

AXGS10 Specifications					
Parameter	Min.	Typ.	Max.	Unit	Condition
Frequency range	950		1532	MHz	
Standard frequencies	970 / 1030 / 1090 / 1150 / 1532			MHz	
Frequency stability					
Overall tolerance (Note 2)			±350	ppm	
Long term (aging) per year			±5	ppm	
Gate function					
Low level input voltage V _{GL}		0	1.5	V	
High level input voltage V _{GH}	3.5	5.0	5.5	V	
Input resistance	10			kΩ	
Input capacitance		5	10	pF	
Turn-on time			40	ns	
Turn-off time			30	ns	
RF output					
Signal waveform	Sine wave				
Load R _L		50		Ω	
Output level gate ON	+7	+10		dBm	@ V _{GATE} > +3.5 V
Output level gate OFF (Note 4)		−40	−35	dBm	@ V _{GATE} < +1.5 V
Harmonics		−40	−30	dBc	
Supply voltage V _S (Note 5)	4.75	5.0	5.25	V	
Current consumption					
Gate ON		35	60	mA	@ V _{GATE} > +3.5 V
Gate OFF		10	20	mA	@ V _{GATE} < +1.5 V
Operating temperature range	−40		+85	°C	
Enclosure (L × W × H)	20.3 × 13.0 × 5.7 max.			mm	Similar to IEC 61837 CO 30
Weight			3	g	
Packing	Tape & reel				IEC 60286-3

Notes: 1. Terminology and test conditions are according to IEC 60679-1 and MIL-PRF-55310, unless otherwise stated

2. Overall tolerance includes initial tolerance, frequency stability vs. temperature range, pushing and pulling

3. Voltage transients above maximum ratings must not be present at supply and gate input

4. Ensure sufficient grounding and blocking – see recommended footprint

5. Supply voltage of 3.3 V on request. For 12 V model see the AXGS20 series.

Absolute Maximum Ratings				
Parameter	Min.	Max.	Unit	Condition
Supply voltage V_S (Note 3)	-0.5	$V_S + 10\%$	V	V_S to GND
Gate voltage V_{GATE} (Note 3)	-0.5	V_S	V	V_{GATE} to GND
Storage temperature	-55	+105	°C	

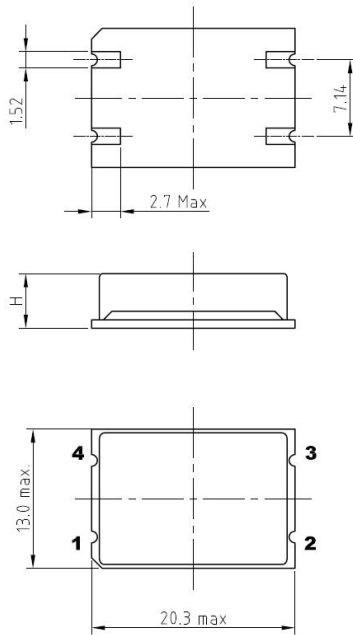
Ordering Code

Model	Revision	Frequency [MHz]
AXGS10	Rev.6	1090.000

Example: AXGS10_Rev.6 – 1090.000 MHz

Outline Dimensions & Pin Connections (mm)

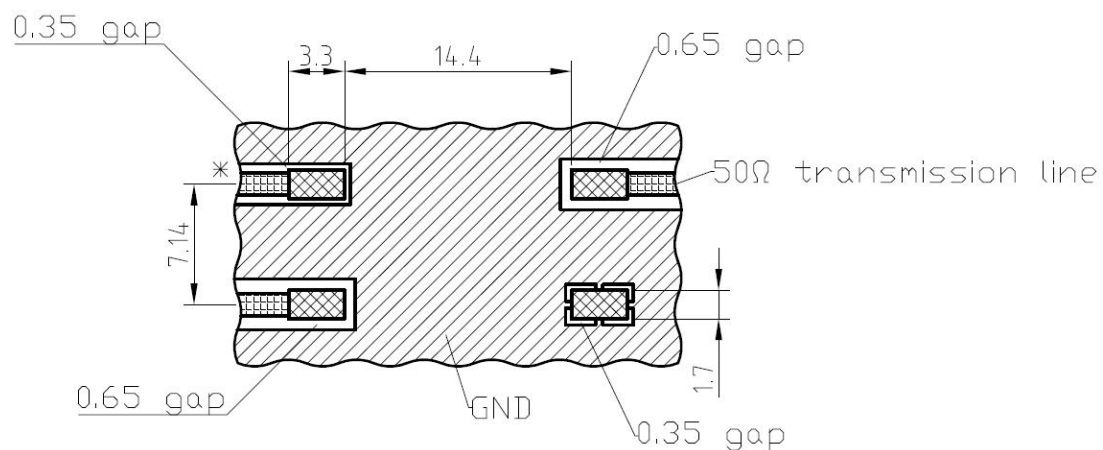
Enclosure drawing



Pin connections

Pin #	Symbol	Function
1	V _{GATE}	Gate input
2	GND	Ground, case
3	RF OUT	RF output
4	V _S	Supply voltage

Recommended Footprint (Top View)



* Recommended: place 1 nF and 1 μF blocking capacitors close to the supply voltage pin

Environmental Conditions						
Test	IEC 60068 Part	IEC 60679-1 Clause	MIL-STD-202G Method	MIL-STD-810F Method	MIL-PRF-55310D Clause	Test conditions (IEC)
Sealing tests (if applicable)	2-17	5.6.2	112E		3.6.1.2	Gross leak: Test Qc, Fine leak: Test Qk
Solderability	2-20	5.6.3	208H		3.6.52	Test Ta Method 1
Resistance to soldering heat	2-58		210F		3.6.48	Test Td1 Method 2 Test Td2 Method 2
Shock*	2-27	5.6.8	213B	516.4	3.6.40	Test Ea, 3 x per axis 100 g, 6 ms half-sine pulse
Vibration, sinusoidal*	2-6	5.6.7.1	201A 204D	516.4-4	3.6.38.1 3.6.38.2	Test Fc, 30 min per axis, 10 Hz – 55 Hz 0.75 mm; 55 Hz – 2 kHz, 10 g
Vibration, random*	2-64	5.6.7.3	214A	514.5	3.6.38.3 3.6.38.4	Test Fdb
Endurance tests			108A			
– Ageing		5.7.1			4.8.35	30 days @ 85 °C, OCXO @ 25 °C
– Extended ageing		5.7.2				1000 h, 2000 h, 8000 h @ 85 °C
Other environmental conditions on request.						

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