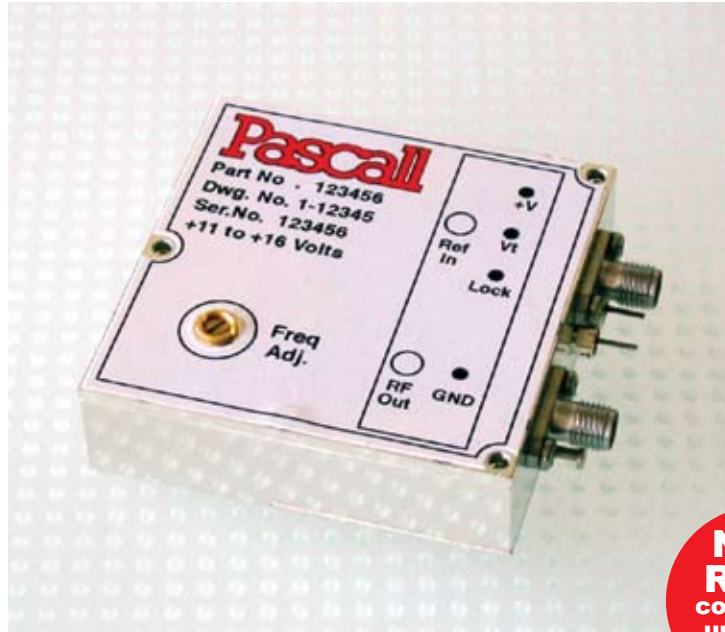


Phase Locked Dielectric Resonance Oscillator



NEW
RoHS
compliant
unit now
available

3.5 - 13.0GHz
Excellent phase noise
Low current

Pascall Phase Locked Dielectric Resonance Oscillators (PLDRO) are designed to meet the ever increasing demands of designers for high performance, frequency stable and efficient oscillators.

The BP1 external reference range has gained a reputation for its low DC power demands whilst maintaining a high RF output power and low phase noise. The BP1 PLDRO operates over -40°C to +75°C.

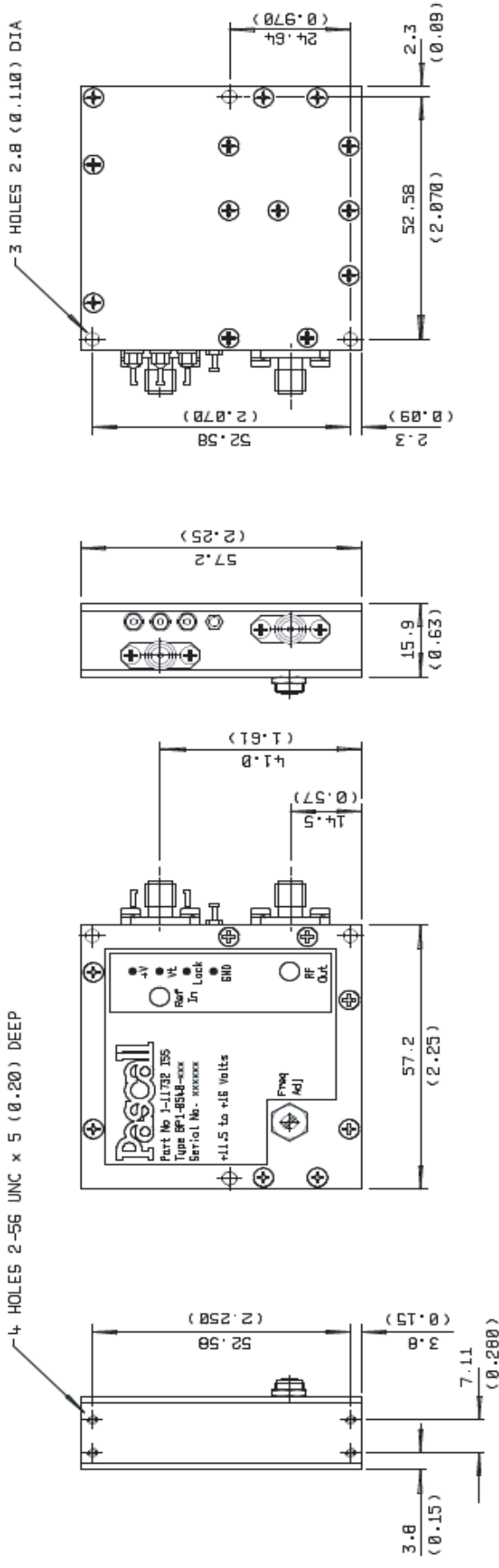
All Pascall PLDROs are designed to minimise microphonic effects and unwanted modulation due to external low frequency electromagnetic fields.



General Information - Specification

Internal reference	BP1 External reference
Output frequency	3.5 to 13.0GHz
Mechanical tuning range	± 25MHz min
Reference frequency	50 to 200MHz (customer specified)
Reference level	0 to +5dBm
RF power output	+13 ± 0.5dBm
RF output stability	± 1dB over temp
Frequency stability	as reference
Phase noise	see typical plots
Spurious - non harmonic	-80dBc
Spurious - harmonic	-25dBc
Alarm outputs	Lock (TTL) & tuning monitor (0 to 10V DC)
Power supply	+11.5 to +16V @ 110mA (+12V for max efficiency)
Temperature range	
Operating	-40 to +75°C
Storage	-45 to +85°C
Size	As diagram (BP1)
Weight	25g
RF connectors	SMA
Power connectors	Solder pins

Mechanical outlines



BP1

Notes

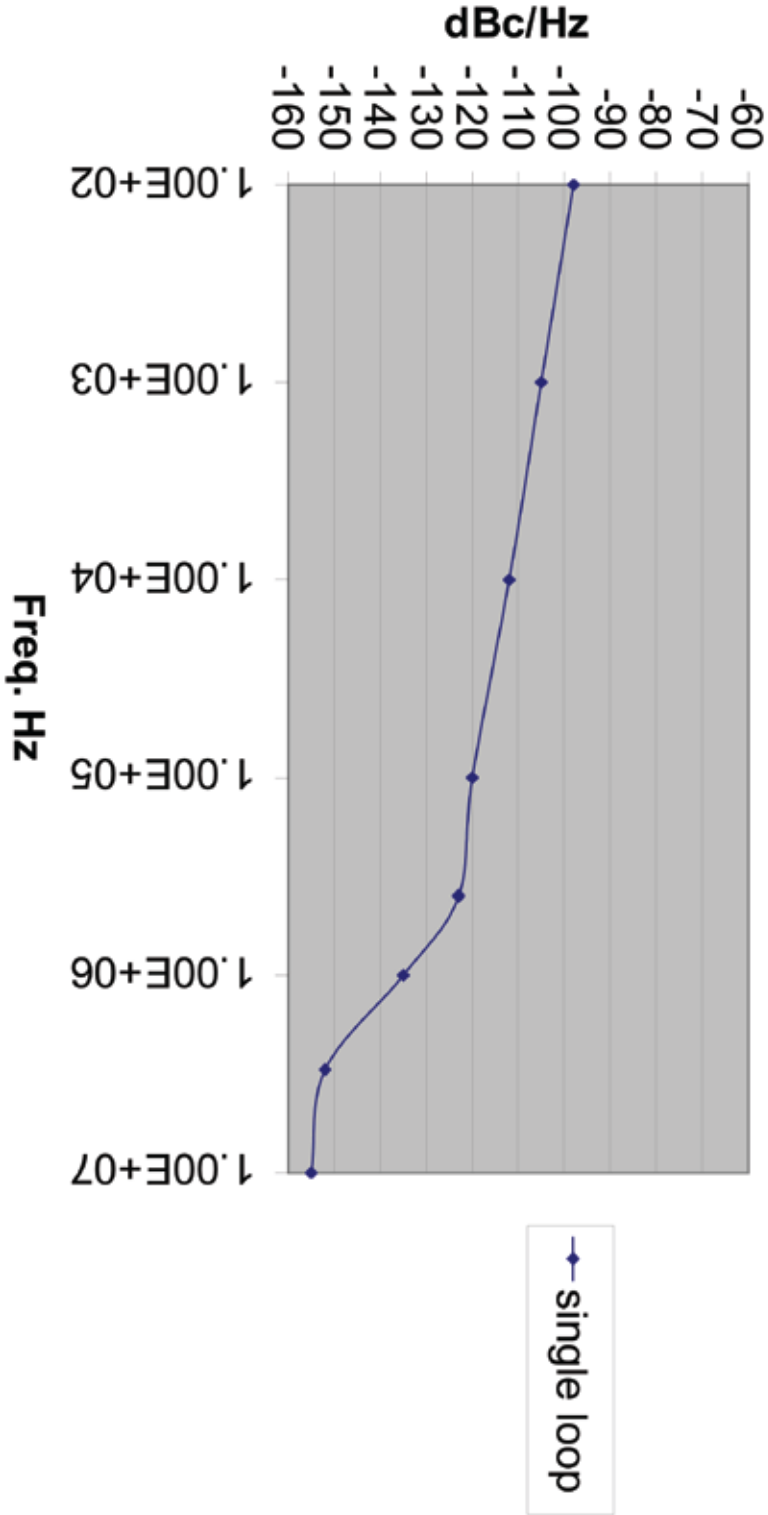
1. Fitted with SMA Connectors
2. Finish - bright tin generally in accordance with MIL-T-10727
Type 1 Bright

Environmental data

Shock (survival) MIL-STD 202G Method 213 Test 3

Vibration (survival) MIL-STD 202G Method 204D

Vibration sensitivity (microphony) typical sensitivity: **BP1** $<0.2e^9$ 200-1500Hz



Typical phase noise at 8GHz