

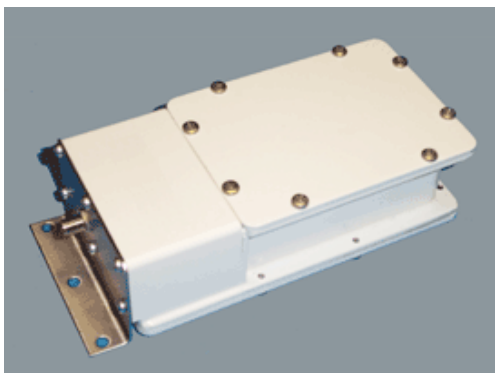
RADITEK

SATCOM

C Band BDC / PLL

Block Downconverter

C-Band, Phase Lock



Advantages-

- ❖ Low Noise Figure
- ❖ Superior VSWR
- ❖ Excellent Phase Noise & Stability
- ❖ RF & IF filters for optimum results
- ❖ Tune for very low bandpass ripple
- ❖ Optimize Gain distribution
- ❖ Weather resistant O-ring sealed Connectors

Order Examples: RBDC-3.4-4.2-L-Nf-Nf-20d-PLL-o8

Description: (Block Downconverter, 3.4-4.2GHz, L Band, N female, N female Connectors, 20dB Gain, Phase Lock)

Frequencies

L.O.	Input	Output	Bandwidth	Units
5.15	3.70 to 4.20	0.95 to 1.45	0.500	GHz
5.15	3.60 to 4.20	0.95 to 1.55	0.600	GHz
5.15	3.40 to 4.20	0.95 to 1.75	0.800	GHz
5.95	4.50 to 4.80	1.15 to 1.45	0.300	GHz

Options –

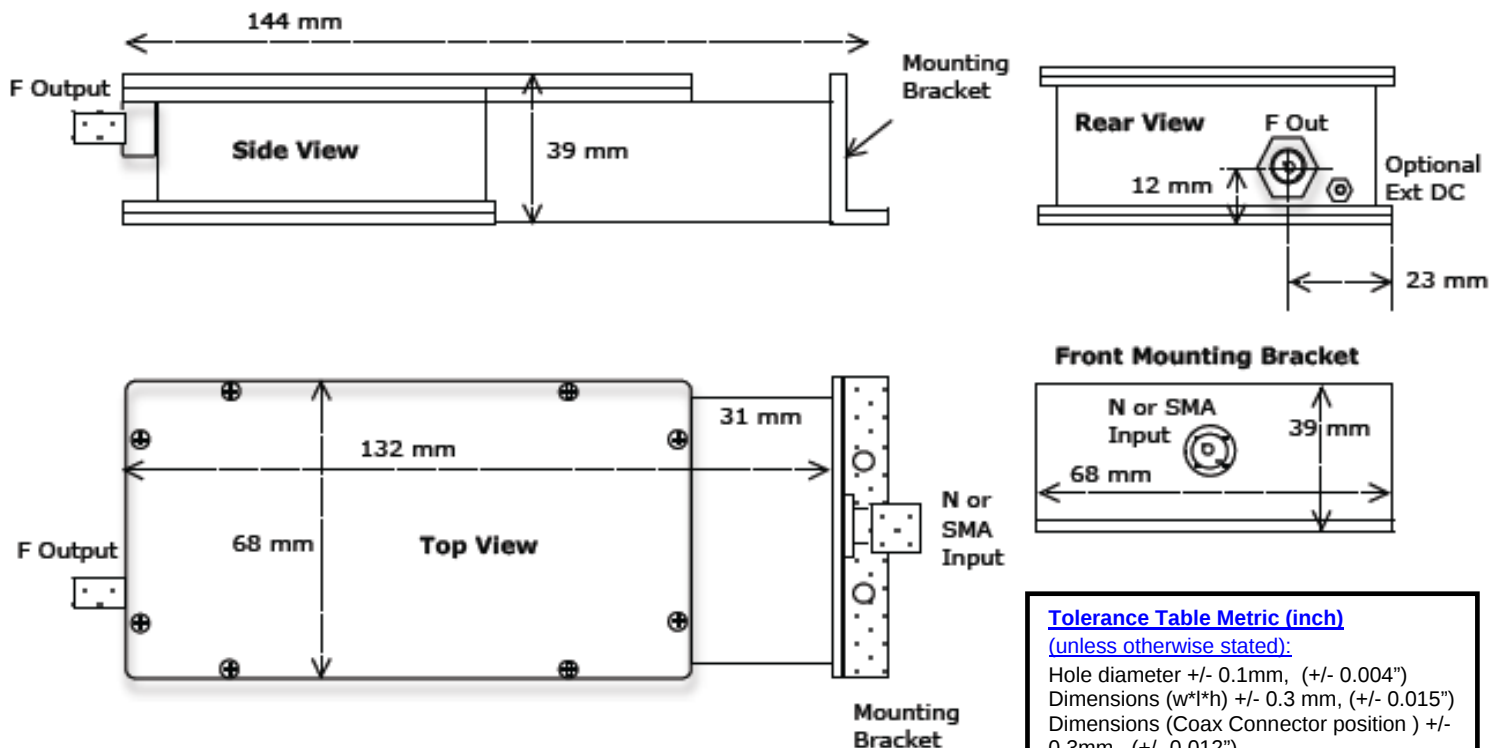
- ❖ External DC Connector Options – F, N, BNC or Feedthrough
- ❖ External DC to Crystal for Rackmount
- ❖ Special Dual DC via output coax & ext DC port
- ❖ Custom Alarm for redundant switch

Specifications		Units
Noise Figure (typical)	10	dB
Ripple (36 MHz Segement)	±0.5	dB (Max)
Input VSWR	1.5	:1 (typical)
Output VSWR	1.5	:1 (typical)
Gain	10, 20, 30 or 40	dB
L.O. Stability	±3	kHz
Compression	+10	dBm (min)
3 rd Order Intercept	+20	dBm (min)
DC Input	12 to 24	VDC
	250	mA (typical)
Filtering	Transient, over & reverse, voltage protected	
Size	144x68x39	mm
Weight (approximate)	550	Grams
Paint	Brilliant White Enamel	
Operating Temperature	-40 to + 60	°C
Relative Humidity	Up to 100% condensation and Frost	
DC I/P	Coax (Default), External or Dual Power (Optional)	

Block Downconverter C-Band, Phase Lock

code-o8

Mechanical Drawing



Tolerance Table Metric (inch)

(unless otherwise stated):

Hole diameter $\pm 0.1\text{mm}$, (± 0.004 ")
 Dimensions (w*h) $\pm 0.3\text{mm}$, (± 0.015 ")
 Dimensions (Coax Connector position) $\pm 0.3\text{mm}$, (± 0.012 ")
 Dimensions (hole position) $\pm 0.1\text{mm}$, (± 0.04 ")

Machined surfaces

Flatness 0.025/mm, (0.001/ inch)
 Bend radius 0.8mm, (0.031" or 1/32")

Block Diagram

