

AS9100 / ISO9001 Certified

Features

- RoHS Compliant, Tight Stability over Wide Temperature Range
- Available with both Voltage Control for Electric Frequency Adjustments and Internal Trimmer
- Sinewave, Clipped Sinewave Output or HCMOS/TTL Compatible, Low Phase Noise
- 14-pin DIP Compatible Package, Industry de factor Standard Footprint

Specifications

Frequency Range	1.5 MHz to 40 MHz
Supply Voltage (Vcc)	5 V \pm 5%; 3.3 V \pm 5%;
Input Current	20 mA maximum for HCMOS/TTL Compatible (1.5 MHz to 9.999 MHz) 30 mA maximum for HCMOS/TTL Compatible (10 MHz to 40 MHz) 5 mA maximum for clipped sinewave output
Frequency Stability vs. Temperature	\pm 1 ppm; \pm 1.5 ppm; \pm 2 ppm; \pm 2.5 ppm \pm 5 ppm
Temperature Range	0° C to 70° C; -40° C to 85° C; 0° C to 50° C; -30° C to 75° C
Frequency vs. Voltage	\pm 0.3 ppm maximum / Vcc \pm 5%
Frequency vs. Load	\pm 0.3 ppm maximum / \pm 2 pF
Aging	\pm 1.0 ppm maximum per year at 25°C
Phase Noise	-145 dBc/Hz at 1kHz

Electrical Tuning

Controllable Frequency Option	V = Voltage control: \pm 5 ppm Minimum
Control Voltage (Vc)	2.5 \pm 2.0 V for Vcc = 5 V; 1.65 \pm 1.5 V for Vcc = 3.3 V
Setability of Vc at Fnom, 25°C	2.5 \pm 0.5 V DC for 5.0V part; 1.65 \pm 0.4 VDC for 3.3V part

Sinewave Output

Non-harmonic Spurious	-50 dBc maxim for 10 MHz
Harmonic Distortion	-20 dBc maxim for 10 MHz
Output Load	50 Ohms for pure sinewave; 10 kOhms/10 pF for clipped sinewave
Output Waveform	Sinewave or clipped sinewave
Output Level	0 dBm minimum - sinewave; 1.0Vp-p minimum - clipped sinewave

HCMOS/TTL Output

Output Load	10 TTL or 15 pF HCMOS maximum
Logic "1" / Logic "0" Level	TTL: 2.4V minimum / 0.4V maximum; HCMOS: 0.9Vcc minimum / 0.1Vcc maximum
Rise/Fall Time (Tr/Tf)	10 ns maximum
Duty Cycle	No tristate 60/40%; No tristate 55/45%

