

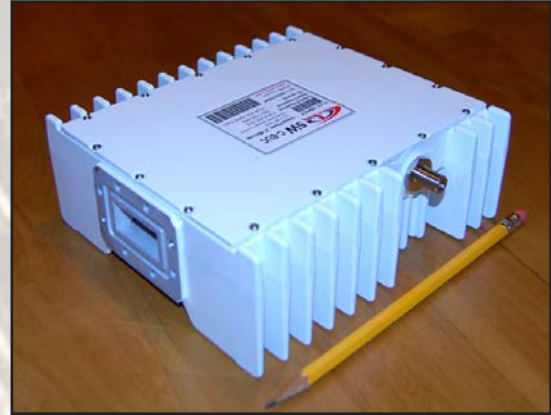


# 5W C-Band Block Up Converter

## KEY FEATURES

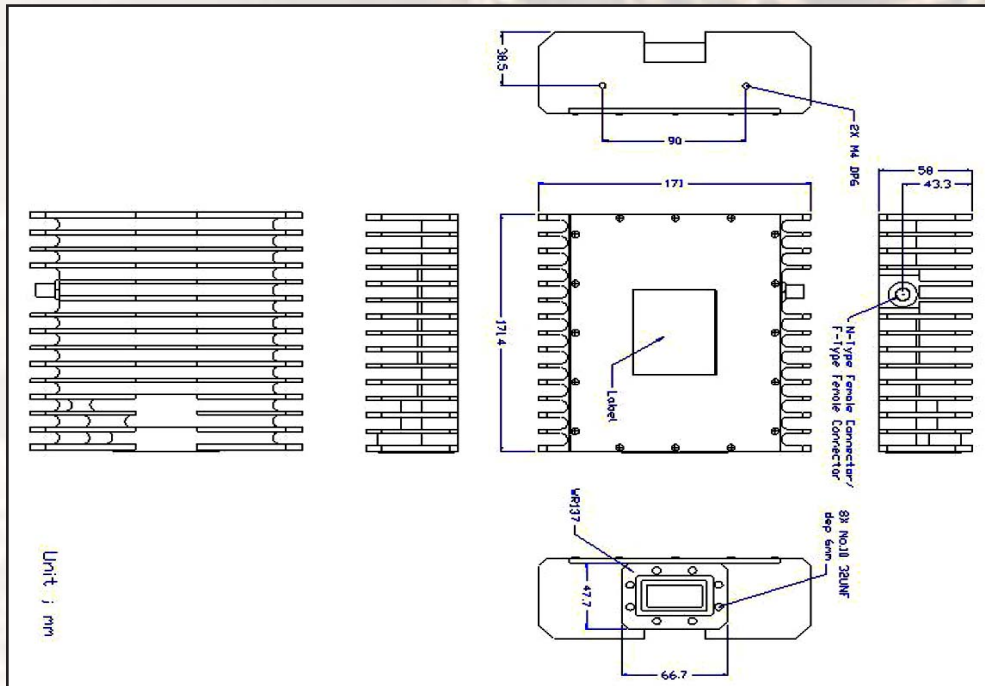
- ◆ Small package size and weight
- ◆ Feed horn mounting
- ◆ Powered through IF cable
- ◆ Low power consumption (<46W)
- ◆ High power efficiency (5W min @P1dB over temperature)
- ◆ Standard, Palapa and Extended C-Band options
- ◆ RoHS compliant
- ◆ Three-year warranty

**ABA5C / ABA5CF**  
**ABA5CP / ABA5CPF**  
**ABA5CE / ABA5CEF**



This small and light weight 5W L-To C-Band Block Up Converter is designed to be mounted on the feed horn. High power efficiency resulting in low current ( $\leq 2$  amps) consumption allows user to pass DC supply voltage via IF cable. The unit is ideal for network and point to point, data distribution, portable and emergency applications.

## Mechanical Drawing





# 5W C-Band Block Up Converter

<b>TECHNICAL SPECIFICATIONS</b>		
<b>RF frequency</b>	<b>ABA5C</b> <b>ABA5CP</b> <b>ABA5CE</b>	5.850 to 6.725 GHz 6.425 to 6.725 GHz 6.725 to 7.025 GHz
<b>Local oscillator</b>	<b>ABA5C</b> <b>ABA5CP</b> <b>ABA5CE</b>	4.90 GHz, non-inverting 5.275 GHz, non-inverting 5.75 GHz, non-inverting
<b>IF frequency</b>	<b>ABA5C</b> <b>ABA5CP</b> <b>ABA5CE</b>	950 to 1,525 MHz 1,150 to 1,450 MHz 975 to 1,275 MHz
<b>Output power @ P1dB min over temperature</b>		5W (+37 dBm min.)
<b>IF connector</b>		N-type or F-type
<b>Power supply</b>		+15 VDC~+24 VDC via IF cable 46 W max
<b>Output interface</b>		CPR-137 Grooved
<b>Gain</b>		60 dB nominal
<b>IMD3</b>		-30 dBc max
<b>L.O. Leakage</b>		-45 dBm max
<b>Spurious</b>		-50 dBc max
<b>Gain variation</b>	<b>over 40 MHz</b> <b>over 575 MHz</b>	0.7 dB p_p 2.0 dB p_p
<b>Over operating temperature</b>		2.2 dB p_p @ fixed frequency
<b>Requirement for external reference</b>		via IF cable
	frequency	10 MHz (sine-wave)
	input power	-5 to +5 dBm @ input port
<b>Phase noise</b>		-53 dBc/Hz max. @ 10 Hz
		-63 dBc/Hz max. @ 100 Hz
		-73 dBc/Hz max. @ 1 kHz
		-83 dBc/Hz max. @ 10 kHz
		-93 dBc/Hz max. @ 100 kHz
		-110 dBc/Hz max @ 1 MHz
<b>Noise figure</b>		20 dB max
<b>Input V.S.W.R.</b>		2 : 1 max
<b>Output V.S.W.R.</b>		2 : 1 max.
<b>Mute</b>		Shut off the BUC in case of L.O. unlocked
<b>Input interface</b>	<b>ABA5C</b> <b>ABA5CF</b>	50 Ohm (N-type IF in) 75 Ohm (F-type IF in)
<b>Temperature range (ambient)</b>		
	operating	-40 deg C to +55 deg C
	storage	-40 deg C to +75 deg C
<b>Dimensions &amp; housing</b>		175 (L) x 160 (W) x 64 (H) mm 6.89" (L) x 6.52" (W) x 2.52" (H)
<b>Weight</b>		1.8 kg (3.97 lbs) max