

AS9100 / ISO9001 Certified

404 SERIES **TCXO**

ULTRA MINIATURE SMD

Features

• RoHS compliant, Tight Stability over Wide Temperature Range, 7 mm x 5 mm

• Voltage Control Option for Electric Frequency Adjustments

• Leadless Chip Carrier (LCC) Ultra Small Package, Industry de factor Standard Footprint

• Small Size, Low Profile, Light Weight and Low Power Consumption

Specifications

10 MHz to 27 MHz Frequency Range

Standard Frequency 12.6/12.8/13.0/14.4/14.85/16.8/19.2/19.44/19.68/19.8 MHz

Input Voltage (Vcc) 5.0 V ±5%; 3.3V±5%; 3.0V±5%; 2.8V±5%

Input Current 2.0 mA Maximum at 3 V (25°C)

Frequency Stability vs. Temperature ±1.5 ppm; ±2 ppm; ±2.5 ppm; ±5 ppm;

 0° C to 70° C; -40° C to 85° C; 0° C to 50° C; -30° C to 75° C Temperature Range

Standard Stability ±2.5 ppm /-30°C to 75°C

Frequency vs. Voltage ± 0.2 ppm maximum / V $\pm 5\%$

Frequency vs. Load ± 0.2 ppm maximum / 10 kOhms or 10 pF $\pm 10\%$

±1 ppm Maximum per year at 25°C Aging

Output Load 10 kOhms or 10 pF ±10% **Output Waveform** Clipped Sine wave

Output Level 1.0Vp-p minimum for Vcc=5.0V; 0.8Vp-p minimum for Vcc=3.3V

Controllable Frequency Option ±10 ppm Minimum over control voltage range

Control Voltage (Vc) $2.5\pm2.0 \text{ VDC}$ for Vcc = 5 VDC; $1.65\pm1.5 \text{ VDC}$ for Vcc = 3.3 VDCSetability of Vc at Fnom, 25°C 2.5±0.5 V DC for 5.0V part; 1.65±0.4 VDC for 3.3V part

