

4145C

Ultra-Clean Phase-Locked Oscillator



4145C Ultra-Clean Phase-Locked Oscillator

Key Features

- High performance: cleans up the signal from a Cs frequency standard
- Utilizes the best Quartz technology: BVA and SC
- Selectable time constants: 10, 50, 200 or 400 seconds to optimize performance
- Exceptional short and medium-term stability
- Exceptional phase noise
- Standard 19" chassis: mounts in standard hardware rack

Key Benefits

- Improved short and medium-term performance

The 4145C Ultra-clean phase-locked oscillator filters the output from a high performance Cs frequency standard and improves both the phase noise and Allan deviation. The 4145C is the best choice when you need improved short and medium-term performance than a Cs provides.

Please contact Microsemi® with any specific requirements.

4145C

Specifications

ELECTRICAL SPECIFICATIONS

- Input voltage: 85-264 V AC
- Input frequency: 47-63 Hz
- Input DC voltage: 24 Vdc + 10%
- Power consumption: 50W (max)
- Connector: IEC plug
- Stability (Allan Deviation)
 - 1s 3x10⁻¹³
 - 100s 3x10⁻¹³

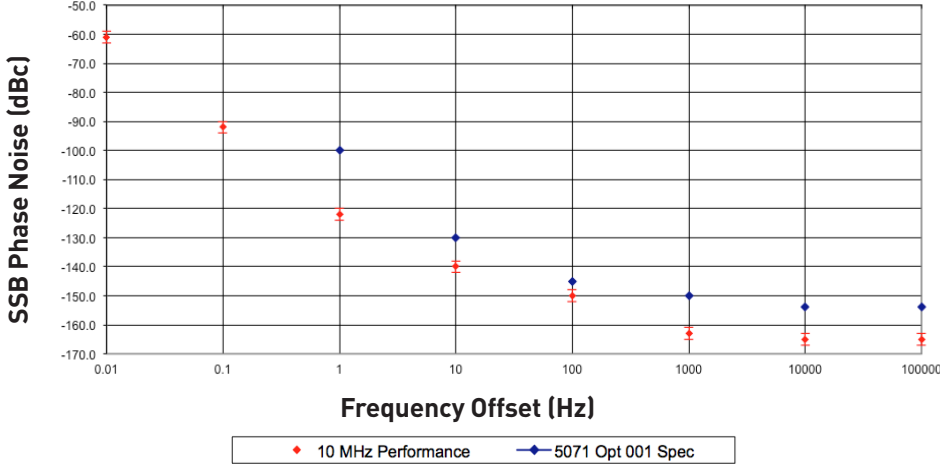
Phase noise 5MHz	L(f) at 10MHz	L(f) at 5MHz
1 Hz	-120 dBc/Hz	-125 dBc/Hz
10 Hz	-135 dBc/Hz	-140 dBc/Hz
100 Hz	-145 dBc/Hz	-150 dBc/Hz
1 kHz	-160 dBc/Hz	-160 dBc/Hz
10 kHz	-160 dBc/Hz	-160 dBc/Hz
100 kHz	-160 dBc/Hz	-160 dBc/Hz

- RF Input
 - Frequency: 5 MHz
 - Format: Sinewave
 - Amplitude: +13 dBm +/- 1 dB, Nominal +13 dBm
 - Load Impedance: 50 ohms
 - Connector: SMA Female
- RF Outputs
 - Frequency: 10 MHz
 - Format: Sinewave
 - Amplitude: +15 dBm +/- 1.5 dB, Typical +16 dBm
 - Load Impedance: 50 ohms
 - Connector: SMA Female
 - Qty: 2
- Frequency: 5 MHz
 - Format: Sinewave
 - Amplitude: +15 dBm +/- 1.5 dB, Typical +16 dBm
 - Load Impedance: 50 ohms
 - Connector: SMA Female
 - Qty: 2

ENVIRONMENTAL & PHYSICAL SPECIFICATIONS

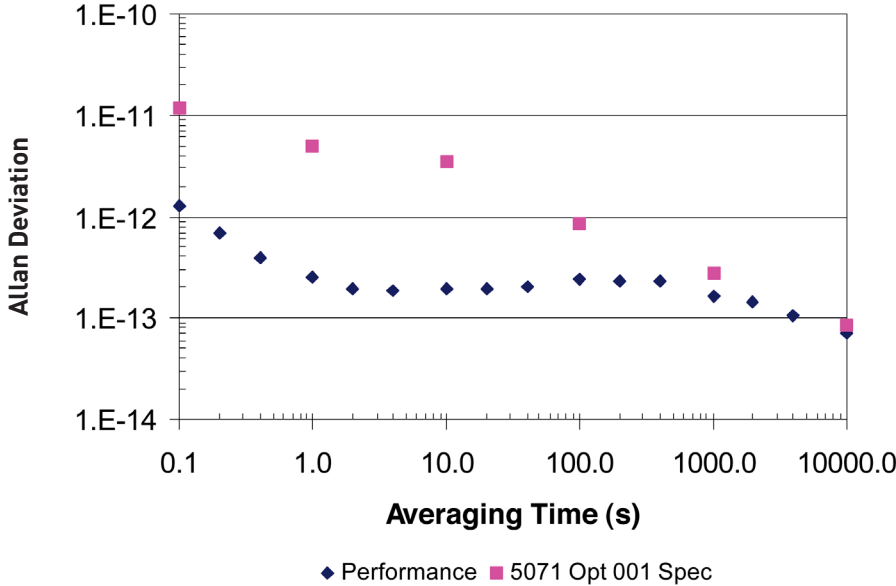
- Weight: 9 Kg (20 lbs)
- Dimensions: 43.2cm x 13.3cm x 55.9 cm (17" x 5.25" x 22")

TSC 4145C Ultraclean Phase Noise Performance



4145C Phase Noise Performance

4145C Short-Term Stability



4145C Phase Noise Performance



Microsemi

Microsemi Corporate Headquarters
 One Enterprise, Aliso Viejo, CA 92656 USA
 Within the USA: +1 (949) 380-6100
 Sales: +1 (949) 380-6136
 Fax: +1 (949) 215-4996

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