VX-501-0071-400M0

VCXO

Nominal frequency (f0) **400 MHz**

Performance Specifications

Frequency stabilities					
Parameter	Min	Typical	Max	Units	Condition
vs. operating temp. range (df/f@25°C)	-25		+25	ppm	-40...85°C
initial tolerance (df/f0)	-15		+15	ppm	@Vc = 1.65 V; 25 °C
vs. supply voltage change (df/f)	-2		+2	ppm	static; 3.3 V ±5 %
vs. load change (df/f))	-0.5		+0.5	ppm	static; Load +10 % -10 %
aging first year	-2		+2	ppm	@ 40 °C
Additional information	subharmonics <-75dBc @ >1.8GHz				

Frequency Tuning					
Parameter	Min	Typical	Max	Units	Condition
Electrical frequency control (EFC) (df/f0)	-250		-90	ppm	ext. tuning voltage@0 V
	90		250	ppm	ext. tuning voltage@3.3 V

RF output					
Parameter	Min	Typical	Max	Units	Condition
Signal		LVPECL			
Load	45	50	55	Ohm	
Rise Time			1	ns	@20 to 80 %Vout
Fall Time			1	ns	@80 to 20 %Vout
Duty cycle	45		55	%	@50 %
V Low	1.36		1.68	V	
V High	2.16		2.42	V	
Sub Harmonics			-45	dBc	

RF output					
Parameter	Min	Typical	Max	Units	Condition
Enable	Enable Function Pin2		Output Pin4		Output Pin5
	high		no data		no data
	open		data		compl. data
	low		data		compl. data

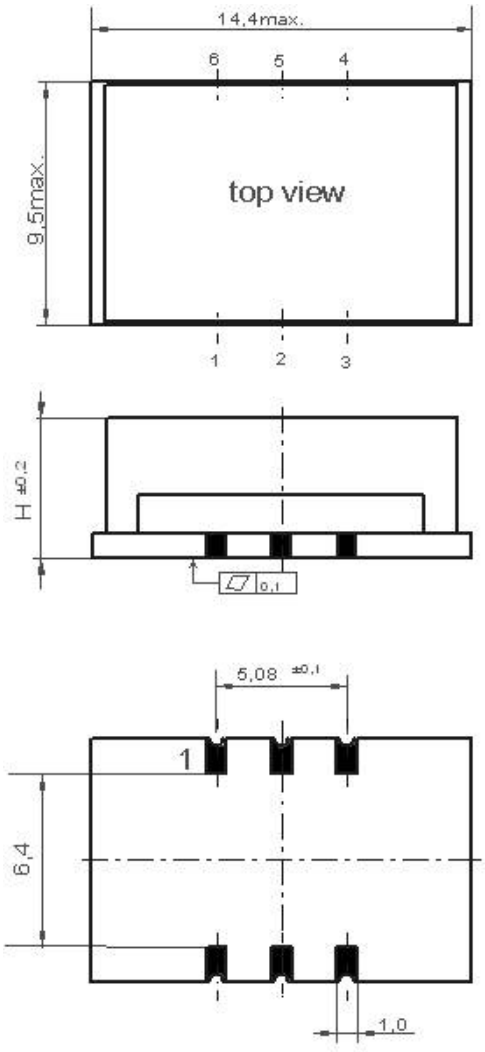
Supply voltage					
Parameter	Min	Typical	Max	Units	Condition
Supply voltage (Vs)	3.14	3.3	3.47	V	
Current consumption steady state			100	mA	@ Vsnom & 25 °C

Additional Parameters					
Parameter	Min	Typical	Max	Units	Condition
Phase Noise		-60		dBc/Hz	@10Hz
		-95		dBc/Hz	@100Hz
		-120		dBc/Hz	@1kHz
		-140		dBc/Hz	@10kHz
		-145		dBc/Hz	@100kHz
		-145		dBc/Hz	@1MHz
Jitter			1	psec (RMS)	@ 10kHz to 20MHz
Processing & Packing	handling&processing note				

Additional Environmental Conditions	
Parameter	Description
Sealing test A	nicht dicht (not hermetically sealed)
Solderability	DIN IEC 68 T2-20 (Ta) 100% RoHS 6 compliant
Solvent resistance	EN 60068-2-45, Test xA non-washable device

Absolute Maximum Ratings					
Parameter	Min	Typical	Max	Units	Condition
Operable temperature range	-45		+90	°C	
Storage temperature range	-50		+95	°C	

Enclosure



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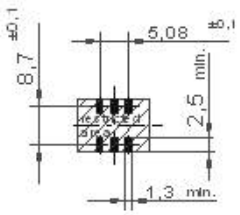


Padvorschlag
land pattern
recommendation

all units in mm

Enclosure Info	
Parameter	Description
Type	G218C
Height	2.8 mm
Pin Connections	1: Vc (control voltage) 2: Enable 3: GND(Case) 4: RF-Output 5: RF-Output compl. 6: Vs (supply voltage)
Marking	VX-501-0071 400,000 MHz * VI AYYWW * pin-1 marking
Package cover material	Metal
Package base material	FR4

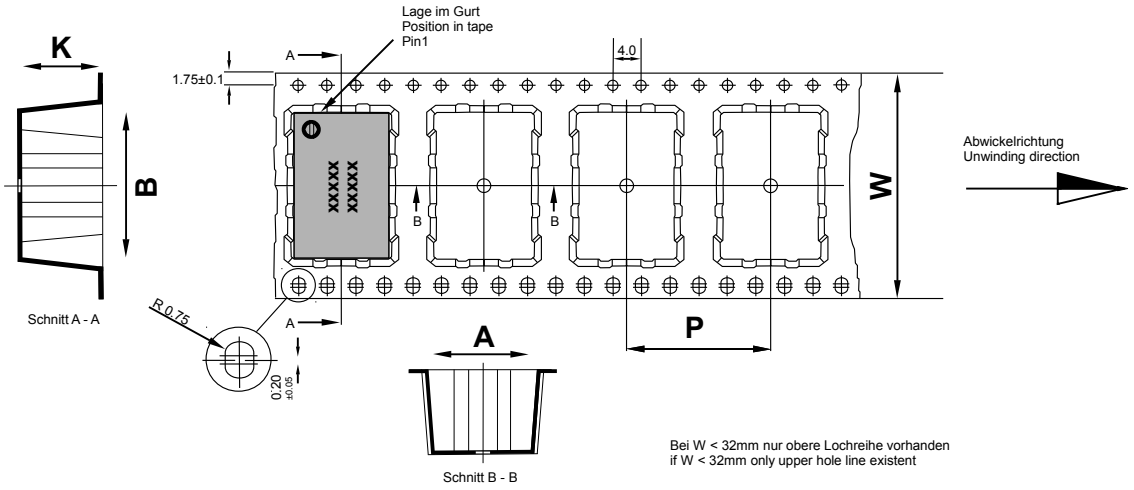
Solder profile

Recommended reflow solder profile according IPC/JEDEC J-STD-020 (latest revision)

Additional Information:

This SMD oscillator has been designed for pick and place reflow soldering
SMD oscillators must be on the top side of the PCB during the reflow process.

Standard shipping method



Maßangaben in mm:	Dimension in mm:
A, B und K Maße von Bauelement abhängig	A, B und K are dependent uppon component dimensions
Fertigungstoleranzen entsprechen der DIN IEC 286-3	production tolerance complying DIN IEC 286-3

All dimensions in millimeters unless otherwise stated

Reel Info						
Tape width W [mm]	Quantity per meter	Quantity per reel	P [mm]	A [mm]	B [mm]	K [mm]
24	83.3	1700	12	9.8	15	3.2

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.

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