

10.2 TO 13.35 GHz SYNTHESIZER FOR DIGITAL RADIO APPLICATIONS

FEATURES

Optimized for 128k or 256k QAM Architecture
 Low Phase Noise & Spurious
 Excellent Phase Hit Immunity
 Rugged Construction

APPLICATIONS

Digital Radios
 Frequency Converters



DESCRIPTION

The SNP-1013-505-01 microprocessor controlled synthesizer is designed to operate with 128k or 256k QAM digital radio receiver applications. This synthesizer features good spectral purity and phase noise over a broad operating frequency range while achieving excellent phase hit immunity. This synthesizer is designed for ODU (outdoor Unit) usage in the telecommunication systems.

Parameters	Model Number	SNP-1013-505-01
	UNITS	SPECIFICATIONS
General		
Frequency Range	GHz, min	10.2 to 13.35
Tuning Step Size	MHz	3.33 & 5
Power Level	dBm, nom	16
Power Variation (Freq. & Temp.)	dB, max	+2
Harmonic Level	dBc, typ	-15
Spurious (< 5 MHz from Carrier)	dBc, max	-70
Switching speed	mS, nom	50
RF Output Impedance	Ohms	50
Phase Noise Offset Freq.		
SSB Phase Noise 10 kHz	dBc/Hz, max.	-70
100 kHz	dBc/Hz, max.	-110
1 MHz	dBc/Hz, max.	-130
10 MHz	dBc/Hz, max.	-150
Internal Frequency Reference		
Internal	MHz	50
Stability	PPM, max.	+10
Digital Interface		
Tuning Format	Serial	3 Wire, 12 Bit
Phase Lock Indicator		TTL High
DC Power		
Volts = +12.00	Amps, max	0.35
Volts = +8.00	Amps, max	0.60
Packaging & Environmental		
Operational Case Temperature	Degrees C	-40 TO +70
Humidity	% RH, max	95
Altitude	Feet ASL	10,000
Size (see attached figure)	Inches	1.4 x 4.8 x 5.2

Customer Specific Applications

If you don't see what you need, contact us. MicroSource takes pride in being a world class, fast turn design center for microwave YIG based component, subsystems and synthesizers.