

## HD27086      5600–6000MHz Input Block Down Converter

### Features

- Input Frequency : 5600 to 6000MHz
- Output Frequency: 2144 to 2544MHz
- Fixed Local Oscillator: 3456MHz
- Conversion Gain: 30dB
- Noise Figure: 3.0dB
- Internal Reference TCXO: 36MHz
- DC Power: 12V
- SMA Connector



### Description

HD27086 is a low cost Block-Down Converter, designed for converting 5.6-6.0GHz to 2.144-2.544GHz Wireless Video applications.

### Electrical Specifications @ +25 °C, $Z_S = Z_L = 50 \text{ Ohms}$

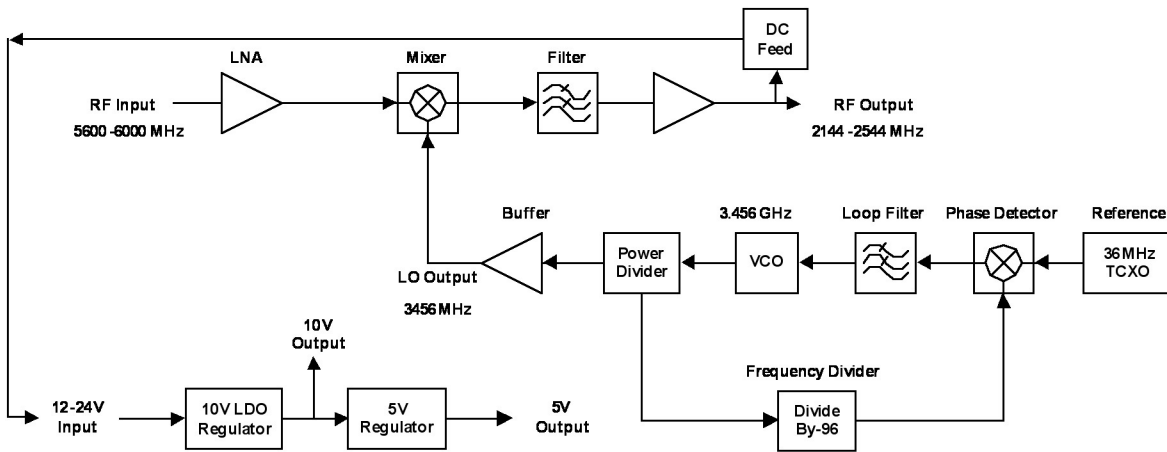
Parameter	Unit	Minimum	Typical	Maximum
Input Frequency Range	MHz	5600		6000
Output Frequency Range	MHz	2144		2544
Maximum Input Power Level	dBm		-10	
Conversion Gain	dB		30	
Noise Figure	dB		3.0	
$P_{1dB}$ @ 5.8GHz Input	dBm		-2	
Fixed Local Oscillator Frequency	MHz		3456	
Fixed Frequency Divider Ratio			96	
Internal Reference TCXO	MHz		36	
Phase Noise @ 1KHz Offset*	dBc/Hz		-90	
LO Leakage at RF Output	dBm		-30	
Input VSWR			1:1.5	
Output VSWR			1:2.0	

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DC Power (from Output Port)	V	12		24
Supply Current	mA		300	

\* Phase Noise is measured at 3456MHz LO

### Block Diagram



HD27086 Block Diagram

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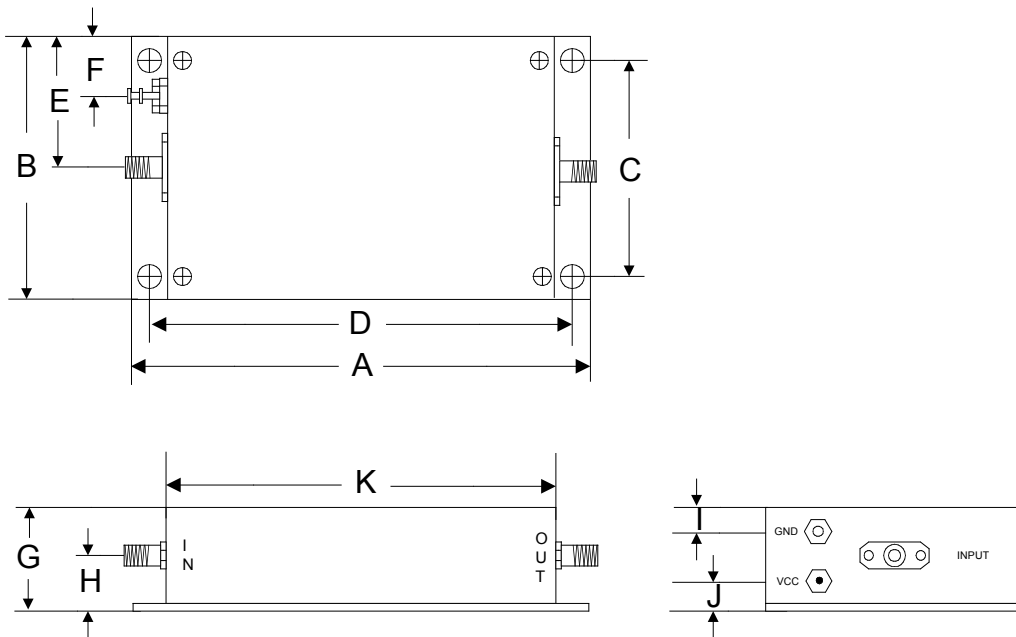
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**Absolute Maximum Ratings**

Parameter	Absolute Maximum
Input Power	+20dBm
Supply Voltage	+16V
Operating Temperature	-40 °C to +85 °C
Storage Temperature	-55 °C to +100 °C

**Outline**



	A	B	C	D	E	F	G	H	I	J	K
<b>Inch</b>	3.750	2.000	1.750	3.400	1.000	0.400	0.813	0.375	0.300	0.238	3.000
<b>mm</b>	92.25	50.80	44.45	86.36	25.40	10.16	20.64	9.53	7.62	6.03	76.20