent Resistance:	MIL-STD-833, Method 215
Vibration:	MIL-STD-833, Method 2007, Condition A
Gross Leak Test:	MIL-STD-833, Method 1014, Condition C
Fine Leak Test:	MIL-STD-833, Method 1014, Condition A-2

Mechanical Dimensions



Pad	FUNCTION
1	Voltage Control or Ground*
2	Ground
3	Output
4	Supply Voltage

MARKING
Line #1: Frequency
Line #2: Date Code

External Bypass Capacitor is Recommended

ALL DIMENSIONS
IN MILLIMETERS

Part Numbering Guide

TG 3 S 15 A V - 33.000M TR

Series

3.2x2.5 Ceramic SMD 4 Pads VCTCXO

Supply Voltage

2 = 2.4V ~ 2.7V
3 = 2.8V ~ 3.3V

Output Type

S = Clipped Sinewave

Frequency Stability

05 = $\pm 0.5\text{ppm}^{(1)}$
10 = $\pm 1.0\text{ppm}$
15 = $\pm 1.5\text{ppm}$
20 = $\pm 2.0\text{ppm}$
25 = $\pm 2.5\text{ppm}$
30 = $\pm 3.0\text{ppm}$
50 = $\pm 5.0\text{ppm}$

⁽¹⁾ Check with factory for available Stability vs. Temperature options

*If no Voltage Control is specified, Pin 1 must be grounded.

Packaging

Blank = Bulk
TR = Tape and Reel

Frequency

Pad 1 Connection

Blank = Ground*
V = $\pm 8\text{ppm}$ Voltage Control
V1 = $\pm 10\text{ppm}$
V2 = $\pm 12\text{ppm}$

Operating Temperature Range

A = 0°C to +50°C
C = -20°C to +70°C
D = -30°C to +70°C
E = -30°C to +80°C
F = -40°C to +85°C*
G = 0°C to +70°C

(Rev. B / 10-03-08)

Specifications subject to change without notice