



CRYSTAL OSCILLATOR SPXO

SG - 550 series

- Frequency range : 2 MHz to 48 MHz
- Supply voltage : 1.8 V / 2.5 V / 3.3 V
- Current consumption : 1.5 mA Typ.
(SEF: 1.8 V No load condition 48 MHz)
- Function : Standby(\overline{ST})
- External dimensions : 5.0 × 3.2 × 1.2 mm (t: Max.)



Product Number (please contact us)
Q33550xx0xxxx00



Actual size

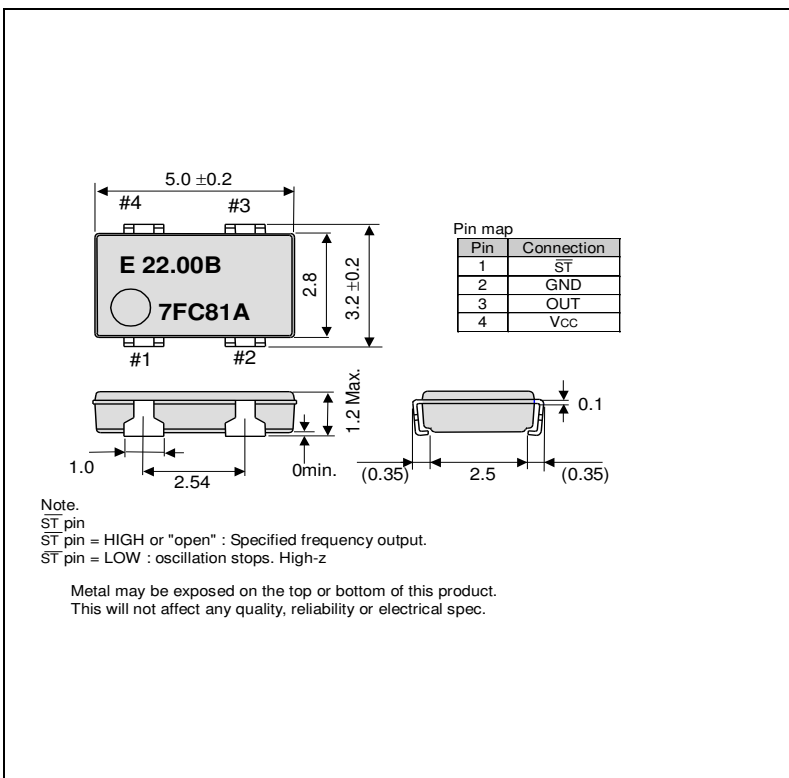


Specifications (characteristics)

Item	Symbol	Specifications			Conditions / Remarks
		SG-550SEF	SG-550SDF	SG-550SCF	
Output frequency range	f_0	2,000 MHz to 48,000 MHz			
Supply voltage	V_{CC}	1.8 V Typ. 1.6 V to 2.2 V	2.5 V Typ. 2.2 V to 3.0 V	3.3 V Typ. 2.7 V to 3.6 V	
Storage temperature	T_{stg}	-40 °C to +125 °C			Store as bare product.
Operating temperature	T_{use}	-40 °C to +85 °C			
Frequency tolerance	f_{tol}	B: $\pm 50 \times 10^{-6}$, C: $\pm 100 \times 10^{-6}$			-20 °C to +70 °C
		M: $\pm 100 \times 10^{-6}$			-40 °C to +85 °C
		L: $\pm 50 \times 10^{-6}$			-40 °C to +85 °C $V_{CC} \pm 5\%$
Current consumption	I_{CC}	1.5 mA Max.	1.5 mA Max.	1.5 mA Max.	No load condition, 2 MHz < f_0 ≤ 4 MHz
		1.5 mA Max.	1.5 mA Max.	2.0 mA Max.	No load condition, 4 MHz < f_0 ≤ 8 MHz
		1.5 mA Max.	2.0 mA Max.	2.5 mA Max.	No load condition, 8 MHz < f_0 ≤ 16 MHz
		2.0 mA Max.	2.0 mA Max.	2.5 mA Max.	No load condition, 16 MHz < f_0 ≤ 25 MHz
		2.0 mA Max. 3.0 mA Max.	2.5 mA Max. 3.5 mA Max.	3.5 mA Max. 4.5 mA Max.	No load condition, 25 MHz < f_0 ≤ 33 MHz No load condition, 33 MHz < f_0 ≤ 48 MHz
Stand-by current	I_{std}	0.7 μ A Max.	1.5 μ A Max.	2.0 μ A Max.	$\overline{ST} = GND$
Symmetry	SYM	45 % to 55 %	45 % to 55 %		50 % V_{CC} level $L_{CMOS} \leq 15$ pF
		40 % to 60 %	40 % to 60 %		
Output voltage	V_{OH}	90 % V_{CC} Min.			$I_{OH} = -3$ mA
	V_{OL}	10 % V_{CC} Max.			$I_{OL} = 3$ mA
Output load condition(CMOS)	L_{CMOS}	15 pF Max.			
Input voltage	V_{IH}	80 % V_{CC} Min.			\overline{ST} terminal
	V_{IL}	20 % V_{CC} Max.			
Rise time / Fall time	t_r / t_f	4 ns Max.			20 % V_{CC} to 80 % V_{CC} level, $L_{CMOS} = 15$ pF
Start-up time	t_{sta}	10 ms Max.			$t = 0$ at 90 % V_{CC}
Frequency aging	f_{aging}	$\pm 5 \times 10^{-6}$ / year Max.			+25 °C, First year, $V_{CC} = 1.8$ V, 2.5 V, 3.3 V

External dimensions

(Unit:mm)



Footprint (Recommended)

(Unit:mm)

