

Features

Stability: ± 10 PPB over - 40°C to +70°C
 Phase Noise Floor : -150 dBc/Hz or better at 10KHz
 R-weld clean looking seal

Typical Applications

Test Instrumentation Reference
 GPS Timing Modules
 Microwave Communications

Description

The GSOX1207-10MHz-A series offers good phase noise and frequency stability in a compact 20.0 mm x 20.0 mm x 11.0 mm resistance welded enclosure.

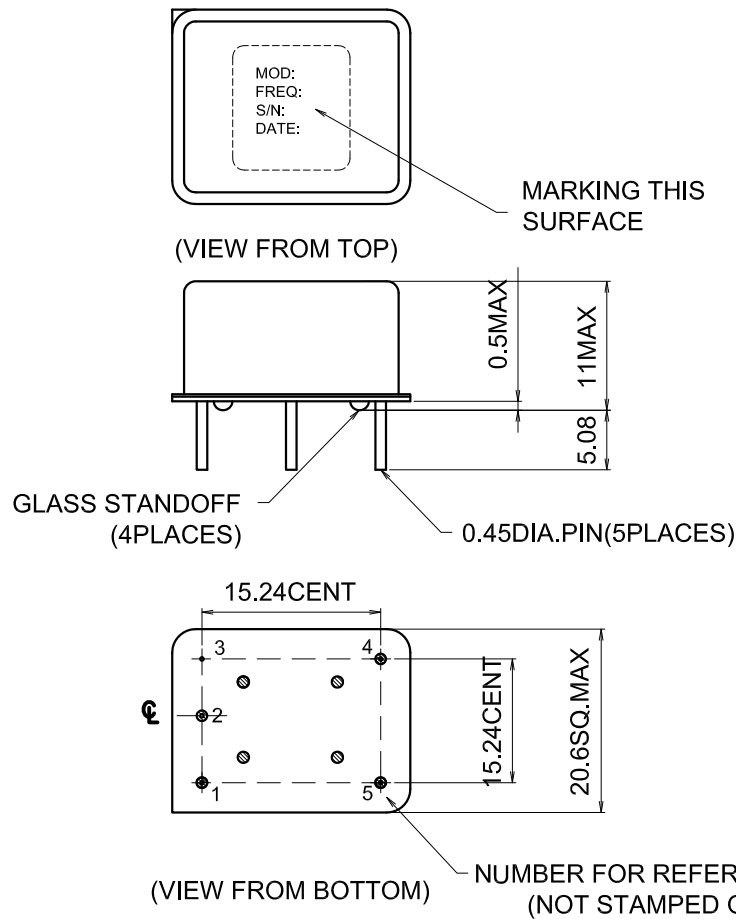
Part Picture

Packaging type R: 20.0 x 20.0 x 11.0 mm



RoHS compliant

Mechanical Drawing and PIN Connections



PIN CONNECTIONS	
PIN	FUNCTION
1	VCO INPUT
2	REFERENCE VOLTAGE
3	0 VOLTS & CASE
4	R.F. OUTPUT
5	+VDC

Specification

#	OCXO Specification	Sym.	Condition	Value			Unit	Included in the test data
				Min.	Typ.	Max.		
1.1	Nominal Frequency	Fo		10.000000			MHz	
1.2	Tol. (<= 90 days of datecode)		+25 C +/- 5 C after 30 min +/- 5 min	-20.0		+20.0	ppb	Vc : 2V +/- 0.2V
RF output								
2.1	Wave form			HCMOS				
2.2	Logic Level 1			3.5			V	
2.3	Logic Level 0					0.5	V	
2.4	Load				15		pF	
Frequency control								
3.1								
3.2	Control voltage range	Vc	*When control voltage pin open,	0.0	2.0	4.0	V	
3.3			Internal Vc set to 2.0 V					
3.4	Slope			Positive				
3.5	Pull range			+/- 500			ppb	
3.6								
3.7	Reference voltage	Vref		3.8	4.0	4.2	V	
3.8	Ref. voltage Load	Load_ref	Vref load must be greater than 9Kohm	9000			ohms	
Power supply								
4.1	Voltage	Vcc		4.75	5	5.25	V	
4.2	Warm-up Current		Vcc=5V			500	mA	
4.3	Steady State Current		at +25 C, Vcc=5V, still air			220	mA	
4.4	Warm-up time	t _{up}	Frequency to within +/- 50 ppb after 3 minutes from power up			180	sec.	Ref. to 1 Hr. freq. with Vc = 2.0 V
Frequency stability								
5.1	vs. temperature		from -40C to 70C	-10.0		+10.0	ppb	
5.2								
6	Aging	per day	after 30 days of operation at time of shipment			+/- 1.0	ppb	
7.1	SSB Phase Noise		at 1 Hz offset				dBc/Hz	
			at 10 Hz offset					
			at 100 Hz offset					
			at 1 kHz offset					
7.2			at 10 kHz offset			-150		
Maximum ratings, environmental, mechanical conditions.								
Operating temperature range		-40 C to +70 C						
Storage temperature range		-55 C to +105 C						