Nominal frequency (f0) 20 MHz

Frequency stabilities

Parameter	Frequency stability	Operating temp. range
Over all (df/f0) vs. operating temp. range (df/f@25 ℃)	-4.6 to 4.6 ppm -10 to 10 ppb	 -40 ... 85 ℃
Additional information Drift 24 Hr and ±2.8℃ temp. change < ±1ppb over all include: Temp. Stab, supply, load stab, inital, 20 years aging S3E compliant according GR1244		
Parameter	Value	Condition
initial tolerance (df/f0) vs. supply voltage change (df/f) vs. load change (df/f) vs. aging / daily (df/f) vs. aging / month (df/f) vs. aging / year (df/f) vs. aging / 10 years (df/f) Holdover 24 h	-500 to 500 ppb -10 to 10 ppb -10 to 10 ppb <± 1 ppb <± 25 ppb <± 100 ppb <± 1 ppm ± 10 ppb	@25 ℃ static; 3.3 V ±5 % static; Load ± 5 % after 30 days ; @ 25 °C after 30 days ; @ 25 °C after 30 days ; @ 25 °C after 30 days ; @ 25 °C incl. drift and -40...+85℃ temperature stability

RF output

Parameter	Value	Condition
Signal	LVCMOS	
Load	15 pF ±10 %	
Fan out	3	
Rise Time	< 10 ns	@ 10 to 90 %Vout
Fall Time	< 10 ns	@ 90 to 10 %Vout
Duty cycle	45 / 55 %	@ 1.65 V
V Low	x < 0.4 V	
V High	x > 2.4 V	

Supply voltage

Parameter	Value	Condition
Supply voltage (Vs)	3.3 V ± 5 %	
Current consumption steady state	< 330 mA	@ Vsnom & 25 ℃
Current consumption during warm up	< 757 mA	@ Vs

Additional Parameters

Parameter	Typ.	Max.	Condition
Phase Noise	-85 -110 -130 -143 -150	-60 -90 -115 -130 -145	dBc/Hz@1Hz dBc/Hz@10Hz dBc/Hz@100Hz dBc/Hz@1kHz dBc/Hz@10kHz
MTIE	0.2 ns 0.9 ns 5.0 ns 12.0 ns		1 sec 10 sec 100 sec 1000 sec
Parameter	Value		Condition
Jitter	< 1.000 psec (RMS)		@ 12 kHz to 20 MHz
TDEV	0.015 ns		1 s
TDEV	0.09 ns		10 s
TDEV	0.45 ns		100 s
TDEV	1.8 ns		1000 s
Warm-up time	< 3 min		@ 25 ℃ to final frequency
Additional information TDEV:Typical Wander Generation performance when locked through a 1mHz system loop bandwidth Holdover 10ppb peak-peak: incl. of 24 h aging and a 40℃ temperature change			
Processing & Packing	handling&processing note		

Additional environmental conditions

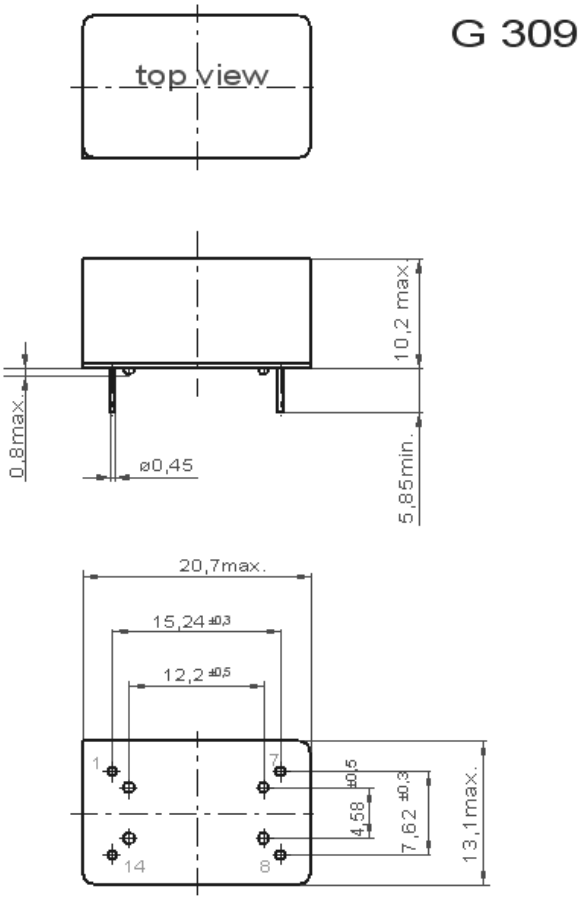
Tensile strength of leads DIN IEC 68-2-21 (Ua 1)
Flexibility of leads DIN IEC 68-2-21 (Ub)
Sealing test A hermetisch dicht (hermetically sealed)
Solderability DIN IEC 68-2-20, (Ta) 100% RoHS 6 compliant
Solvent resistance DIN IEC 68-2-45 (xA) washable device

Absolute Maximum Ratings

Parameter	Min	Typ	Max	Units	Condition
Operable temperature range	-40		85	℃	
Storage temperature range	-50		85	℃	

Enclosure

Type G309	Height 10.2 mm



all units in mm

Pin Connections
Pin 1: N.C.
Pin 7: GND(Case)
Pin 8: RF-Output
Pin 14: Vs (supply voltage)

Marking
OX-4022-EAE-1080
20,000 MHz
* VI AYYWW
* pin-1 marking

Standard shipping method

10 * 8 array / 80 units per tray

Notes:
Unless otherwise stated all values are valid after warm-up time and refer to typical conditions for supply voltage, frequency control voltage, load, temperature (25℃) .
Subject to technical modification.

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