



Synthesizer, SMT

Frequency 770-820MHz

PLL25A-795M

Features

- ◆ Low Power Consumption
- ◆ Low Phase Noise
- ◆ Fast Settling Time
- ◆ Integrated VCO, PLL IC, Loop Filter

Applications

- ◆ Commercial Wireless Applications

Electrical Specifications, $T_A = +25^{\circ}\text{C}$, $V_{CC} = +5\text{V}$ (unless otherwise stated)

Parameter	Units	Min	Typ	Max
Frequency Range –	MHz	770		820
Step Size	kHz		50	
Settling Time – To within 1 kHz	mSec		2.5	
Output Power –	dBm	1.0		4.0
Output Phase Noise:				
100Hz	dBc/Hz		-83	-81
1 kHz	dBc/Hz		-81	-78
10 kHz	dBc/Hz		-100	-97
100 kHz	dBc/Hz		-127	-124
1MHz	dBc/Hz		-153	-150
Power Supply –	Volts	+4.75	5.00	+5.25
Supply Current	mA		-	-
Spurious Product – 50 kHz	dBc		-80	-70
Reference Feedthrough –	dBc		-80	-70
Harmonic Suppression:				
2nd Harmonic	dBc		-10	
3rd Harmonic	dBc		-20	
Ref Osc Signal				
Frequency	MHz		10	
Amplitude	Vp-p	0.4		2
Phase Noise – 1 kHz	dBc/Hz		-145	
Input Impedance	k Ω		10	
Output Impedance –	Ω		50	
Operating Temperature Range	$^{\circ}\text{C}$	-40		+85
PLL IC	ADF4113			

Comments

All specifications apply with a 50 ohm load impedance+

Phase Noise:

E4445	795MHz	820MHz	ADIsimPLL	Units
100Hz	-83	-83.66	-85.80	dBc/Hz
1 kHz	-81	-79.04	-80.46	dBc/Hz
10 kHz	-100	-101.26	-100.3	dBc/Hz
100 kHz	-123	-123.68	-138.8	dBc/Hz
1MHz	-145	-145	-178.7	dBc/Hz