

1. Specification

Specification:	TO-301	TO-302	TO-311	TO-312
Frequency range:	10.00 ... 40.00 MHz			
Nominal frequency tolerance:	< ± 3 ppm		< ± 3 ppm U _C =2.5 V	
Stability in the temperature range - 20°C to + 70°C:	<± 1 ppm	<± 2 ppm	<± 1 ppm	<± 2 ppm
Frequency stability vs. supply voltage changes U _B ± 5 %: vs. load changes ± 5 %:	< ± 1 ppm < ± 1 ppm			
Aging @ 25°C:	± 2 ppm first / ± 1 ppm following years			
Frequency correction:	± 5 ppm by int. trimmer		± 8 ppm by ext. voltage 0.5 ... 4.5 V	
Transfer function / Linearity:	-		positive	
Supply voltage U _B :	5 V ± 5 %			
Current consumption:	≤ 5 mA			
Output voltage : load : level :	Sinusoidal 560 Ohm > 500 mVpp			
Phase noise: 100 Hz 1000 Hz	-105 dBc/Hz -120 dBc/Hz			
Operating Temperature range: Operable Temperature range: Storage Temperature range:	-20°C ... + 70°C -25°C ... + 75°C -40°C ... + 85°C			

2. Environmental conditions

Shock:	DIN IEC 68-2-27, Test Ea, 100 g, 6ms Half-sine, 3 bumps in 3 main directions
Vibration:	DIN IEC 68-2-6, Test Fc, 10-500Hz, 10g, 2 h in 3 main directions
Humidity:	DIN IEC 68-2-3, 40°C/93%RH, 21 days
Solderability:	DIN IEC 68-2-20 only for wire leads, Methode 3: Solder globule at + 235°C

3. Marking



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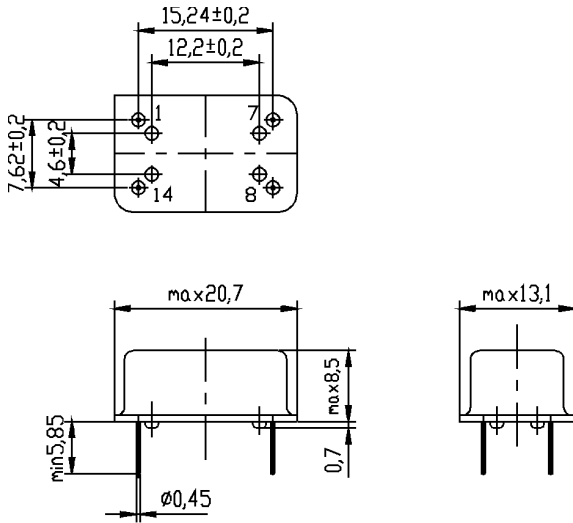
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Manufacturer's name, date code(week/year)
 Specification
 Center frequency

4. Case

Case style: BF-100



1.Pin configuration

TO-301 / TO-302:

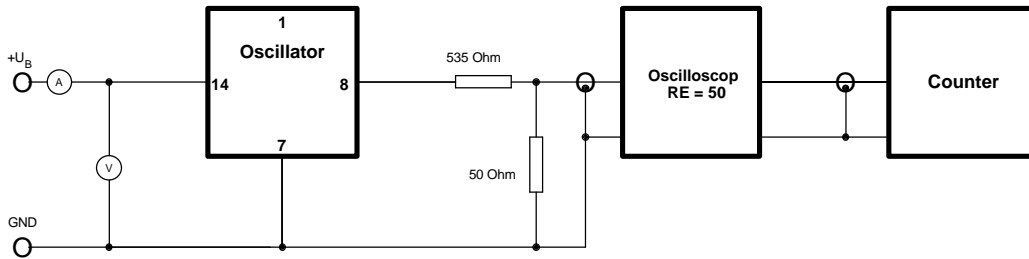
- 1. N.C.
- 7. Ground, case
- 8. RF-output
- 14. Supply voltage

TO-311 / TO-312:

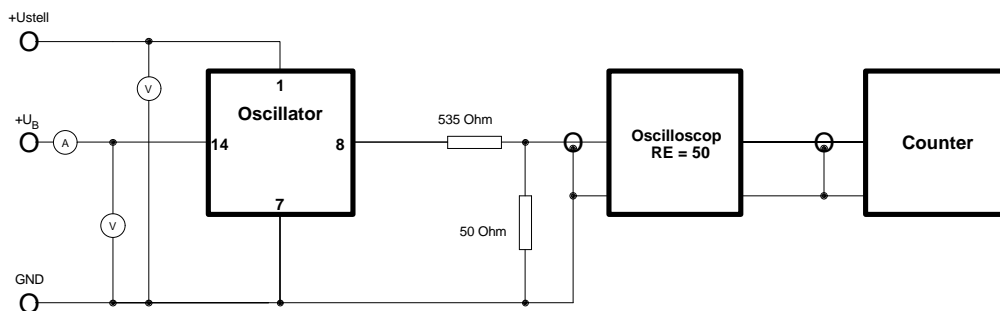
- 1. Control voltage U_c
- 7. Ground, case
- 8. RF-output
- 14. Supply voltage

5. Test circuit

TO-301/TO-302:



TO-311/TO-312:



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