

Block Up-Converter

50W Output Power

Model: TLBUC12.75G13.25G-50W

The TLBUC12.75G13.25G-50W is a block up-converter operating in the Ku-band. It features an integrated local oscillator, with input IF frequency of 950-1450 MHz and output RF frequency of 12.75 to 13.25 GHz. Providing up to 50W of saturated output power.

Features:

- IF Frequency: 950-1450MHz.
- RF Frequency: 12.75-13.25GHz.
- Saturated output power: 50W.

Applications:

- Communication/Radar Systems
- Test Labs

电气特性 Electrical Characteristics:

参数 Parameter		Min	Typ	Max	单位 Units
RF频率范围 RF Frequency Range		12.75		13.25	GHz
LO频率范围 LO Frequency range			11.8		GHz
IF频率范围 IF Frequency Range		950		1450	MHz
输出功率 Output Power		50			W
线性输出功率 Output P1dB			47		dBm
增益 Gain			72		dB
杂散 Spurious	In Band			-60	dBc
	Out of Band			-50	dBc
外参考输入频率 External Reference Input Frequency			10(sine wave)		MHz
外参考输入功率 External Reference Input Power		-5		5	dBm
增益平坦度 Gain Flatness	@54MHz			1.5	dB
	@full band		4		
温度变化增益平坦度 Gain Flatness@temperature range			4		dB

电气特性 Electrical Characteristics:

参数 Parameter		Min	Typ	Max	单位 Units
相位噪声 Phase Noise	@100Hz			-65	dBc/Hz
	@1KHz			-135	
	@10KHz			-140	
	@100KHz			-95	
驻波 VSWR				2	:1
直流电压 DC Supply Voltage		36		60	V DC
功耗 Power Consumption@Psat				390	W

机械特性 Mechanical Specifications:

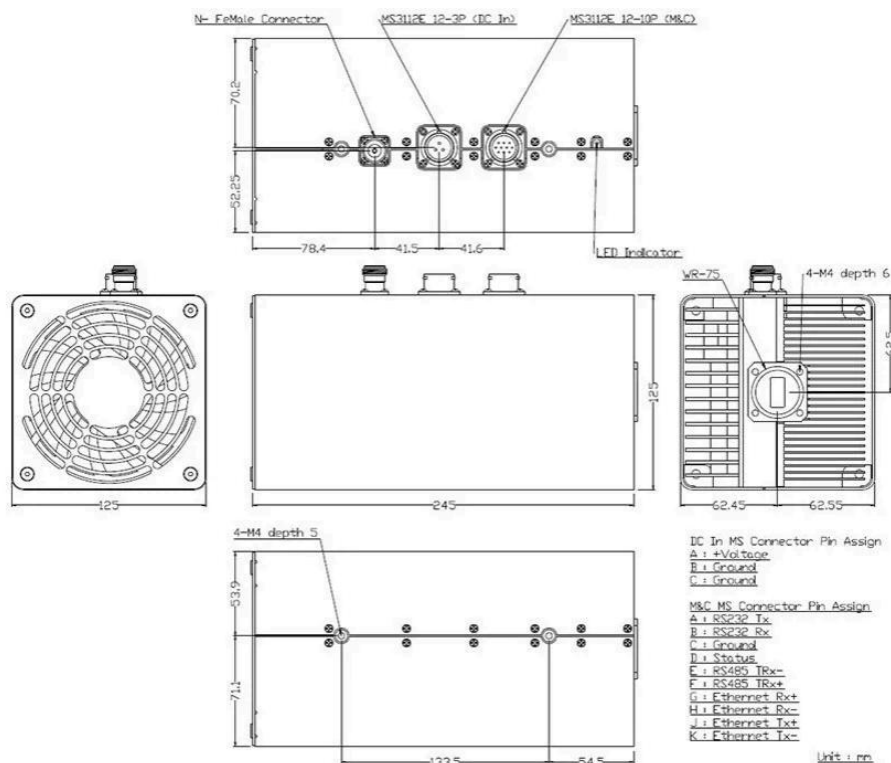
参数 Parameter	指标 Value	单位 Units
IF接口 IF Connector	N type	
防护等级 Ingress Protection Grade	IP-55	
尺寸 Size	245*125*125	mm
重量 Weight	4	Kg

绝对最大值 Absolute Maximum Ratings:

参数 Parameter	指标 Value
IF输入功率 IF Input Power	+5 dBm
ESD灵敏度 ESD sensitivity (HBm)	Class 0, passed 150V

外形尺寸 Outline Drawing:

Unit:mm; Tolerance:±0.1mm



ESD Protection: Strictly adhere to ESD precautions to prevent electrostatic damage.

温度环境 Environmental Conditions:

参数 Parameter	Min	Typ	Max	单位 Units
操作温度 Operating Temperature	-40		+55	°C
存储温度 Non-operating Temperature	-55		+85	°C
相对湿度 Relative humidity		95		%
海拔 Altitude		3,000		meters
震动 Shock / Vibration(MIL-STD-810F)	10G rms (15 degree 2KHz) endurance			
冲击 Shock(non operating)	50G for 12msc half sin wave			

订货信息 Ordering Information:

标准型号 Base Number	描述 Description	版本号 Revision
TLBUC12.75G13.25G-50W	Block Up-Converter, IF frequency range:950-1450MHz; RF output frequency range: 12.75-13.25GHz; 50W output power	Rev.1.0