



The MP897/942/1747/1842/140K-LN-A is a Quad-Band low noise amplifier for 900MHz and 1800 application. The amplifier employs advance E-pHEMT devices that provide ultra low noise figure, a wide dynamic range, broadband, and high efficiency. The amplifier system integrates band pass filter and quadplexers.



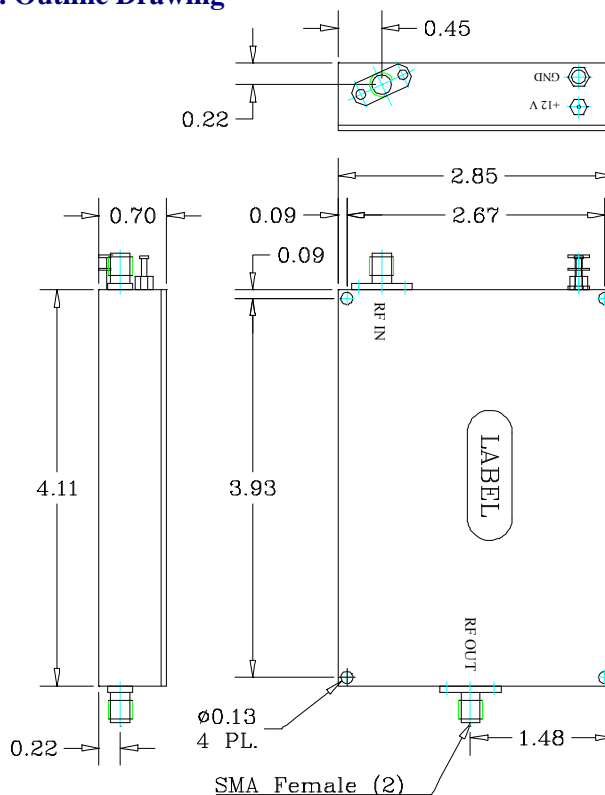
Model: MP897/942/1747/1842/140K-LN-A

1. Electrical Characteristics		
Item	Value	Note
Frequency Band 1	880 ~ 915 MHz	
Gain	25 ± 1.0 dB	
Input IP3 (dBm, Min.)	5	@ -20 dBm Input 0.8 MHz Tone Spacing
IIP2 (dBm, Min)	15	@ -20 dBm Input
Frequency Band 2	925 ~ 960 MHz	
Gain	15 ± 1.0 dB	
Input IP3 (dBm, Min.)	14	@ -10 dBm Input 0.8 MHz Tone Spacing
IIP2 (dBm, Min)	15	@ -20 dBm Input
Frequency Band 3	1710 ~ 1785 MHz	
Gain	30 ± 1.0 dB	
Input IP3 (dBm, Min.)	-2	@ -25 dBm Input 0.8 MHz Tone Spacing
IIP2 (dBm, Min)	45	@ -25 dBm Input
Frequency Band 4	1805 ~ 1880 MHz	
Gain	25 ± 1.0 dB	
Input IP3 (dBm, Min.)	2	@ -25 dBm Input 0.8 MHz Tone Spacing
IIP2 (dBm, Min)	40	@ -25 dBm Input
General		
Gain Flatness	± 2.0 dB (Typ), Cross Pass Band ± 0.2 dB (Max.) Over 200 KHz	
Noise Figure	2.5 dB (Max.)	@ +25°C
Output P1	+13 dBm (Min.)	
Input VSWR	2.0 :1 (Max.)	
Spurious Level	-149 dBm/Hz (Max.)	Goal "Not Measurable"
Max. Input Without Damage	+ 25 dBm	
DC Input Voltage	+12V	
Power Consumption	2.2 Watts (Max.)	
Input / Output Impedance	50 Ω	

2. Mechanical Characteristics		
RF Connector	SMA- Female	
DC Input Connector	#8 Feedthru	
Dimensions	4.80" x 2.85" x 0.70"	
Weight	0.49 lb (0.23kg) (Max.)	
IP Rating	65	Designed to meet

3. Environment Characteristics (Designed to meet)			
	Min.	Typ.	Max.
Operating Ambient Temperature (°C)	-20		+70
Non-operating Temperature (°C)	-40		+85
Humidity	MIL-STD-810G Method 507.5		
Shock / Vibration	MIL-STD-810G (Vibration Method 514.6, Category 20)		
Salt Spray	ASTM B117-96 Hour		

4. Outline Drawing



Revision History			
REV	Reason to Change	Date	Initialed by
	Production Proposed	11.21.16	Y.Z.
	Customer Approved for Phase I	12.06.16	Y.Z.