#### **GaN Based Product**



# 6W Super Mini Ext. Ku-Band BUC

#### **KEY FEATURES**

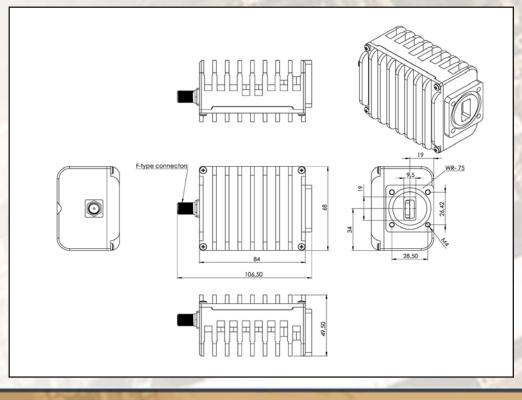
- Output frequency 13.75-14.50 GHz
- L.O. 12.80 GHz
- Smallest package size and weight
- Powered through IF cable
- Industry's lowest power consumption (<25W)</li>
- RoHS compliant
- Three-year warranty

## ABA6SKX / ABA6SKXF



This smallest and lightest 6W L-To Ku-Band Block Up Converter is based on GaN technology and is designed to be mounted directly on the feed horn. High power efficiency resulting in low current (< 1 amps) consumption allows to use this BUC with any modem without an external power supply.

#### **Mechanical Drawing**





## **GaN Based Product**

# 6W Super Mini Ext. Ku-Band BUC

TECHNICAL SPECIFICATIONS	
RF frequency	13.75 to 14.50 GHz
Local oscillator	12.80 GHz
IF frequency	950 to 1,700 MHz
Output power	6W (+37.8 dBm min.)
IF connector	N-type or F-type
Power supply	+15 VDC~+24 VDC via IF cable 25 W max
Output interface	WR-75 Grooved
Gain	62 dB nominal
IMD3 (two tones)	-26 dBc max. 2 signal 5MHz apart at P-LINEAR
L.O. leakage	-45 dBm max
Spurious	-50 dBc max
Spectral regrowth (QPSK at 1.5x and OQPSK at 1.0x symbol rate offset with 2dB back-off from rated output power)	-30 dBc
TX Gain variation TX Gain stability over temperature range	± 0.5 dB over 40MHz ± 1.8 dB over full band ± 1.5 dB typ., ± 1.8 dB max.
Requirement for external reference	via IF cable
frequency	10 MHz (sine-wave)
input power	-5 to +5 dBm @ input port
Phase noise – Exceeds and Intelsat's standard IESS308/309 and NJRC's specification	-53 dBc/Hz max. @ 10 Hz -63 dBc/Hz max. @ 100 Hz -73 dBc/Hz max. @ 1 KHz -83 dBc/Hz max. @ 10 KHz
Noise power density Transmit Receive	-93 dBc/Hz max. @ 100 KHz -60 dBm/Hz (max.) -155 dBm/Hz (max.)
Noise figure	20 dB max
Input V.S.W.R.	2 : 1 max
Output V.S.W.R.	2 : 1 max.
	Shut off the BUC
Mute Input interface ABA6SKX ABA6SKXF	in case of L.O. unlocked 50 Ohm (N-type IF in) 75 Ohm (F-type IF in)
Temperature range (ambient) opeating	-40 deg C to +55 deg C
	<b>U</b>
storage	-55 deg C to +85 deg C
Vibration & shock	Complies with MIL-STD-810E
Dimensions & housing	84 (L) x 68 (W) x 49.5 (H) mm
Weight	3.36" (L) x 2.7" (W) x 1.98" (H) 0.340 kg (0.75 lbs) max