

Specification	AXMW1090GYT-01	Issue: 4.1	Date: 2011-01-29
Oscillator type: Gated 1090 MHz Microwave Oscillator			

Parameter	min.	typ.	max.	Unit	Condition
Nominal frequency	1090.000			MHz	
Frequency stability					
Initial tolerance at delivery			± 10	ppm	@+25°C
vs. temperature in operating temperature range			± 30	ppm	
operating temperature range	-40		+70	°C	
Long term (aging)			± 5	ppm	per year
Frequency adjustment range					
Electronic Frequency Control (EFC)		n.a.			
RF output					
Signal waveform	Sine wave				$R_L = 50 \Omega$
Output level @ +25°C	+ 10	+ 12	-60	dBm	@ $V_{Gate} > +3.5V$
				dBm	@ $V_{Gate} < +1.5V$
Sub-Harmonics		-40	-30	dBc	Multiples of 109 MHz
Harmonics		-40	-30	dBc	
Gate Function					
Low level input voltage V_{Gate}		0	1.5	V	
High level input voltage V_{Gate}	3.5	5.0	5.5	V	
Input resistance		10		k Ω	
Input capacitance			10	pF	
Turn on time		30	40	ns	
Turn off time		10	30	ns	
Supply voltage V_s	11.4	12	12.6	V	
Current consumption		42	50	mA	@ $V_{Gate} > +3.5V$
		7	15	mA	@ $V_{Gate} < +1.5V$
Operable temperature range	-55		+85	°C	
Storage temperature range	-55		+125	°C	
Enclosure (see drawing) (LxWxH)	54 x 40 x 19 max.			mm	h = 2.0 mm
Weight				gram	
Packing	Palette				

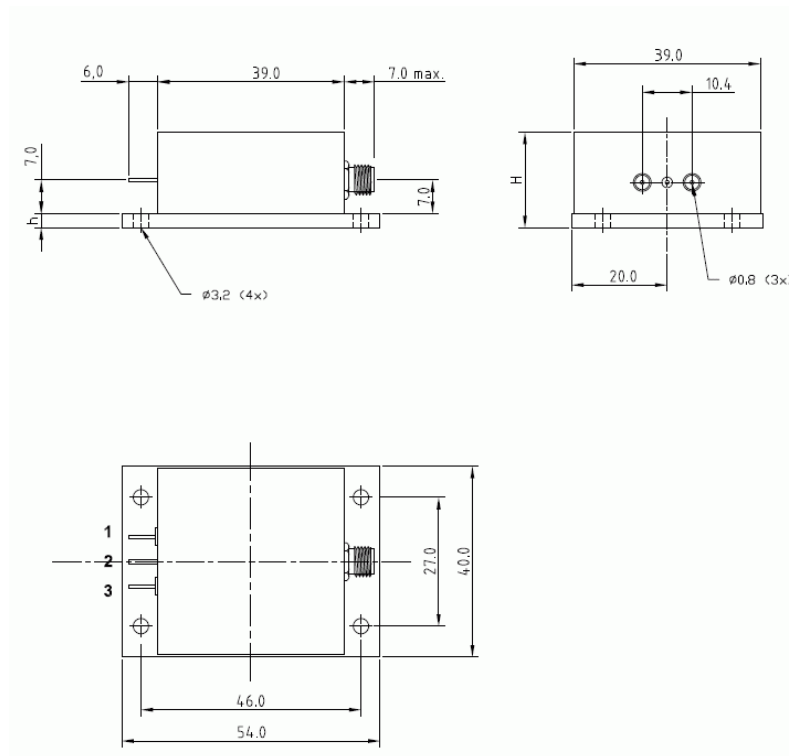
Notes:

1. Terminology and test conditions are according to IEC standard IEC60679-1, unless otherwise stated

Ordering Code:

Model (Specification)	Frequency [MHz]
AXMW1090GYT-01	1090.000

Enclosure drawing



Pin connections

Pin#	Symbol	Function
1	GATE	Gating Input
2	GND	Ground
3	V_S	Supply Voltage
SMA	RF OUT	RF Output

Environmental conditions

Test	IEC 60068 Part ...	IEC 60679-1 clause ...	Test conditions
Sealing tests (if applicable)	2-17	4.6.2	Gross leak: Test Qc
Solderability	2-20	4.6.3	Test Ta (235 ± 5)°C Method 1
Resistance to soldering heat	2-58		Test Tb Method 1A, 5s
Shock*	2-27	4.6.8	Test Ea, 3 x per 6 axes 50G, 11 ms half-sine pulse
Vibration, sinusoidal*	2-6	4.6.7	Test Fc, 30 min per axes, 10 Hz - 55 Hz 0,75mm; 55 Hz - 2 kHz, 10g
Endurance tests			
- ageing		4.7.1	30 days @ 85°C, OCXO @25°C
- extended aging		4.7.2	1000h, 2000h, 8000h @85°C

*Endurance test

Revision History

Rev.	Date [dd.mm.yy]	Remarks
1	18.08.2006	First issue
2	18.08.2006	Editorial changes
3	03.12.2007	Output, spectrum, supply & gate parameters changed
4	13.12.2010	Crystal frequency, RF output parameters & Gate function parameters changed
4.1	29.01.2011	Package height H and thickness of base plate (h) changed: PCN11012901