970WF/387

W-Band Balanced Mixer

Physical Properties

- Material: 6061 T6 Aluminum
- Dimensions: 1.0 X 1.0 X 1.0 Inches
- Flange: UG-387/U-M
- Finish: Gold Plating
- RF Port: WR-10 Waveguide
- LO Port: WR-10 Waveguide
- IF Port: SMA-F



SN: G72Z9P

Picture shown above is indicative only.[3]

Electrical Specifications @ 25°C		Test Data			
Parameters	**Specifications**	**Min.**	**Typ.**	**Max.**	**Unit**
RF Frequency	75 to 110	75	-	110	GHz
LO Frequency	75 to 110	75	-	110	GHz
IF Frequency	DC to 25	DC	-	25	GHz
LO Drive Level	+13 typ.	+10	+13	+15	dBm
Conversion Loss	12 typ.	-	12	-	dB
LO to RF Isolation	28 typ.	-	30	-	dB

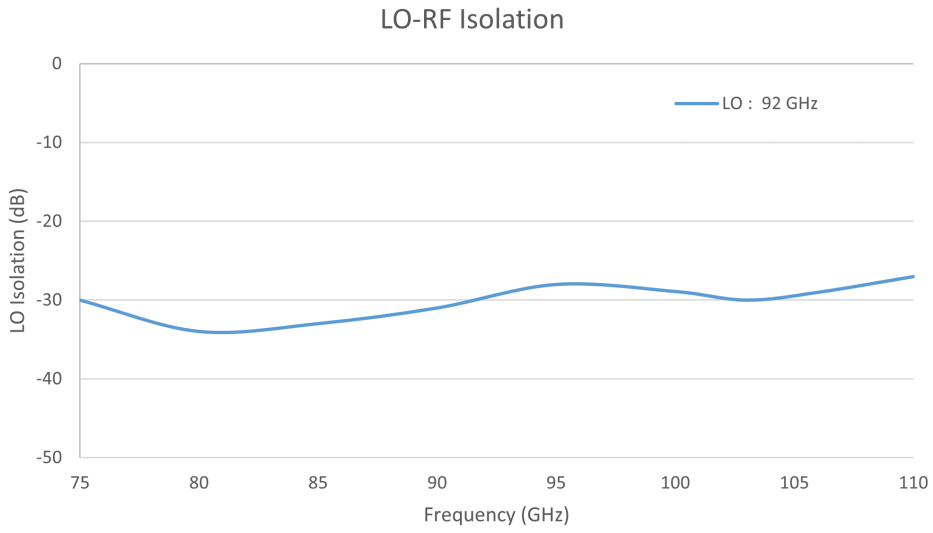
1. Do not put any foreign objects inside the waveguide. Warranty Void.
2. Open and short-circuit loads are not recommended at the mixer output. Ensure proper 50 Ohm load before applying RF.
3. Picture shown above is Indicative only, SN or PN may differ from actual unit. refer to outline on page 2 for more details

Absolute Maximum Ratings	
Parameter	**Ratings**
Operating Temperature	-10°C to +45°C
Storage Temperature	-40°C to +100°C
(LO+RF) Input Power (CW)	+17 dBm

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

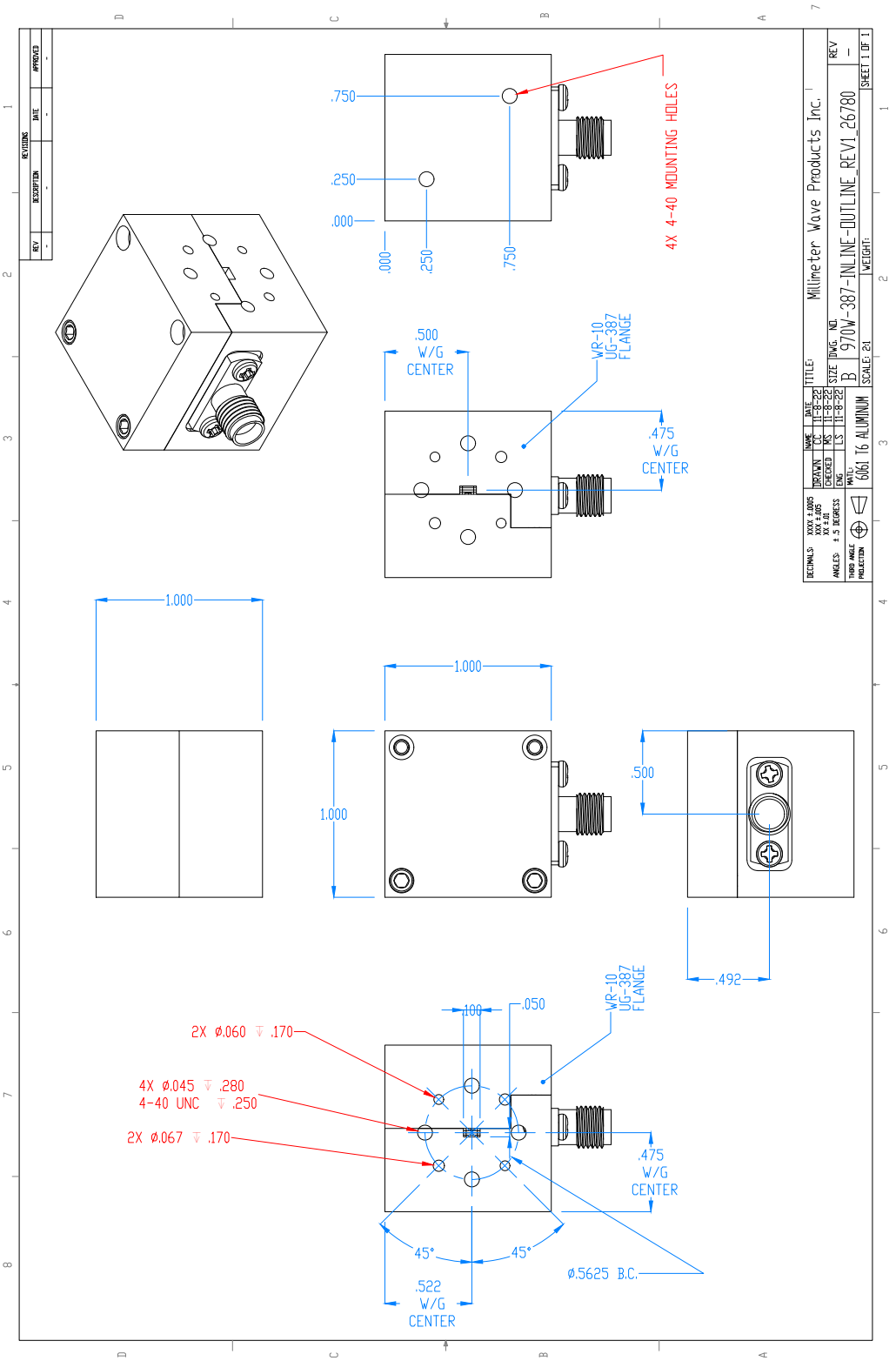
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LO Frequency (GHz)	IF Input Frequency (GHz)	RF Output Frequency (GHz)	IF to RF Conversion Loss (dB)
75	1	76	8.9
75	2	77	7.8
75	3	78	7.2
75	4	79	7.9
75	5	80	7.5
75	6	81	10.3
75	7	82	8.0
75	8	83	7.0
75	9	84	7.1
75	10	85	8.1
75	11	86	9.6
75	12	87	9.9
75	13	88	8.7
75	14	89	8.7
75	15	90	9.8
75	16	91	10.9
75	17	92	10.5
75	18	93	9.4
75	19	94	11.1
75	20	95	8.0
75	21	96	6.1
75	22	97	6.9
75	23	98	9.1
75	24	99	10.3
75	25	100	10.2
75	26	101	9.5
75	27	102	9.6
75	28	103	9.4
75	29	104	11.2
75	30	105	15.3
75	31	106	13.5
75	32	107	11.6
75	33	108	11.5
75	34	109	10.1
75	35	110	9.6



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Outline Drawing



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