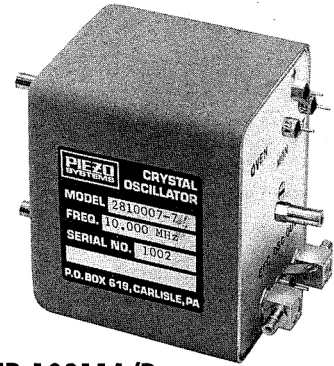


HIGH STABILITY CRYSTAL OSCILLATOR

Specially designed for use in:
 Frequency Counters
 Frequency Synthesizers
 Spectrum Analyzers
 Network Analyzers
 GPS Receivers



Model: 281007 series Little Wonder™
 Compatible Replacement For HP 10544A/B/C or HP 10811A/B

STANDARD FREQUENCIES	10.00 MHz and 10.23 MHz		
FREQUENCY STABILITY	2810007-1 OR -7 4.5×10^{-9} -55°C to +71°C 2.5×10^{-9} 0°C to +71°C 2810007-3 OR -9 4.5×10^{-9} -40°C to +60°C 2.5×10^{-9} 0°C to +60°C	1.0×10^{-8} 3.0×10^{-9} 1×10^{-8} 3×10^{-9}	2810007-2 OR -8 1.0×10^{-8} -55°C to +71°C 3.0×10^{-9} 0°C to +71°C 2810007-4 OR -10 1×10^{-8} -40°C to +60°C 3×10^{-9} 0°C to +60°C
OPERATING TEMPERATURE RANGE	-55°C to +71°C		
LONG TERM STABILITY	5 × 10 ⁻¹⁰ /day after 24 hr. warm-up; 1 × 10 ⁻⁷ /year, continuous operation		
WARM-UP	5 × 10 ⁻⁹ /of final value 10 minutes after warm-up at +25°C.		
OUTPUT VOLTAGE	1 VRMS minimum into 1000 ohms; 0.5 VRMS minimum into 50 ohms		
OUTPUT WAVEFORM	Sine, harmonics -26 dBc, spurious -100 dBc		
INPUT VOLTAGE	+11.0 to +13.5 VDC ±2% Oscillator; +20 to +30 VDC ±5% Oven		
INPUT CURRENT	600 mA at turn-on 150 mA at idle		
PHASE NOISE (Maximum) 1 Hz Measurement Bandwidth Typically 3 to 5 dB better	1 Hz -90 dBc 10 Hz -120 dBc 100 Hz -140 dBc 1000 Hz -152 dBc 10 kHz -155 dBc 100 kHz -158 dBc		
ELECTRICAL FREQUENCY DEVIATION	1 × 10 ⁻⁷ minimum		
INPUT CONTROL VOLTAGE	0 to ±5 volts		
MECHANICAL FREQUENCY ADJUSTMENT	2 × 10 ⁻⁶ minimum		
INPUT IMPEDANCE	100K ohms minimum		
VIBRATIONAL SENSITIVITY	2 × 10 ⁻⁹ g		
SHOCK	50 g's 11 MS, 1/2 Sinewave		
VIBRATION	0.06" DA 10 Hz to 55 Hz		
SIZE	2.812" × 2.062" × 2.45" (L-W-H)		
METHOD OF MOUNTING	(2) 6-32 inserts for Model 2810007-1		
INPUT & OUTPUT CONNECTOR	Model No. 2810007-1 through -4 units plug into a cinch #250-15-30-210 or equivalent (not supplied unless specified) Model No. 2810007-7 through -10 units have right angle SMB connectors. Various other configurations are available. Consult factory for details.		
COMPATABILITY	HP Part No. 10811A 10811B	Piezo Part No. 2810007-1 2810007-7	
AVAILABLE OPTIONS	Input voltages, mechanical mounting, wider temperature ranges, various frequencies. Consult factory for details.		

