

PHASE LOCKED RESONATOR OSCILLATOR

FEATURE

- •Wide Operating Temperature Range
- •Temp: -40 to +80°C Standard
- •Ultra Low Phase-Noise
- •Small Size, Low Power Consumption
- •Low Cost, Low Profile

APPLICATION

- Radar System
- Electronic warfare
- Communication system
- Test equipment

DESCRIPTION

JS MICROWAVE PDRO, Phase Locked Dielectric Resonator Oscillators, have been designed for use in Commercial and Military communication systems where demanding high performance, high reliability and cost are critical. The series PDRO take advantage of the small size, low phase-noise and high efficiency offered by fundamental GaAs MESFET and BJT DROs when they are phase-locked to an external crystal oscillator in the 50 MHz to 300 MHz range. Features such as ultra-low- phase noise, high power, small size and low cost make PDRO product line the best value on the market today for your Commercial or Military applications.

SPECIFICATIONS:(@+25

Parameter	Internal Reference			
Typical Performance Specifications				
Output Frequency Range	3 GHz to 26.5 GHz			
Output Power	+15 dBm (Type)			
Power Variation	±2 dBm			
Output Impedance	50Ω			
Load VSWR	1.5:1			
Supply Voltage*	+12 +15 VDC			
Current(Type)	350 mA Steady State,800 mA Surge			
Spurious	-80 dBc			
Harmonics	-20 dBc			
Phase Noise	See Table			
Alarm	TTL High in Lock			
External Reference Frequency	N/A			
Input Power Level	N/A			
Frequency Stability	±2.5 ppm			
Connections	SMA(F)			
RF Output Reference	SMA(F)			
Input	SMA(F)			
Reference onitor	Feed thru			
Alarm	Feed thru			
Supply Voltage	Solder Lug			
Ground	N/A			
Operating Temperature	-40 to +80°C			

JS Microwave technology and Solution Co. Ltd.

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Frequency Offset from Carrier (@Hz)	Phase Noise (dBc/Hz)@5 GHz	Phase Noise (dBc/Hz)@10 GHz	Phase Noise (dBc/Hz)@14 GHz	Phase Noise (dBc/Hz)@22 GHz
Typical Phase Noise For Internal Reference Units				
100	-80	-75	-72	-75
1K	-105	-100	-97	-97
10K	-120	-110	-107	-107
100K	-123	-115	-110	-109
1M	-135	-128	-125	-120
10M	-145	-140	-140	-140

HOW TO ORDER

Specify Part Number

PLDRO - FF - PP - I-C

Center Frequency (MHz)

Output Power (dBm)

Example: To order a 12GHz interference PLDRO with output power of 15dBm, specify PLDRO-12000-15-I-C

OUTLINE (mm)

