

Nominal frequency (f0)

10 MHz

Frequency stabilities

Parameter	Frequency stability	Operating temp. range
Over all (df/f0)	-0.5 to 0.5 ppm	
vs. operating temp. range (df/f@25 °C)	-20 to 20 ppb	-40 ... 70 °C
	-10 to 10 ppb	-10 ... 70 °C
Parameter	Value	Condition
initial tolerance (df/f0)	-100 to 100 ppb	@Vc = 2 V; 25 °C
vs. supply voltage change (df/f)	-5 to 5 ppb	static; 5 V $\pm$ 5 %
vs. load change (df/f)	-5 to 5 ppb	static; Load $\pm$ 5 %
vs. aging / daily (df/f)	$\leq \pm 1$ ppb	after 10 days ; @ 25 °C
vs. aging / month (df/f)	$\leq \pm 30$ ppb	after 10 days ; @ 25 °C
vs. aging / year (df/f)	$\leq \pm 75$ ppb	after 10 days ; @ 25 °C
vs. aging / 10 years (df/f)	$\leq \pm 400$ ppb	after 10 days ; @ 25 °C

Frequency tuning

Parameter	Value	Condition
Electrical frequency control (EFC) (df/f0)	-2 to -0.75 ppm	ext. tuning voltage @ 0 V
	0.75 to 2 ppm	ext. tuning voltage @ 4 V
Linearity	< 10 %	

RF output

Parameter	Value	Condition
Signal	sinewave	
Load	50 Ohm $\pm$ 10 %	
Output power min	9 dBm	@ Load
Output power typ.	10.5 dBm	@ Load
Output power max	12 dBm	@ Load
Harmonics	<- -30 dBc	
Sub Harmonics	<- -90 dBc	
Spurious	<- -90 dBc	

Supply voltage

Parameter	Value	Condition
Supply voltage (Vs)	5 V $\pm$ 5 %	
Current consumption steady state	< 200 mA	@ Vsnom & 25 °C
	< 550 mA	@ Vs B & -40 °C
Current consumption during warm up	< 600 mA	@ Vs
Current Consumption @ -40°C <550mA; @80°C <60mA		

Additional Parameters

Parameter	Value	Condition
Phase Noise	< -120 dBc/Hz < -140 dBc/Hz < -145 dBc/Hz < -150 dBc/Hz	10 Hz 100 Hz 1000 Hz 10 kHz typ values
Warm-up time	< 5 min	@ 25 °C to final frequency
Additional information warm up time: <5 Min. to within ± 10 ppb of 1 hour freq. @ 25°C Max. phase noise: -136dBc/Hz @100Hz, -141dBc/Hz @1kHz, -147dBc/Hz @10kHz		
Processing & Packing	handling&processing note	

Additional environmental conditions

Vibration
10g, 10Hz to 500Hz per IEC 68-2-6 Test Fc, severity 500/10
Shock
50g, 11ms, half-sine per IEC 68-2-27 Test Ea, severity 50A

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 compliant
Solvent resistance DIN IEC 68-2-45 (xA) washable device

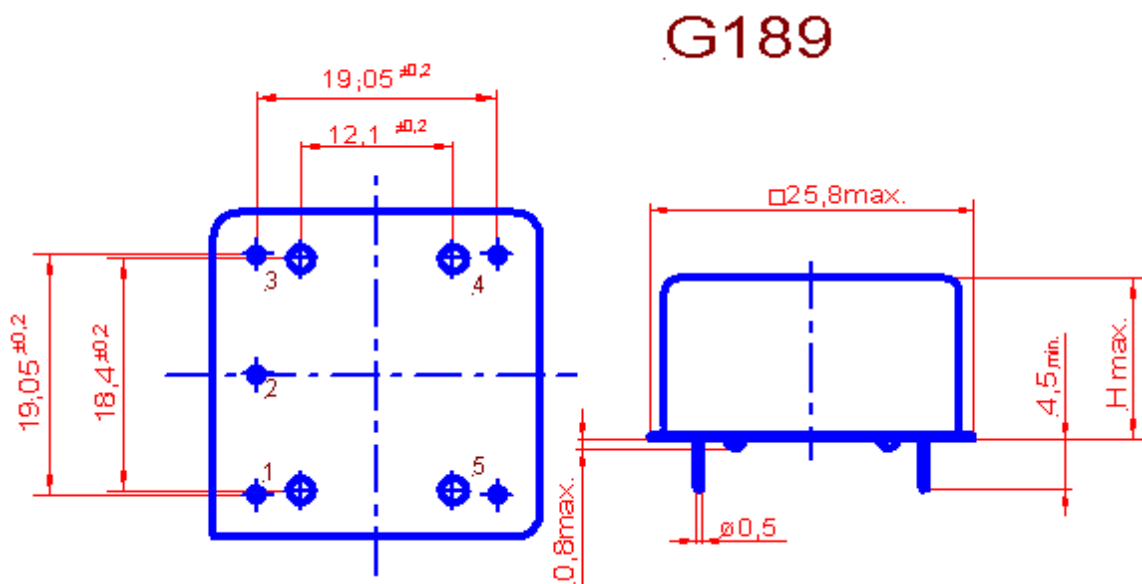
Absolute Maximum Ratings

Parameter	Min	Typ	Max	Units	Condition
Operable temperature range	-40		80	°C	
Storage temperature range	-40		85	°C	

Enclosure

Type G189

Height 12.7 mm



all units in mm

Pin Connections

- Pin 1: RF-Output
- Pin 2: GND(Case)
- Pin 3: Vc (control voltage)
- Pin 4: Vref (ref.outp. 4V ±2%)
- Pin 5: Vs (supply voltage)

Marking

C4550A2-0110
10,000 MHz
Ser.No. AYYWW *
* pin-1 marking

Standard shipping method

10 * 4 array / 40 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°C).
Subject to technical modification.

Mouser Electronics

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