

Nominal frequency (f0)

368.64 MHz

Frequency stabilities

Parameter	Frequency stability	Operating temp. range
vs. operating temp. range (df/f@25 °C)	-25 to 25 ppm	-40 ... 85 °C
Parameter	Value	Condition
initial tolerance (df/f)	-10 to 10 ppm	@Vc = 1.65 V; 25 °C
vs. supply voltage change (df/f)	-2 to 2 ppm	static; 3.3 V ±5 %
vs. load change (df/f)	-1 to 1 ppm	static; Load ± 10 %
vs. aging / year (df/f)	<± 1 ppm	@ 40 °C

Frequency tuning

Parameter	Value	Condition
Electrical frequency control (EFC) (df/f0)	-200 to -100 ppm 100 to 200 ppm	ext. tuning voltage @ 0 V ext. tuning voltage @ 3.3 V
Linearity	< 10 %	
Frequency control input impedance	> 50 kOhm	

RF output

Parameter	Value	Condition
Signal	LVPECL	
Load	50 Ohm ±10 %	
Rise Time	< 0.8 ns	@ 20 to 80 %Vout
Fall Time	< 0.8 ns	@ 80 to 20 %Vout
Duty cycle	45 / 55 %	@ 2 V
V Low	1.355 < x < 1.68 V	
V High	2.155 < x < 2.42 V	
Sub Harmonics	<- 45 dBc	
Spurious	<- 50 dBc	
Enable function	Enable Function	output
	Pin 2	Pin 4 Pin 5
	high	no data no data
	open	data compl. data
	low	data compl. data
Subharmonics are only multiple of 92,16 MHz @ output frequency		

Supply voltage

Parameter	Value	Condition
Supply voltage (Vs)	3.3 V ± 5 %	
Current consumption steady state	< 150 mA	@ Vsnom & 25 °C

Additional Parameters

Parameter	Value	Condition
Phase Noise	< -70 dBc/Hz < -100 dBc/Hz < -120 dBc/Hz < -140 dBc/Hz < -142 dBc/Hz < -142 dBc/Hz	10 Hz 100 Hz 1000 Hz 10 kHz 100 kHz 1000 kHz max values
Jitter	< 0.50 psec (RMS)	@ 100 Hz to 10 MHz
Processing & Packing	handling&processing note	

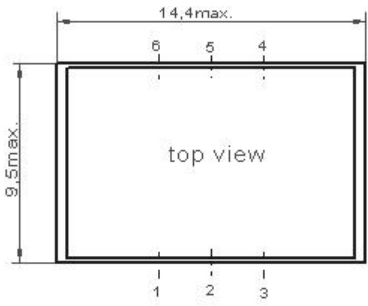
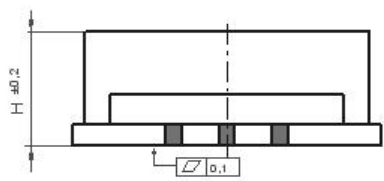
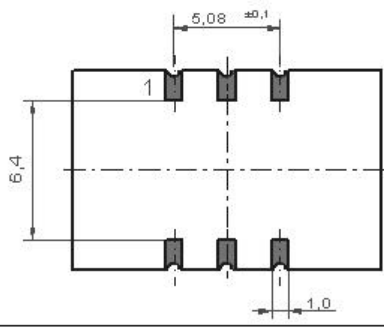
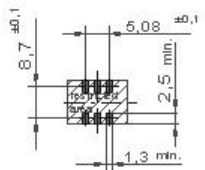
Additional environmental conditions

Rapid temperature changes +60°C at 95% RH for 24 hours
Vibration and 1 Min. per octave
Tensile strength of leads DIN IEC 68 T2-21 (Ua 1)
Flexibility of leads DIN IEC 68 T2-21 (Ub)
Sealing test A nicht dicht (not hermetically sealed)
Solderability DIN IEC 68 T2-20 (Ta) 100% RoHS compliant
Solvent resistance EN 60068-2-45, Test xA non-washable device

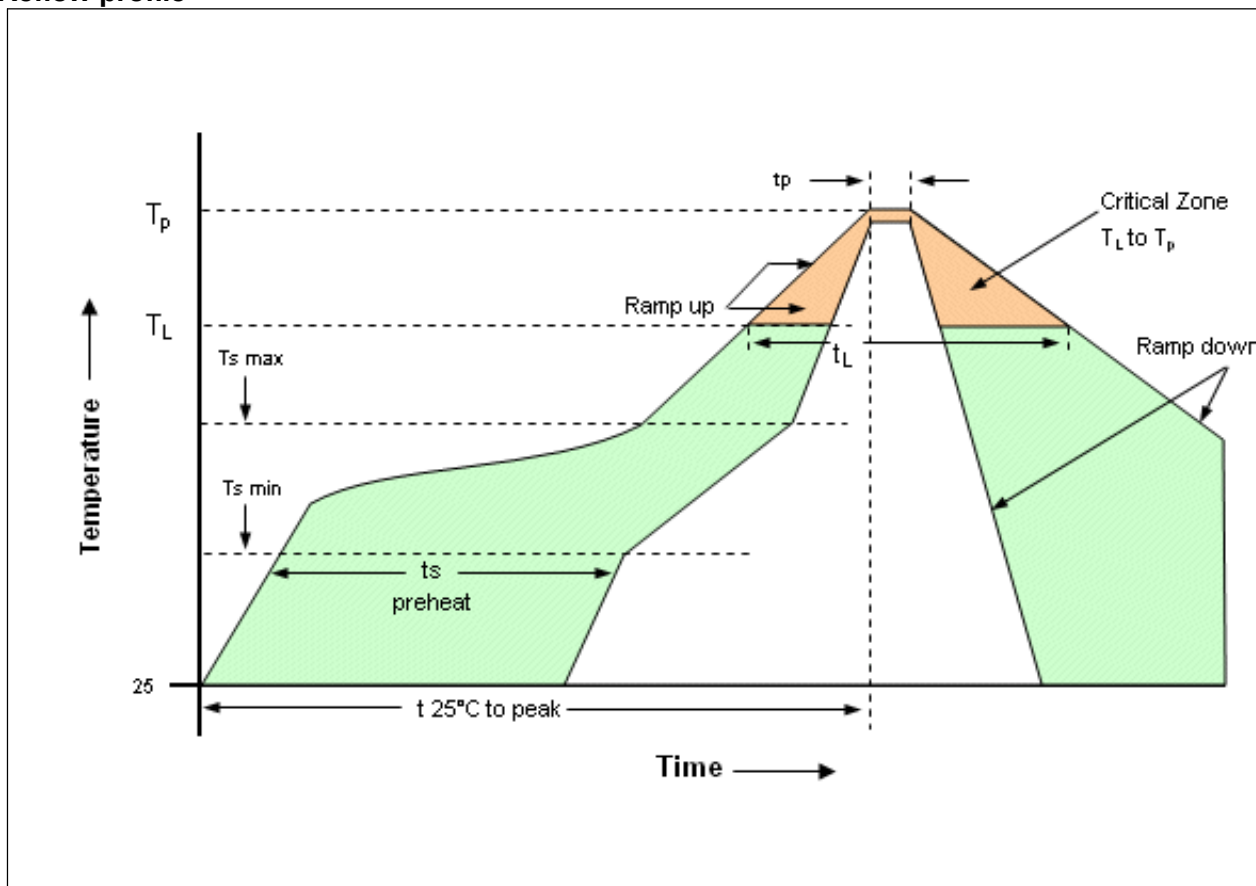
Absolute Maximum Ratings

Parameter	Min	Typ	Max	Units	Condition
Operable temperature range	-40		85	°C	
Storage temperature range	-55		125	°C	

Enclosure

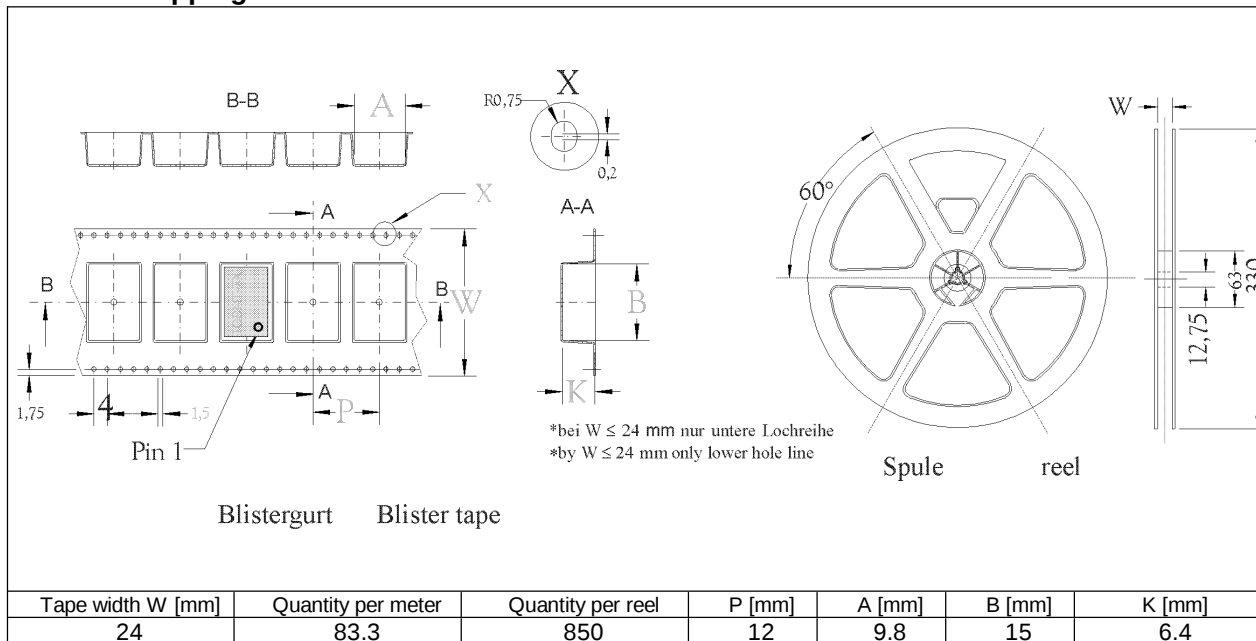
Type G218B	Height 5.9 mm
 top view G 218    Padvorschlag land pattern recommendation all units in mm	
Pin Connections Pin 1: Vc (control voltage) Pin 2: Enable/Disable Pin 3: GND(Case) Pin 4: RF-Output Pin 5: RF-Output compl. Pin 6: Vs (supply voltage)	
Marking C5310A1-0206 368,640 MHz * VI AYYWW * pin-1 marking	

Reflow profile



Profile Feature	Pb-Free Assembly/Sn-Pb Assembly
Average ramp-up rate (TL to Tp)	3°C/second max.
Preheat -Temperature Min (Tsmin)	150°C
-Temperature Min (Tsmax)	200°C
-Time (min to max) (ts)	60-180 seconds
Tsmax to TL - Ramp-up Rate	3°C/second max.
Time maintained above - Temperature (TL)	217°C
- Time (tL)	60-150 seconds
Peak Temperature (Tp)	max 260°C
Time within 5°C of actual Peak Temperature (tp)	20-40 seconds
Ramp-down Rate	6°C/second max.
Time 25°C to Peak Temperature	8 minutes max.
Note: All temperatures refer to topside of the package, measured on the package body surface.	
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



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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