970E-75/12.5/387

970 Series Receiver

Physical Properties

- Material: 6061 T6 Aluminum
- Dimensions: 1.0x1.0x0.4 Inches
- Flange: UG-387/U
- Finish: Gold Plating
- LO Port: SMA-F
- RF Port: WR-12 Waveguide
- IF Port: SMA-F

SN: 32538

*Picture shown is indicative only.[5]

Electrical Specifications @ 25°C		Test Data			
Parameters	**Specifications**	**Min.**	**Typ.**	**Max.**	**Unit**
RF Input Frequency	60 to 90	60	-	90	GHz
RF Input Power	+5 typ.	-	+5	+10	dBm
IF Output Frequency	DC to 12 GHz	DC	-	12	GHz
LO Frequency	10 to 15	10	-	15	GHz
LO Input Power	+3 typ.	0	+5	+8	dBm
Conversion Loss	15 typ.	-	15	-	dB
Noise Figure	15 typ.	-	15	-	dB
Input P1dB	-5 typ.	-	-5	0	dBm
Bias [1,3]	+6 ~+12 typ.		+6	+12	Vdc
Supply Current	0.2 typ.	0.2	0.3	0.4	A
Max Input RF Power	+12 max.			+12	dBm

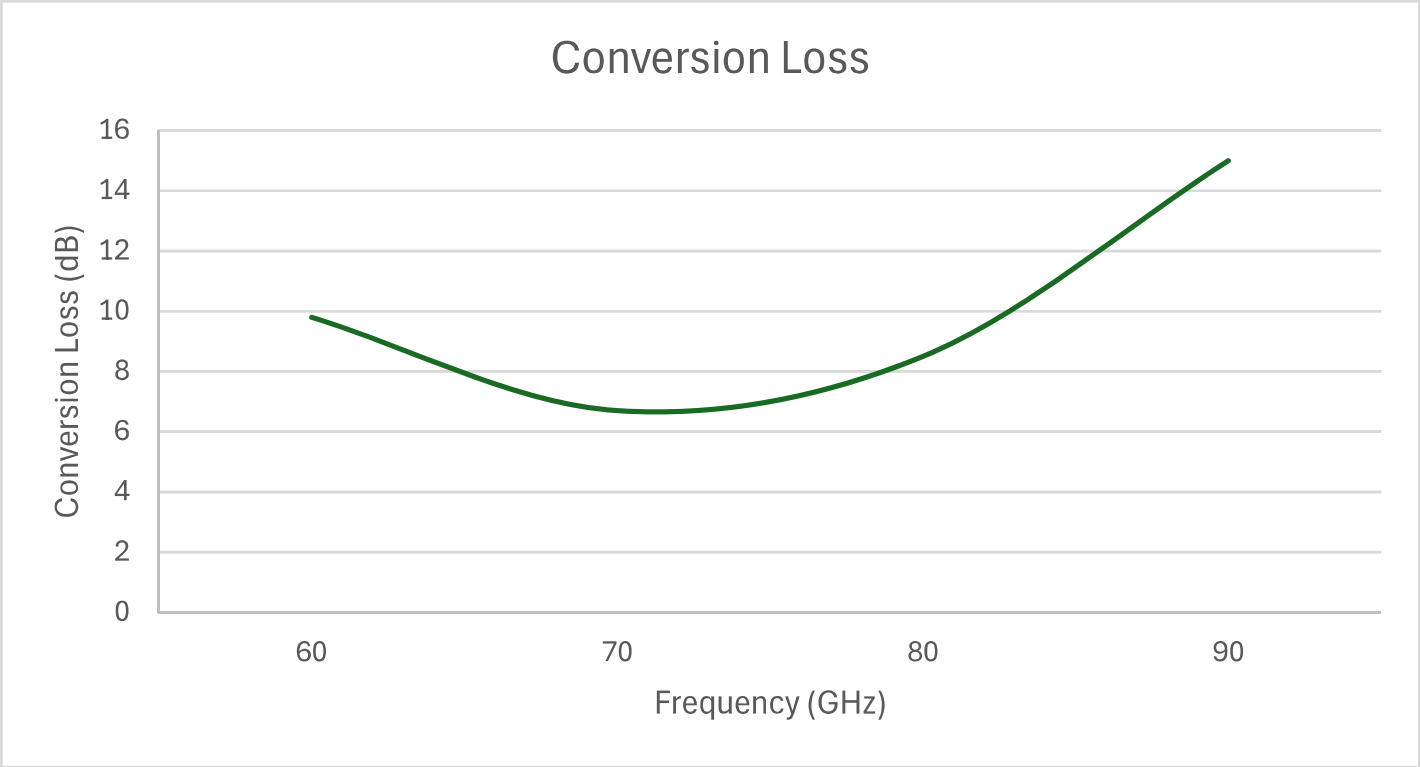
1. DC Supply must be able to source at least 0.8A DC at startup.
2. Open and short-circuit loads are not recommended at the amplifier output. Ensure proper 50 Ohm load before turning the amplifier "ON".
4. Do not put any foreign objects inside the waveguide. Warranty Void.
5. SN or PN may differ from actual unit. Please refer to outline on page 3 for more details.

Absolute Maximum Ratings	
Parameter	**Ratings**
Operating Temperature	-40°C to +80°C
Storage Temperature	-40°C to +100°C
Total Power Dissipation	2W
Input LO Power	+9 dBm
Input RF Power	+11 dBm
DC Operating Voltage	+15V

*Permanent damage may occur if any of these are exceeded.

Biasing Up Procedure	
Step 1	Connect Ground Pin
Step 2	Apply DC Supply Voltage
Step 3	Turn ON RF input
Power Down Procedure	
Step 1	Turn OFF RF input
Step 2	Turn OFF DC Supply Voltage
Step 3	Remove Ground

Conversion Loss Measurement



Tested By: D.P.

Date: 01/06/2026

Outline Drawing