



Block up Converter

L(950-1950MHz) to Ka(29-30GHz)

N Female Connector, 10MHz External Reference

3, 4, 5, 6 & 10 Watts



Order Examples: RBUC-L(950-1450M) to Ka(29.5-30.0)-Nf-ER10M-3W-w17

Description: (Block Up Converter, L Band(950-1450MHz) to Ka(29.5-30.0GHz), N-Type Female Connector, 10MHz External Reference, 3 Watts)

Additional Option: L(950-1950M) to Ka(29.0-30.0) F female 2W, 4W, 5W, 6W, 10W

Parameters		Specification						Unit
Model		2 29.5-30	3 29.5-30	4 29-30	5 29.5-30	6 29.5-30	10 29.5-30	W GHz
Frequency	Input frequency	950~1450	950~1450	950~1950	950~1450	950~1450	950~1450	MHz
	Output frequency	29.5~30.0	29.5~30.0	29.0~30.0	29.5~30.0	29.5~30.0	29.5~30.0	GHz
	L.O. Frequency	28.55	28.55	28.05	28.55	28.55	28.55	GHz
Interfaces								
Connector Input	Connector type	N/ F	N/ F	N/ F	N/ F	N/ F	N/ F	female
	Impedance	50 or 75	50 or 75	50	50 or 75	50	50	ohm
	VSWR	≤2.0**	≤2.0**	≤2.0**	≤2.0**	≤2.0**	≤2.0**	
	Return Loss	≤-10**	≤-10**	≤-10**	≤-10**	≤-10**	≤-10**	dB
	DC Supplied	IF	IF	IF	IF	IF	IF	Connector
Connector Output	Connector type	WR-28	WR-28	WR-28	WR-28	WR-28	WR-28	
	VSWR	≤2.0**	≤2.0**	≤2.0**	≤2.0**	≤2.0**	≤2.0**	
	Return Loss	≤-10**	≤-10**	≤-10**	≤-10**	≤-10**	≤-10**	dB
Electrical								
Phase Noise	@ 100Hz	≤-60	≤-60	≤-60	≤-60	≤-60	≤-60	dBc/Hz
	@ 1KHz	≤-70	≤-70	≤-70	≤-70	≤-70	≤-70	dBc/Hz
	@ 10KHz	≤-80	≤-80	≤-80	≤-80	≤-80	≤-80	dBc/Hz
	@ 100KHz	≤-90	≤-90	≤-90	≤-90	≤-90	≤-90	dBc/Hz
Output Power	P1dB	≥ 2	≥ 3	≥ 4	5.01	6	10	W
		33	34.5 (typ)	≥36	37 (typ)	37.5	54	dBm
Spectrum Regrowth	QPSK 2.0Msps, Roll off 0.35	≤-25*	≤-25*	≤-19*	≤-19*	≤-25*	≤-25*	dBc
Gain	Typical	55	55	57	57	57	60	dB
Gain Flatness @ 25°C		≤4	≤4	≤4	≤ 4	≤4	≤4	dBp-p
Gain Variation Over Temp.		≤ 4	≤ 4	≤ 4	≤ 4	≤ 5	≤ 5	dBp-p

Note * Back off 3dB at P1dB Return Loss

****** Can be improved with the addition of an isolator

RBUC-L-Ka-Nf-ER10M-xW-Generic-w17

Specifications may be subject to change

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WORLD HQ: 1702L Meridian Ave. Suite 127, San Jose, Ca 95125, U.S.A.

Tel: (408) 266-7404

FAX: (408) 266-4483

WEB: www.raditek.com

E-mail: sales@raditek.com

BUC, L(950-1950MHz) to Ka(29-30GHz), N Female Connector, 10MHz External Reference, 3, 4, 5,6, 10 Watts

Model		2W	3W	4W	5W	6W	10W	Units
Spurious	In Band	≤-50	≤-50	≤-50	≤-50	≤-55	≤-55	dBc
	Out Band	≤-50	≤-50	≤-50	≤-50	≤-55	≤-55	dBc
DC input voltage		+15~+24	+15~+24	+15~+24	+15~+24	+24	+24	VDC
Power Consumption		@ P1dB	≤35	≤35	≤50	≤50	TBD	W
External Reference Requirement								
Frequency Reference	Frequency	10	10	10	10	10	10	MHz ±15ppm
	External Reference level	-5~5	-5~5	-5~5	-5~5	-5~5	-5~5	dBm
Recommended 10MHz External Reference Phase Noise	@ 10Hz	-120	-120	-120	-120	-120	-120	dBc/Hz
	@ 100Hz	-140	-140	-140	-140	-140	-140	dBc/Hz
	@ 1KHz	-145	-145	-145	-145	-145	-145	dBc/Hz
	@ 10KHz	-150	-150	-150	-150	-150	-150	dBc/Hz
	@ 100KHz	-150	-150	-150	-150	-150	-150	dBc/Hz
Mechanical & Environmental								
Dimension		190X110X57	190X110X57	190X110X65	190X110X65	TBD	TBD	mm
Weight		1.4	1.4	1.6	1.5	TBD	TBD	Kg
Operating Temperature		-40 ~ +55	-40 ~ +55	-40 ~ +55	-40 ~ +55	-40 ~ +55	-40 ~ +55	°C