

These high performance low noise amplifiers are designed to be antenna mounted.

STANDARD FEATURES

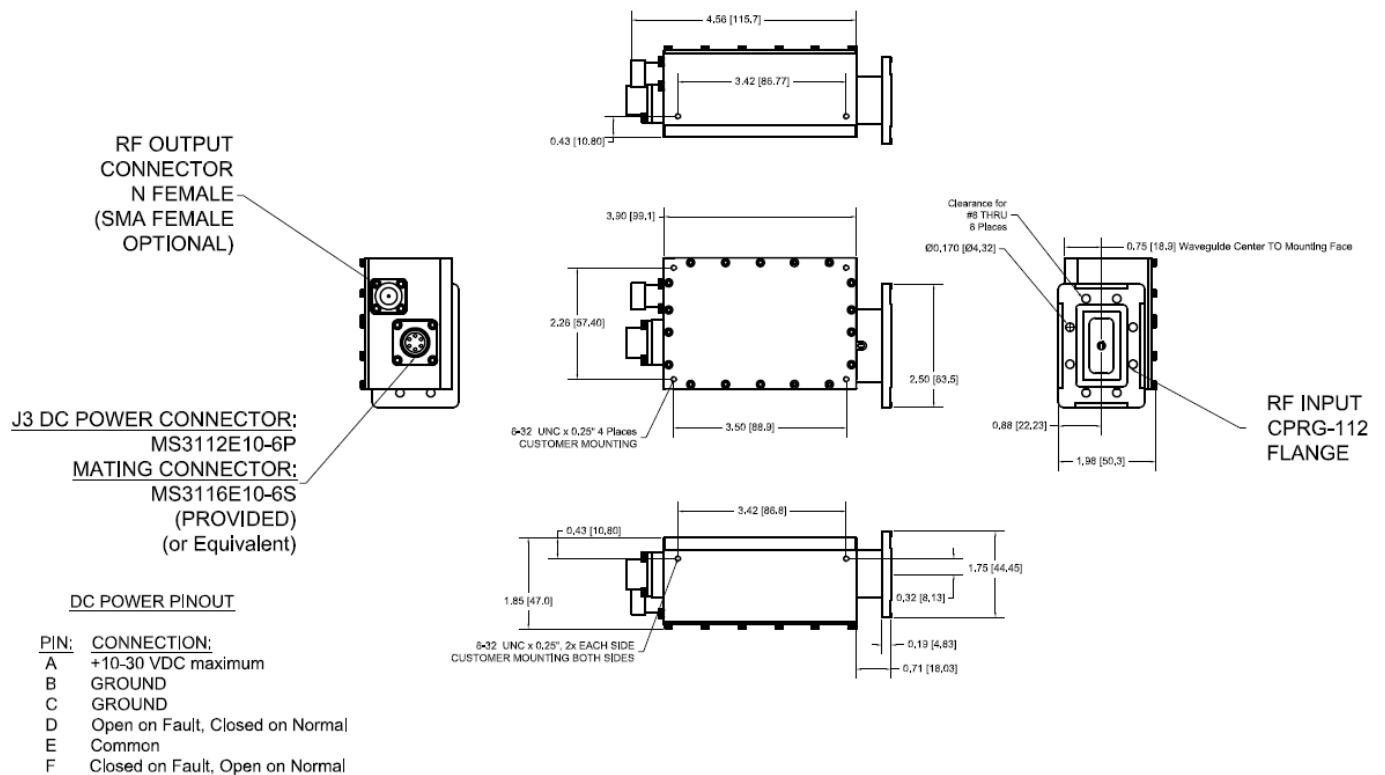
- Weatherproof enclosure
- Ultra low noise performance
- Wide input voltage range
- Operates from -40°C to $+70^{\circ}\text{C}$

OPTIONS

- 40 dB, 50 dB, 60 dB Gain
- SMA or N female output connector
- 23 dBm output P_1 dB compression point



Outline: Standard Configuration



AXC 40000 Series

Ext. C Band SATCOM

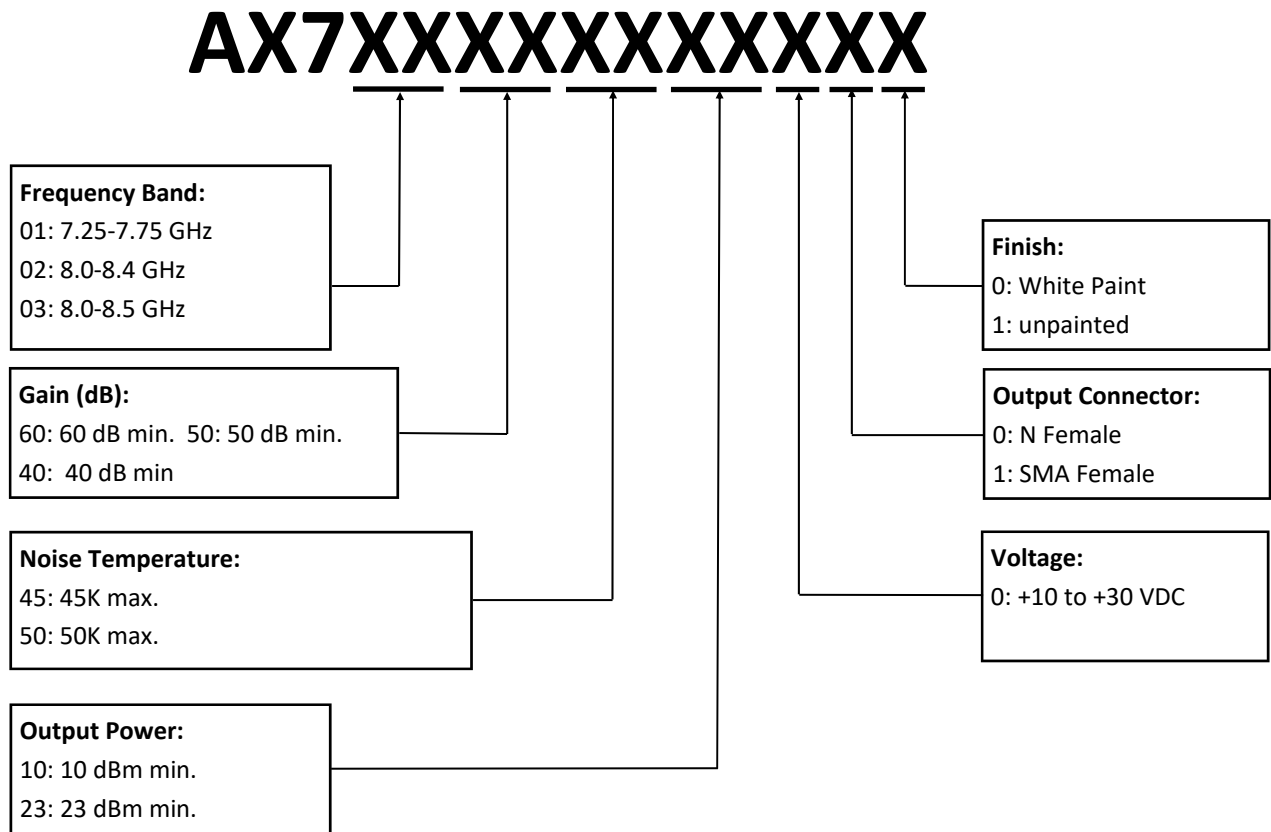
Parameter	Notes	Limits	Units
Frequency Range	Band 01 Band 02 Band 03	7.25—7.75 8.0-8.4 8.0-8.5	GHz GHz GHz
Noise Temperature Selection	At 23°C case.	45, 50 max.	K
Gain	40 dB, 50 dB min. optional	60 min., 64 typ.	dB
Gain Flatness	Full Band, Band	+/-1	dB
Gain Slope	Per 40 MHz	+/-0.2	dB
Gain Stability vs. Time	Short Term (10 min.)	+/-0.1	dB
(Constant Temperature)	Medium Term (24 hours)	+/-0.2	dB
	Long Term (1 week)	+/-0.5	dB
Gain Stability	Versus temperature	-0.06 typ.	dB/°C
VSWR	Input	1.2 typ., 1.25 max.	:1
	Output	1.25 typ., 1.50 max.	:1
Power Output	Standard	+10 min., +15 typ.	dBm
@ 1 dB Compression	Optional (High Power)	+23 min., +24 typ.	dBm
Third Order Output	Standard	+20 min., +25 typ.	dBm
Intercept Point	Optional (High Power)	+30 min., +32 typ.	dBm
Group Delay per 40 MHz	Linear	0.01 max.	nS/MHz
	Parabolic	0.001 max.	nS/MHz ²
	Ripple	0.1 max.	nS p-p
AM/PM Conversion	At -5 dBm output power	0.05 max.	°/dB
Maximum Input Power	Damage threshold	0 max.	dBm
			Power
Requirements	Operating Voltage	+10 to +30	VDC
	Input Power (+10 dBm output)	2.6 nom.	Watts
	Input Power (+23 dBm output)	3.6 nom.	Watts
Mechanical Characteristics			
Size		See Outline on Page 1	
Weight		1.2 nom.	lbs.
Connectors	RF Input RF Output Power/Alarm	CPR112G Type N Female or SMA-F MS3112E10-6P (mate supplied)	
Pressure Test		5 min.	Psi
Environmental			
Operating Temperature		-40 to +70	°C
Humidity	with condensation	100	%

User is responsible for sealing all connectors with appropriate weatherproofing materials. Failure to seal connectors will void warranty for any damage that might occur.

AX 70000 Series

X Band SATCOM LNAs

Part Number Configurator:



Part Number Example:

AX701604510001

Freq: 7.25-7.75 GHz

Gain: 60 dB

Noise Temperature: 45K

Output Power: +10 dBm

Finish: unpainted

Output Connector: N Female

Voltage: +10 to +30 VDC