

<p><i>Sponsorji in donatorji:</i>  <i>Fakulteta za elektrotehniko Ljubljana</i>  <i>SIPRONIKA d.o.o</i>  <i>Trival antene</i></p> <p>LAST UPDATE 27.07.2003  STRAN JE V IZDELU V!  (in to bo trajalo in trajalo...)</p>	 <p><b>Poštna 7/b</b>  1360 Vrhnika  Slovenija</p>	<p><b>Branko Zemljak, S57C</b></p> <p>PR: S57CS50BOX.SVNEU  e-mail: S57C@HamRADIO.si  <a href="http://lea.hamradio.si/~s57c">http://lea.hamradio.si/~s57c</a></p> <p>telefon: +386 (0)1 755 11 31  GSM: +386 (0)41 717 714  SMS: 041 71 7714 @  <a href="mailto:linux.mobilni@si">linux.mobilni@si</a></p>
---	---	--

**8. S5 UKV SREČANJE, Ljubljana, 13.04.2002,**

Dnevni red srečanja

Poročilo z 8. UKV srečanja, Branko Zemljak, S57C

O 8. UKV srečanju, Dragan Dobricic, YU1AW (srbski jezik)

Rezultati meritev, Marko Cebokli, S57UUU

**Prezentacije**

YU1AW klikni na znak za prenos prezentacije (cca 6MB)

S53WW klikni na znak za prenos prezentacije (cca 1MB)

**S53MV Tehnika za frekvence nad 20GHz**

S53SM v pripravi

**Zvočni posnetki (MP3)**

S57C v pripravi

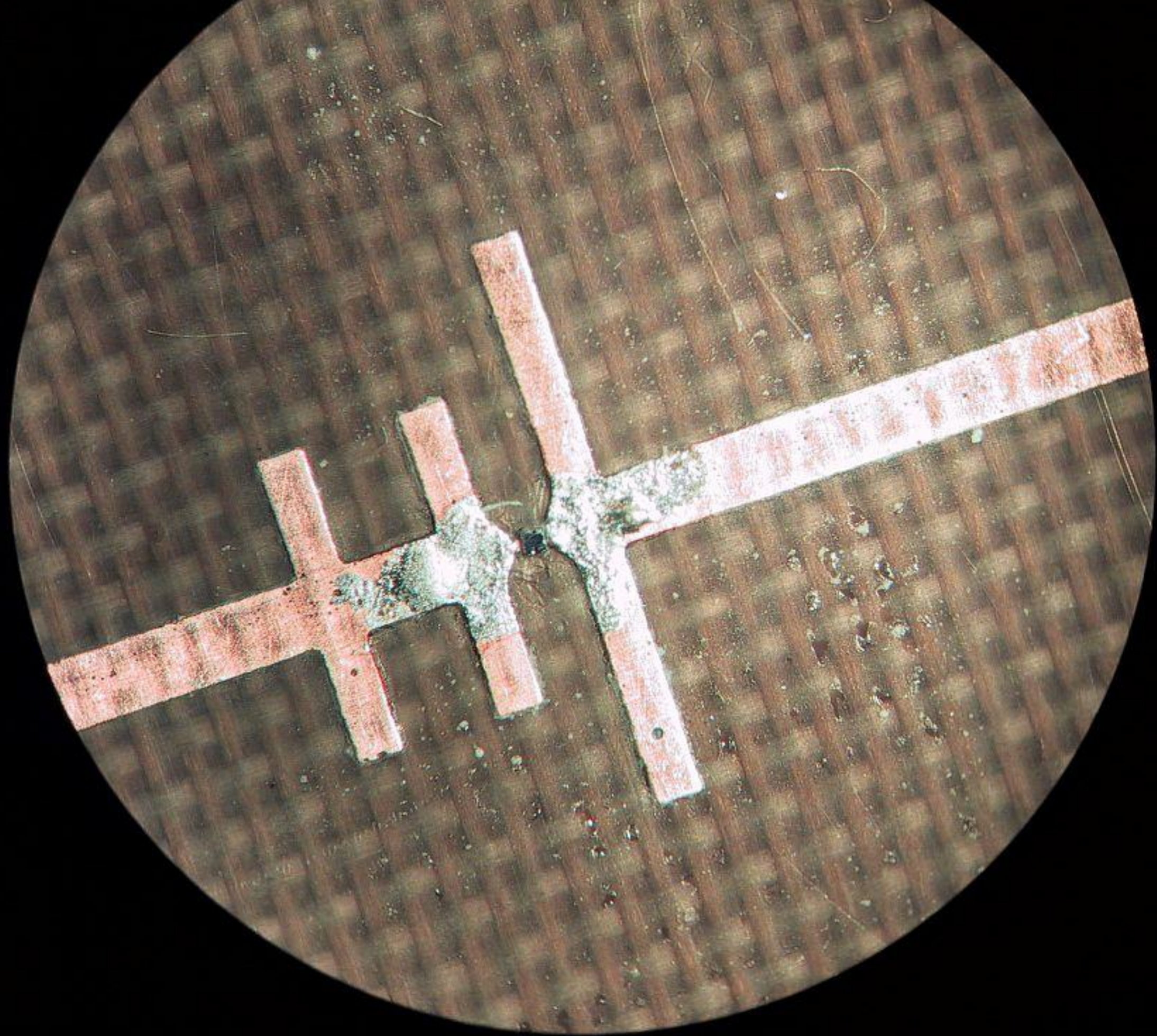
YU1AW v pripravi

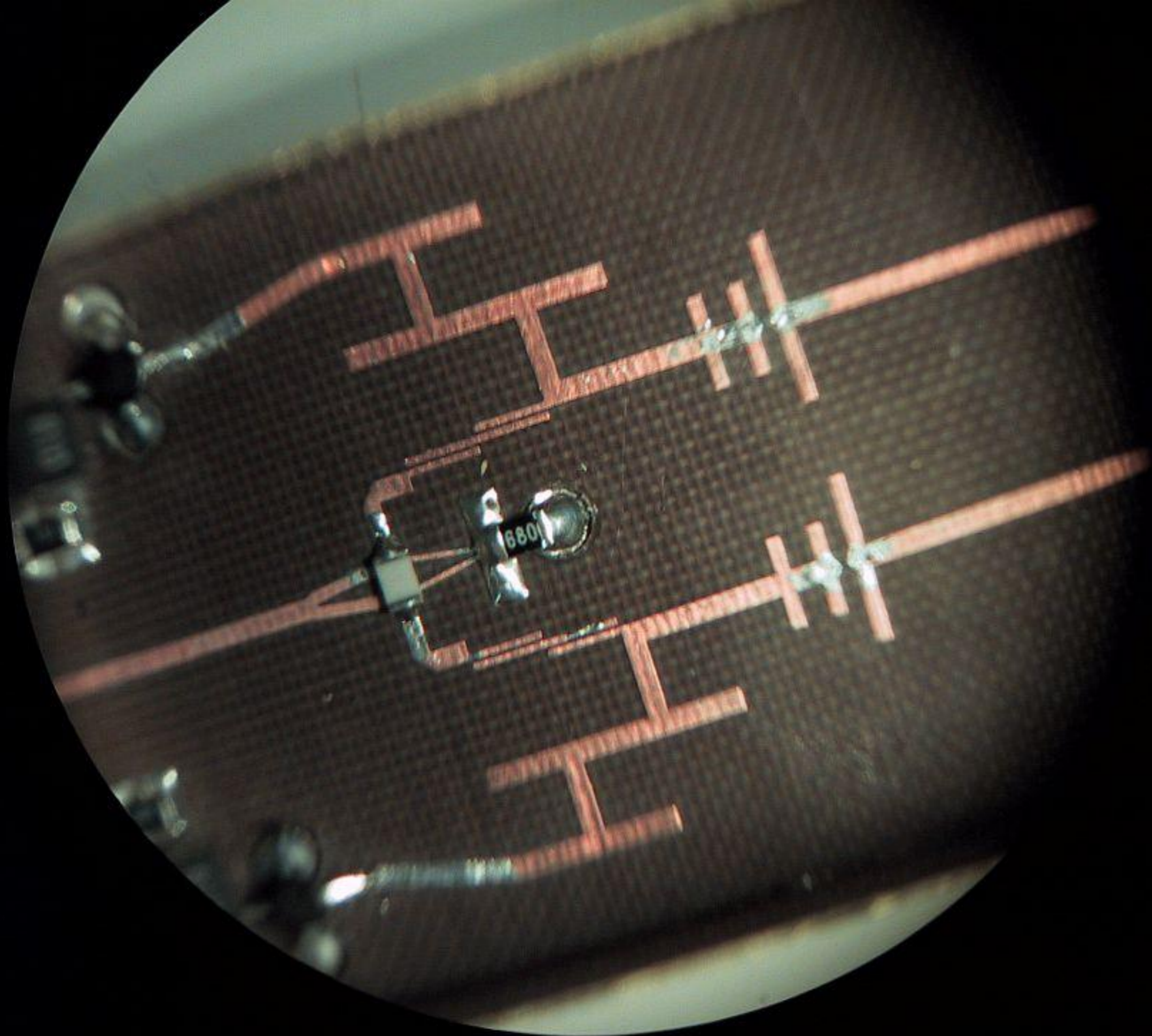
S53MV v pripravi

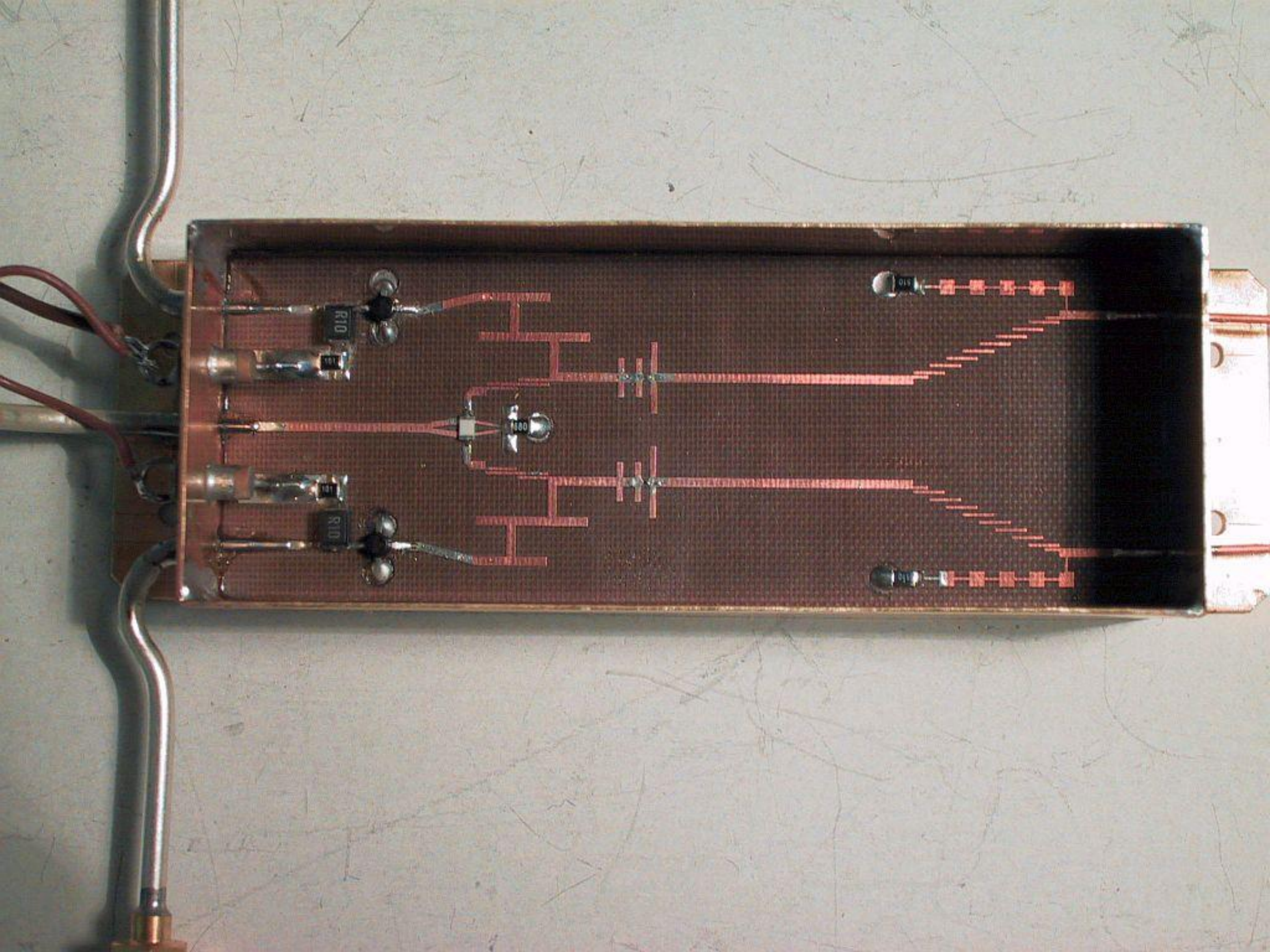
S53SM v pripravi

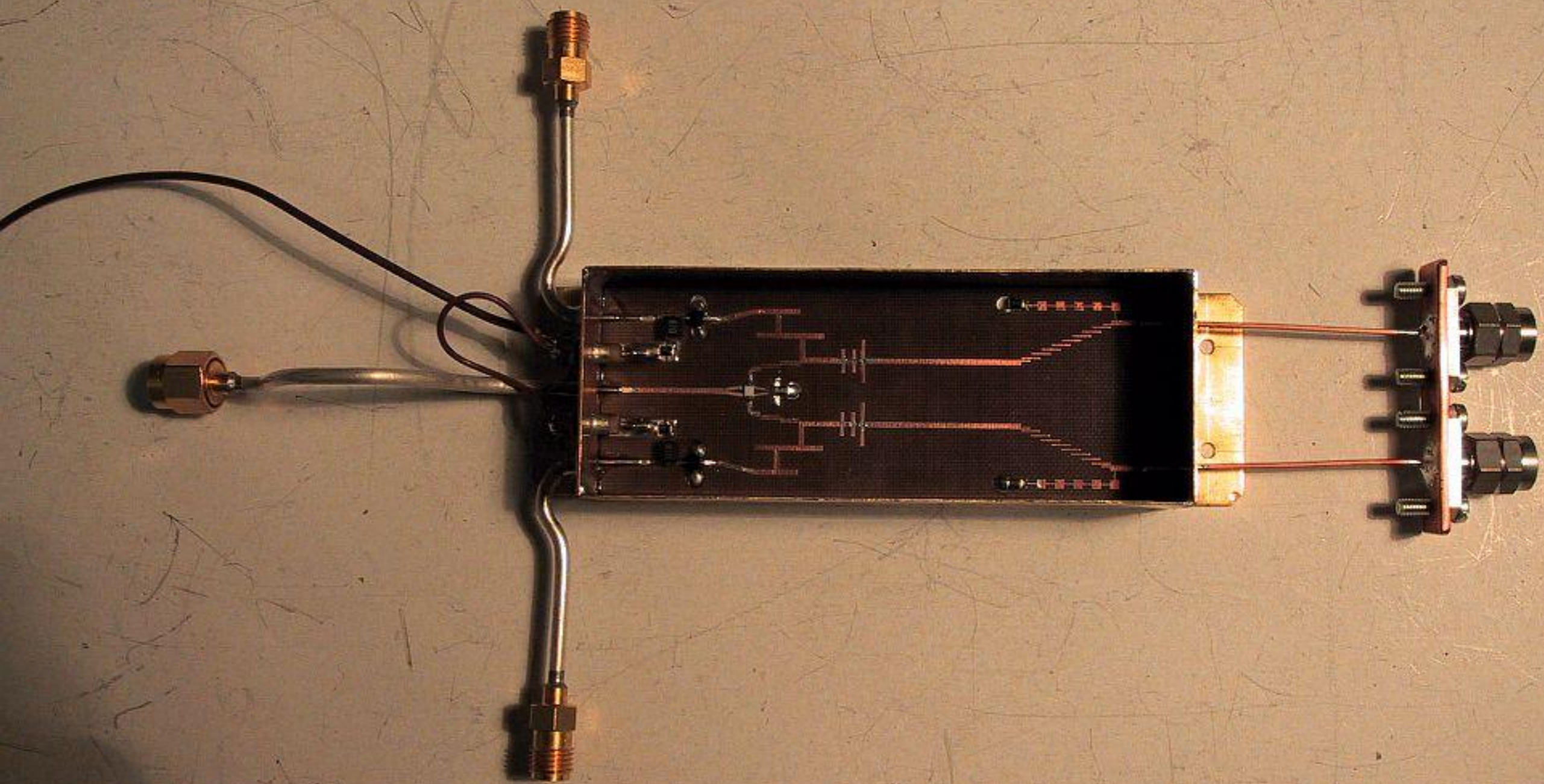
S53WW v pripravi

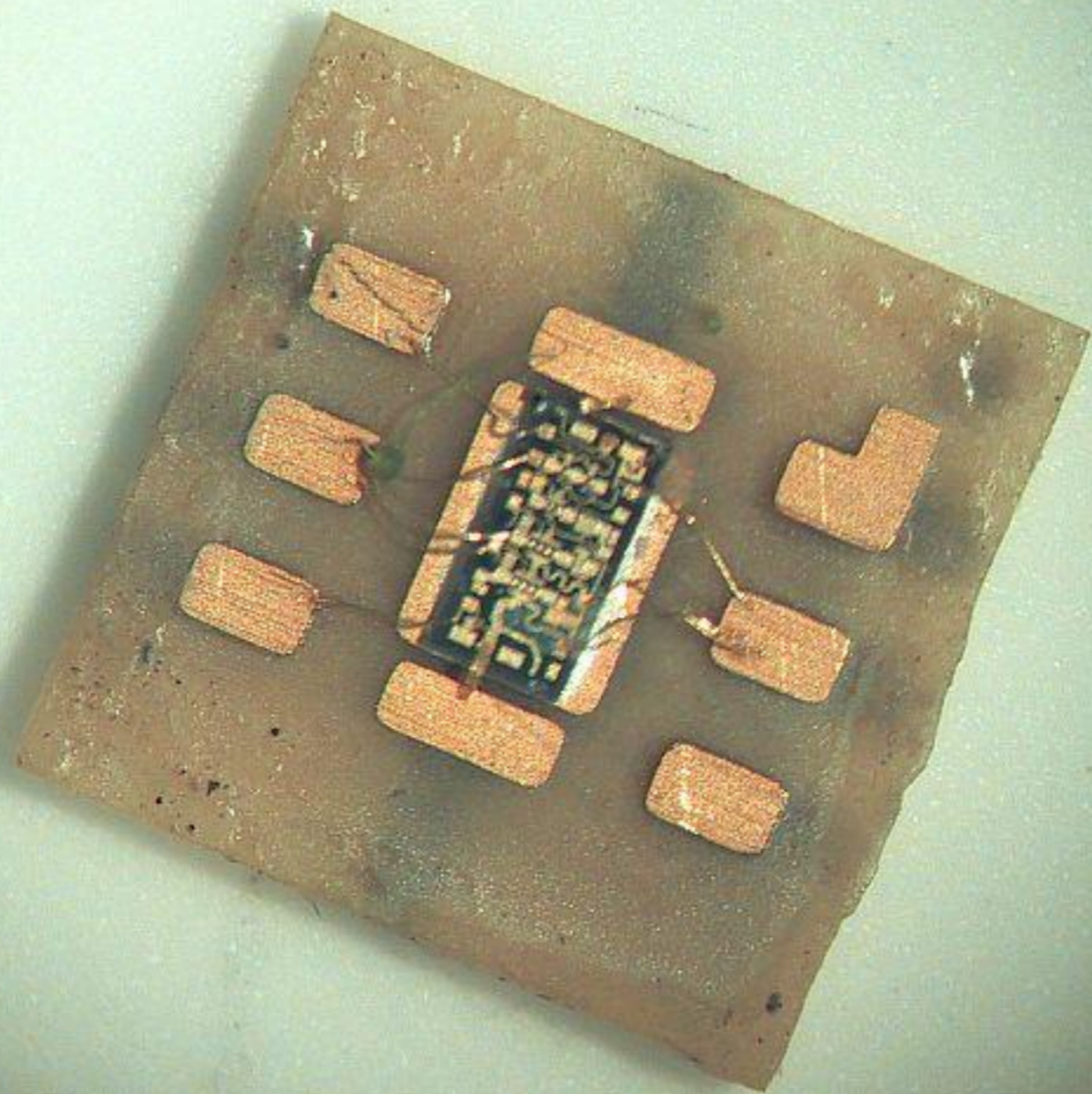
Foto galerija

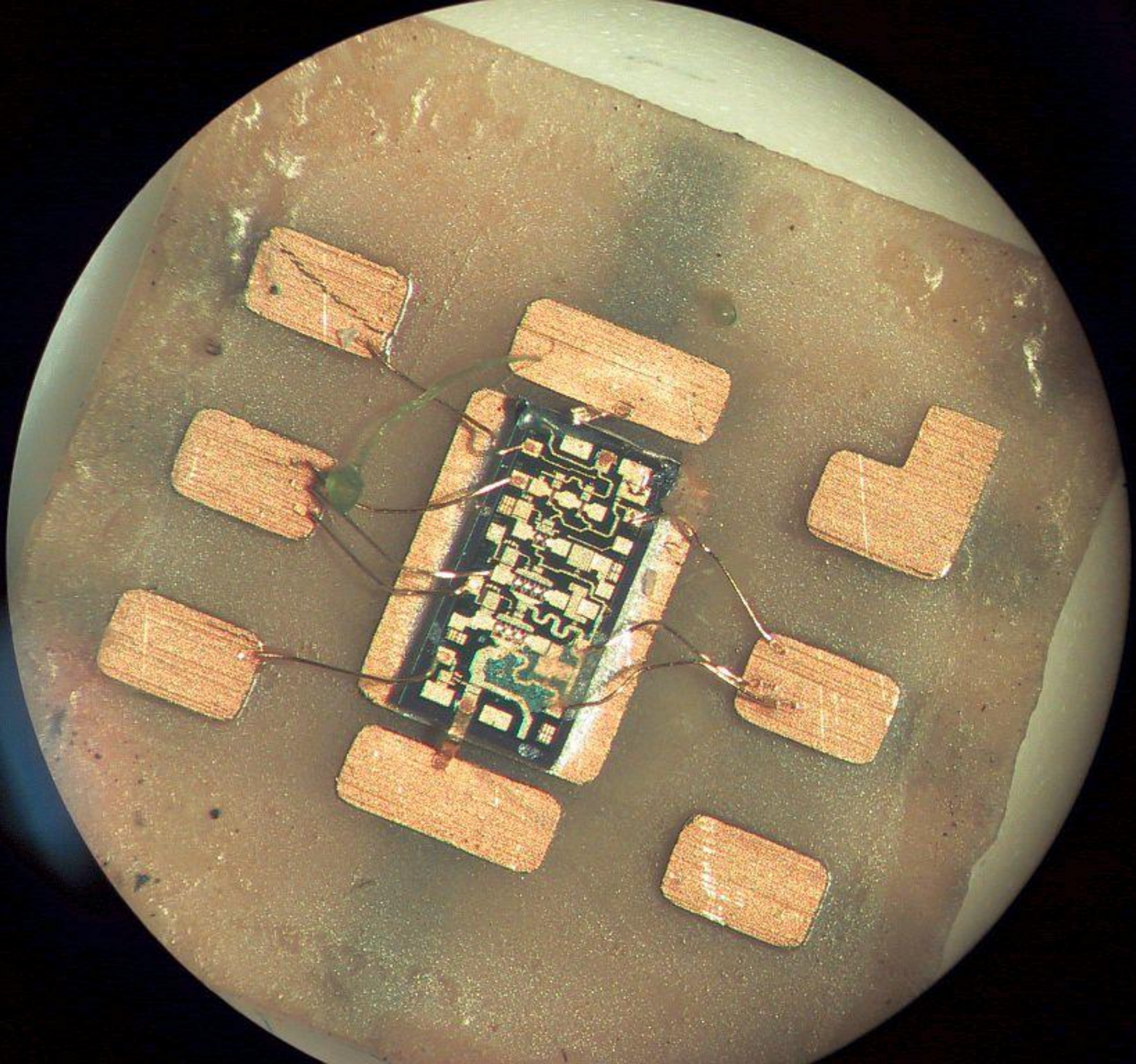


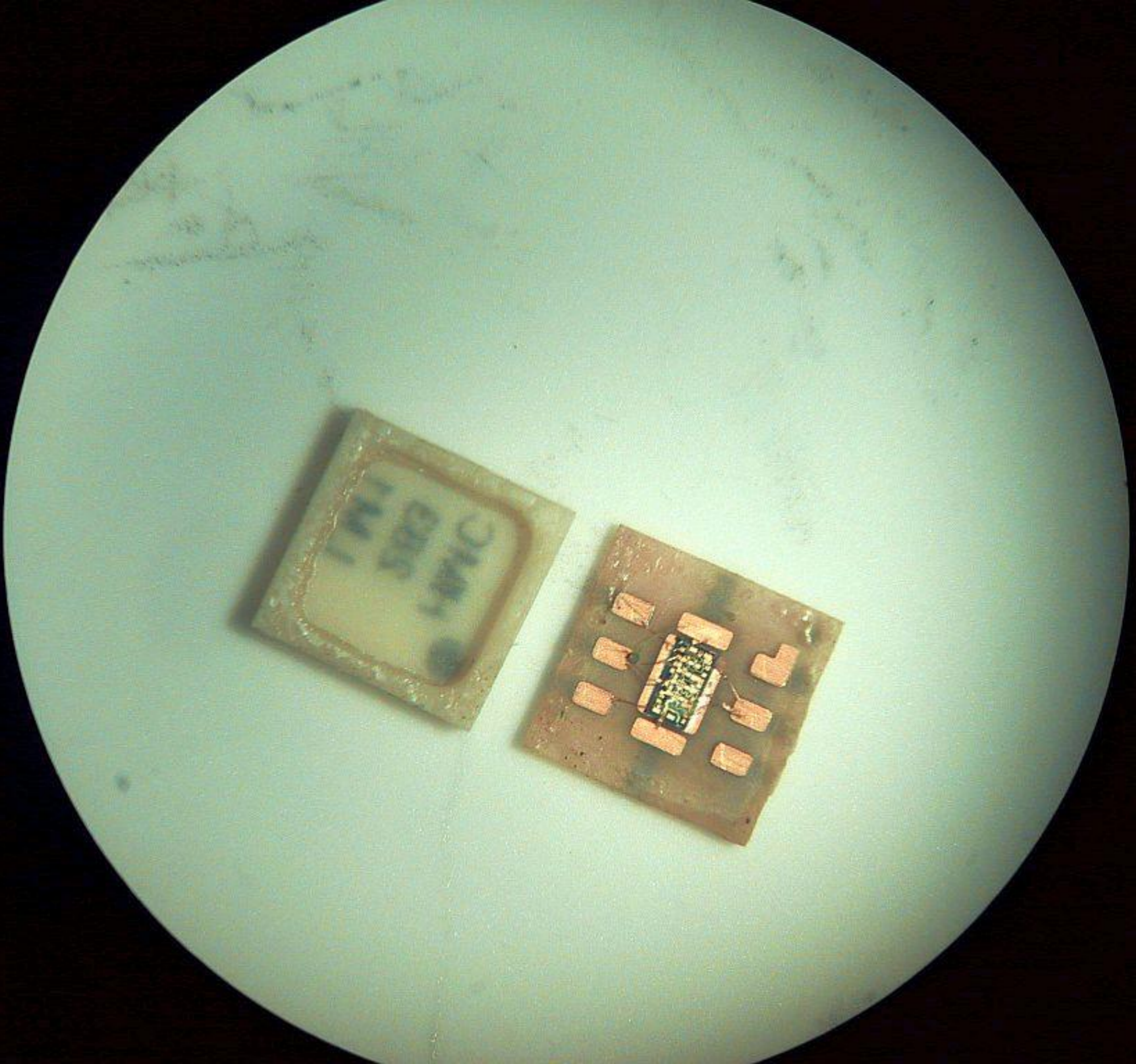




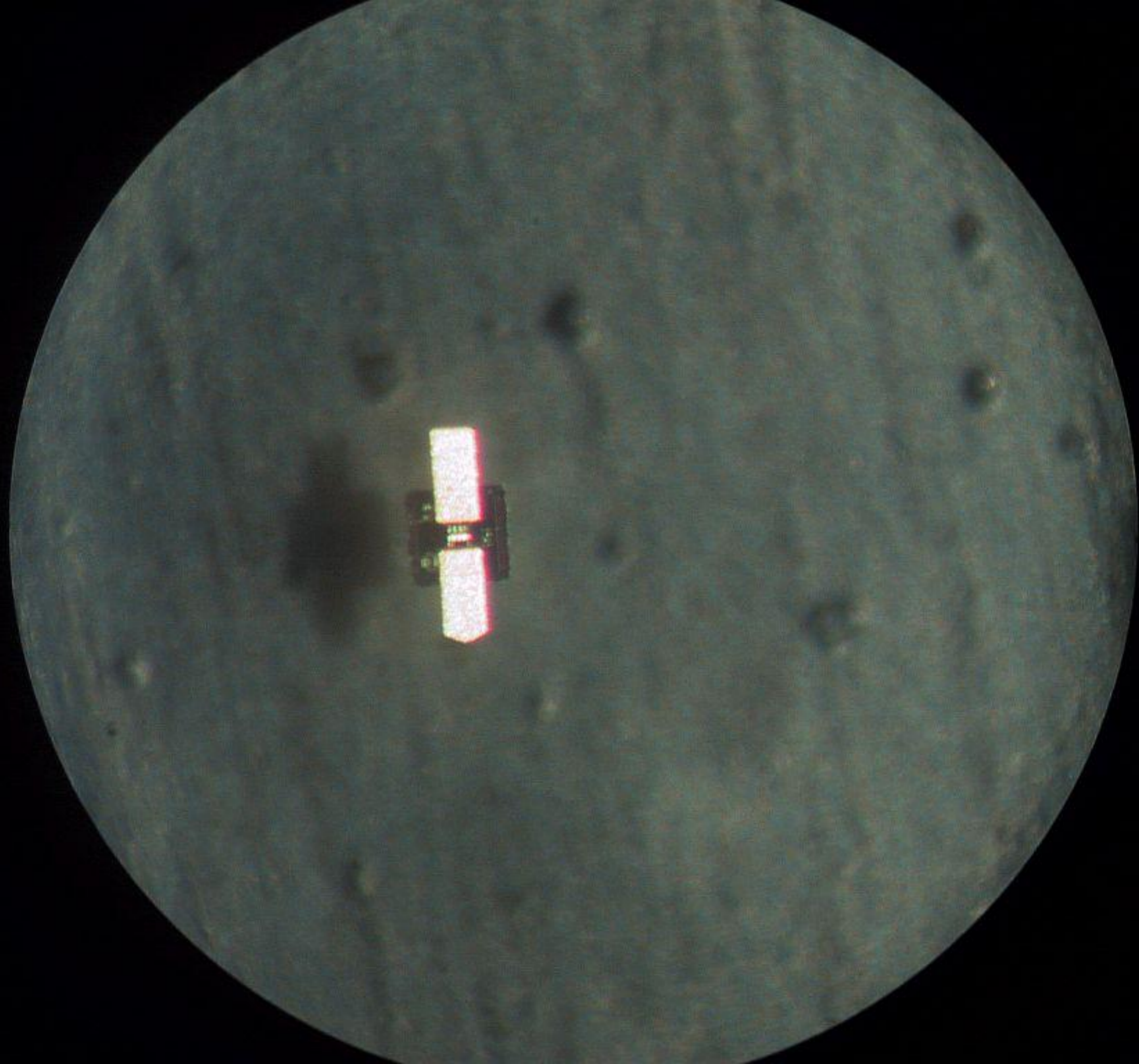


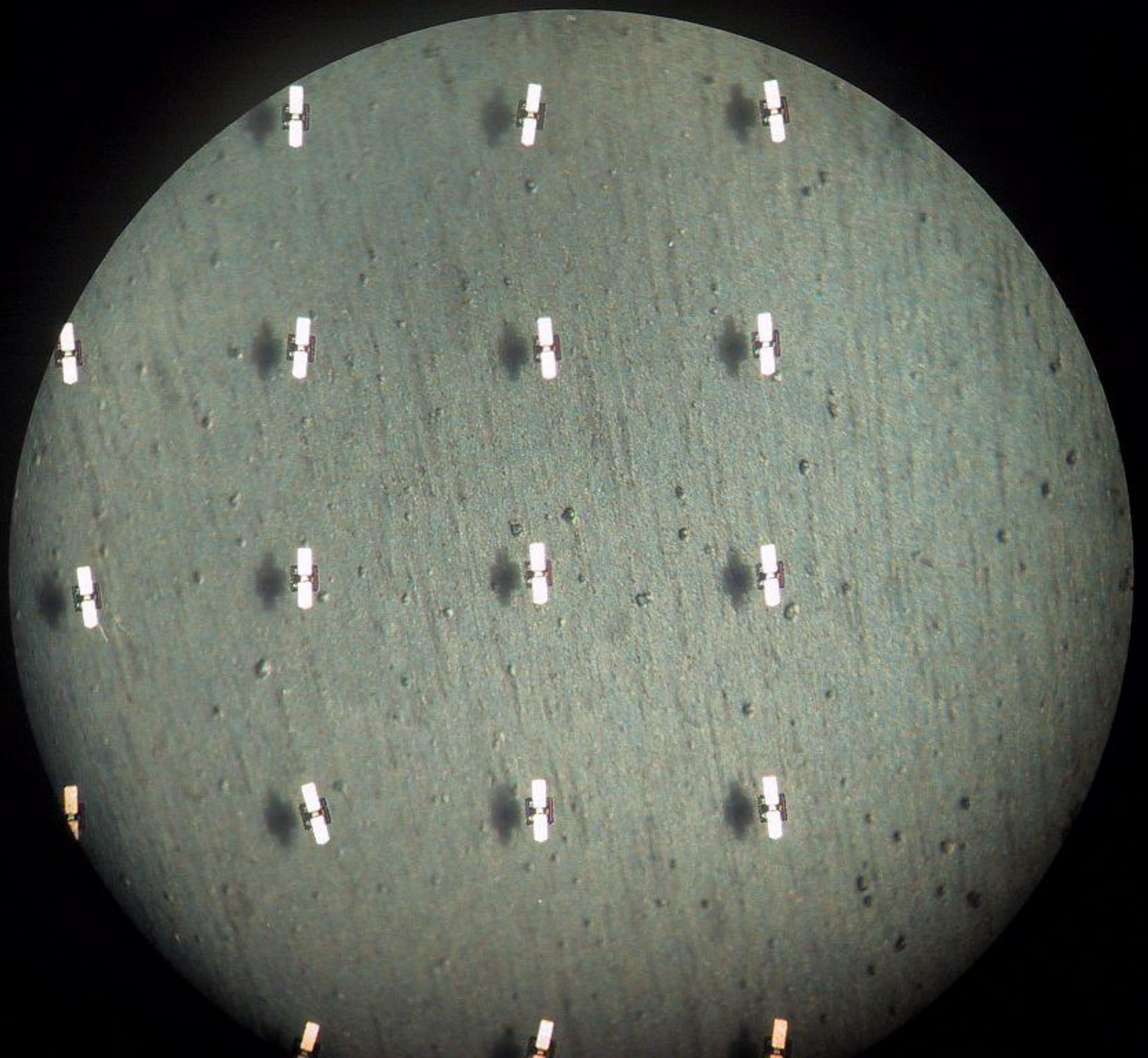




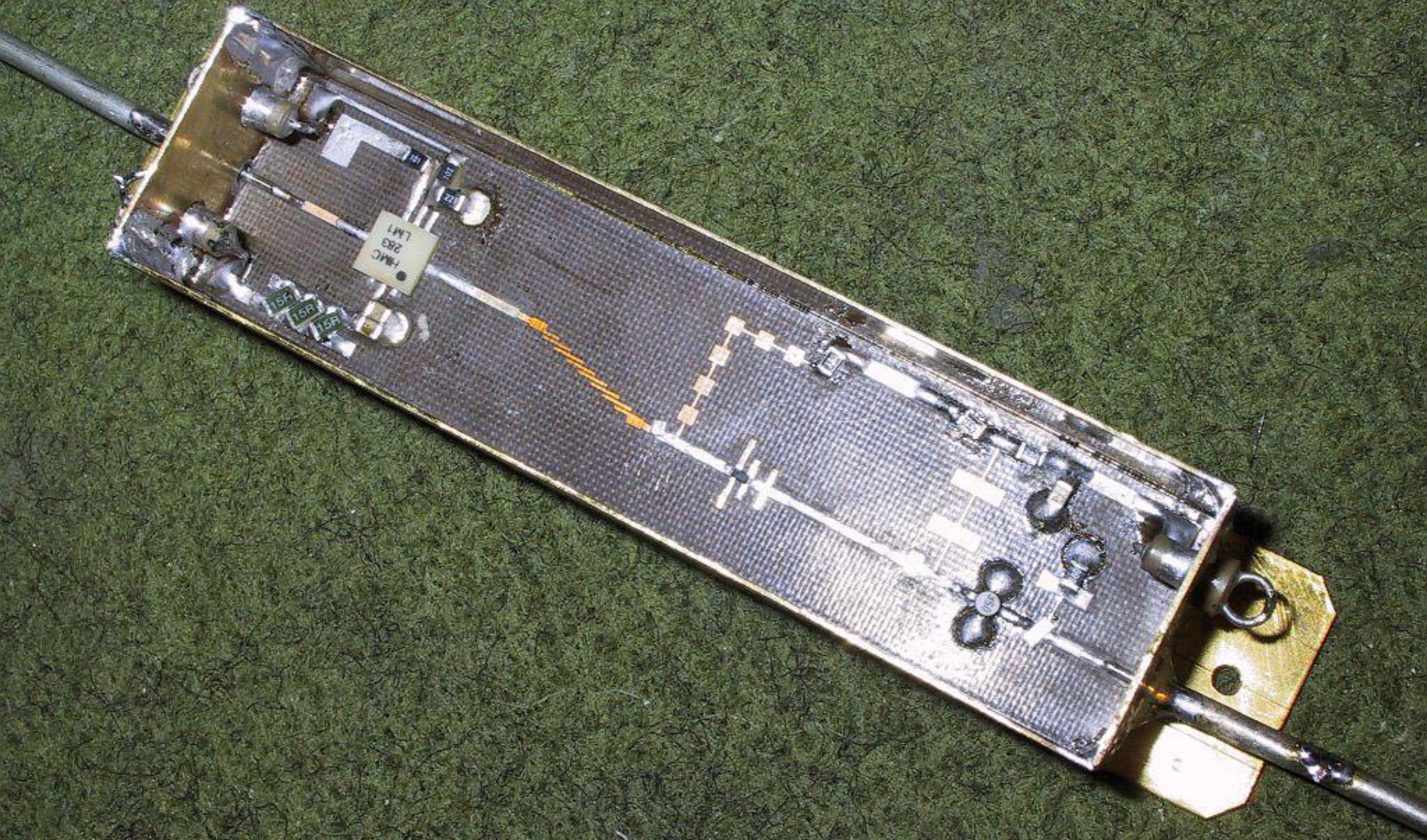












LM1  
283  
LM1

15R  
15R  
15R

100

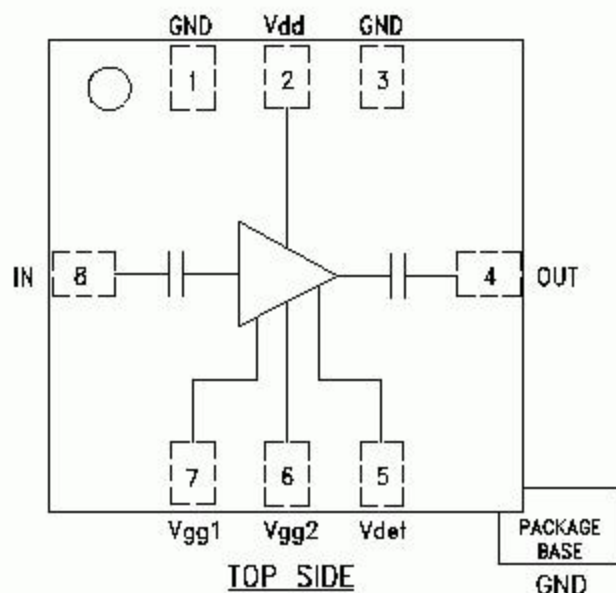
## SMT MEDIUM POWER GaAs MMIC AMPLIFIER, 17 - 40 GHz

### Typical Applications

The HMC283LM1 is ideal for:

- Millimeterwave Point-to-Point Radios
- LMDS
- SATCOM

### Functional Diagram



### Features

- SMT mmWave Package
- Psat Output Power: +21 dBm
- High Gain: 21 dB
- No External Matching Required

### General Description

The HMC283LM1 is a Medium Power Amplifier (MPA) in a SMT leadless chip carrier package covering 17 to 40 GHz. The LM1 is a true surface mount broadband millimeterwave package offering low loss & excellent I/O match preserving MMIC chip performance. Utilizing a GaAs PHEMT process, the device offers 20 dB gain and +21 dBm output power from a bias supply of +3.5V @ 300mA. As an alternative to chip-and-wire hybrid assemblies the HMC283LM1 eliminates the need for wirebonding, thereby providing a consistent connection interface for the customer. The amplifier may be used as a frequency doubler. A built-in-test pad (Vdet) allows monitoring of microwave output power. All data is with the non-hermetic, epoxy sealed LM1 packaged MPA device mounted in a 50 ohm test fixture.

### Electrical Specifications, $T_A = +25^\circ\text{C}$ , $V_{dd} = +3.5\text{V}^*$ , $I_{dd} = 300\text{mA}$

Parameter	Min.	Typ.	Max.	Min.	Typ.	Max.	Units
Frequency Range	17 - 40			21 - 32			GHz
Gain	15	20		17	22		dB
Gain Variation over Temperature		0.05	0.07		0.05	0.07	dB/°C
Input Return Loss	6	10		6	12		dB
Output Return Loss	4	7		4	8		dB
Reverse Isolation	30	40		35	45		dB
Output Power for 1 dB Compression (P1dB)	14	18		14	18		dBm
Saturated Output Power (Psat)	17	21		17	21		dBm
Output Third Order Intercept (IP3)	22	27		21	27		dBm
Noise Figure		10			10		dB
Supply Current (I <sub>dd</sub> )(V <sub>dd</sub> = +3.5V, V <sub>gg</sub> 1 & 2 = -0.15V Typ.)		300	330		300	330	mA

\*V<sub>dd</sub> = +3.5V, adjust V<sub>gg</sub> = V<sub>gg1</sub>, V<sub>gg</sub> 2 between -2.0 to +0.4V to achieve I<sub>dd</sub> = 300 mA typical.

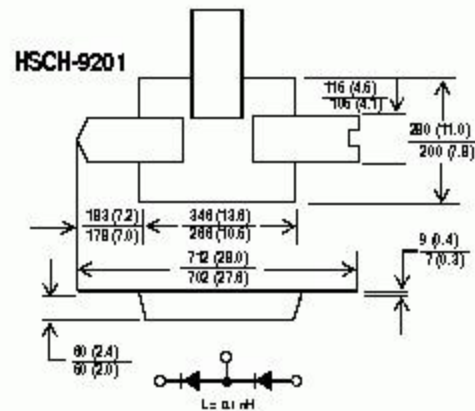
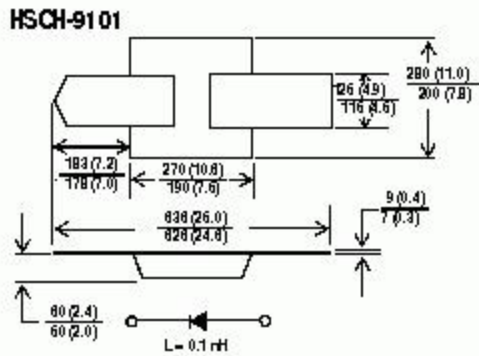


# Agilent HSCH-9101, -9201, and -9251 GaAs Beam Lead Schottky Barrier Diodes

Data Sheet

## Features

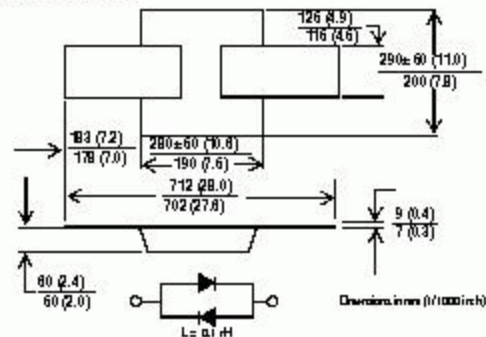
- Gold Tri-Metal System For Improved Reliability
- Low Capacitance
- Low Series Resistance
- High Cutoff Frequency
- Polyimide Passivation
- Multiple Configurations



## Description

The HSCH-9101 single, the HSCH-9201 series pair, and the HSCH-9251 anti-parallel pair are advanced gallium arsenide Schottky barrier diodes. These devices are fabricated utilizing molecular beam epitaxy (MBE) manufacturing techniques and feature rugged construction and consistent electrical performance. A polyimide coating provides scratch protection and resistance to contamination.

## HSCH-9251 Junction Side Up



**Agilent Technologies**  
Innovating the HP Way