OCO700

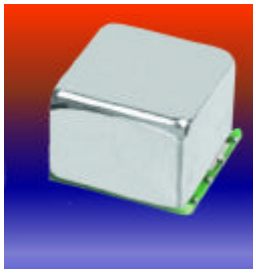
OCXO

Typical Applications

Base Station
Switching
Synthesizer

Features

Surface Mounted Package
Reflow Process Compatible
High Stability
AT-Cut Crystal



Frequency range **10 MHz – 70 MHz**

Standard frequencies 13; 26 MHz

Frequency stabilities

Parameter	Frequency stability	Operating temp range
vs. operating temperature range	< ± 100 ppb	-20 ... +70°C
Parameter	**Value**	**Condition**
Initial tolerance	< ± 500 ppb	@ Vc = 2.5 V
vs. supply voltage change	< ± 20 ppb	static
vs. load change	< ± 10 ppb	static
vs. aging / 1st year	< ± 500 ppb	after 30 days
vs. aging / 10 years	< ± 3 ppm	

Frequency tuning

Parameter	Value	Condition
Electrical frequency control (EFC)	> ± 8 ppm	
Voltage range (V_C)	0.5 to 4.5 V	
Linearity	< 10 %	
Pulling slope	positive	

RF output

Parameter	Value	Condition
Signal	HCMOS	Note 1
Load	15 pF ± 5 %	
Rise and Fall time	< 5 ns	@ 15pF & 10 to 90%
Duty cycle	40/60 %	@ Vs/2

Supply voltage

Parameter	Value	Condition
Supply voltage (V_S)	5 V ± 5 %	
Power consumption steady state	< 1.0 W	@ 25°C:
During warm up	< 2.5 W	
Reference voltage output	4.0 V ± 5 %	

Additional parameters

Parameter	Value	Condition	
Phase Noise	< -70 dBc/Hz	1 Hz	Note 2
	< -100 dBc/Hz	10 Hz	
	< -130 dBc/Hz	100 Hz	
	< -140 dBc/Hz	1 kHz	
	< -145 dBc/Hz	10 kHz	
	< -145 dBc/Hz	100 kHz	
Warm-up time	< 5 min	@25°C to final freq. within ± 0,5 ppm	
Weight	< 9 g		

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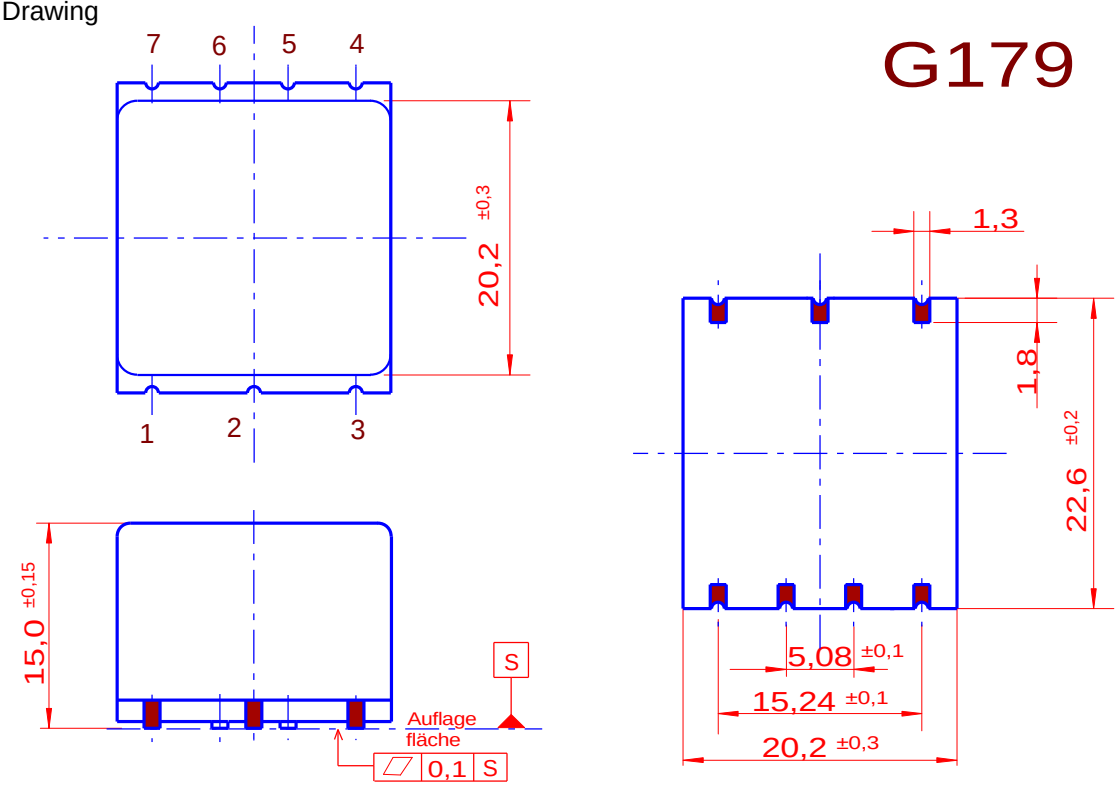
Additional Parameters

Parameter	Value	Condition
Operable temperature range	-30 ...+80°C	
Storage temperature range	-40 ...+90°C	
Processing & Packing	handling&processing note	

Enclosure

Typ G 179

Drawing



Pin Connections

Pin	1	RF Output
Pin	2	GND, Case
Pin	3	Control Voltage (Vc)
Pin	4	Reference voltage output
Pin	5	Oven control output
Pin	6	GND, Case
Pin	7	Supply Voltage V_s

all units in mm

	Ordering Code	
	Model	**Frequency**
Example:	OCO700	10M00000
Order:	OCO700	

Note

1 can drive TTL, ACMOS and CMOS

2 Typical values @ 10 MHz

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; Not all options and codes are available at all Frequencies

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