



CRYSTAL OSCILLATOR (SPXO)

OUTPUT : LV-PECL

SG-770 / SG-771 series

- Frequency range : 50 MHz to 230 MHz
- Supply voltage : 2.5 V Typ. / 3.3 V Typ.
- Output : Differential LV-PECL
- External dimensions: 7.0 × 5.0 × 1.6 mm
- Features : Fundamental mode oscillator with HFF-XTAL
- Function : Standby (\overline{ST}) ...SG-770 series
Output enable (OE) ...SG-771 series



Product Number (please contact us)

SG-770: X1G0023x1xxxx00

SG-771: X1G00282xxxx00



Actual size



Specifications (characteristics)

Item	Symbol	Specifications			Conditions / Remarks
		SG-770SDD	SG-770SCD	SG-771PCD	
Output frequency range	f_o	50.000 MHz to 230.000 MHz		80.000 MHz to 175.000 MHz	Please contact us about available frequencies.
Supply voltage	V_{cc}	2.5 V ± 0.125 V	3.3 V ± 0.165 V	3.3 V ± 0.165 V	
Storage temperature	T_{stg}	-55 °C to +125 °C			Storage as single product.
Operating temperature	T_{use}	As per below table			
Frequency tolerance	f_{tol}	$\pm 50 \times 10^{-6}$ Max.		As per below table	
Current consumption	I_{cc}	90 mA Max.		70 mA Max.	50 Ω
Symmetry	SYM	45 % to 55 %		40 % to 60 %	at outputs crossing point
Output voltage	V_{OH}	$V_{cc} - 1.1$ V Min.			
	V_{OL}	$V_{cc} - 1.5$ V Max.			
Output load condition (ECL)	L_{ECL}	LV-PECL			
Input voltage	V_{IH}	70 % V_{cc} Min.			\overline{ST} terminal or OE terminal
	V_{IL}	30 % V_{cc} Max.			
Rise time / Fall time	t_r / t_f	1 ns Max.			20 % to 80 % ($V_{OH} - V_{OL}$)
Start-up time	t_{str}	10 ms Max. *1			Time at minimum supply voltage to be 0 s
Frequency aging	f_{aging}	$\pm 5 \times 10^{-6}$ / year Max.		This is included in frequency tolerance specification.	+25 °C, $V_{cc} = 2.5$ V or 3.3 V, First year.

*1 Rise time (0 V to 2.13 V or 3.15 V) of $V_{cc} > 150 \mu s$ Product Name SG-770 S D D - 156.250000 - Q

(Standard form)

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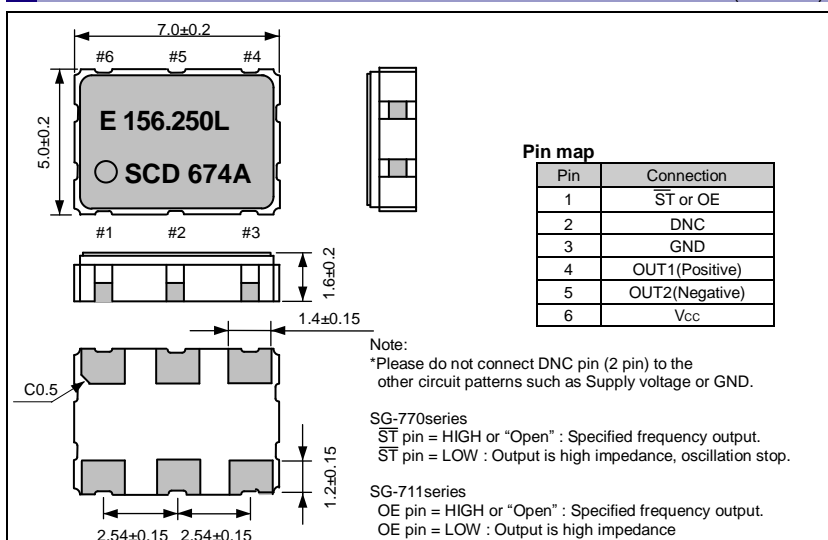
①Model ②Function (P: Output enable, S: Standby) ③Supply voltage

④Frequency(MHz) ⑤Frequency tolerance/ Operating temperature

③Supply voltage	⑤SG-770 series	Frequency tolerance	Operating temperature	⑤SG-771 series	Frequency tolerance	Operating temperature	Frequency aging
D 2.5 V Typ.	L	$\pm 50 \times 10^{-6}$	-40 °C to +85 °C	A	$\pm 30 \times 10^{-6}$	-40 °C to +85 °C	10 years
C 3.3 V Typ.	B		-20 °C to +70 °C	B	$\pm 35 \times 10^{-6}$	-40 °C to +85 °C	20 years
	P		-10 °C to +70 °C	C	$\pm 20 \times 10^{-6}$	-10 °C to +70 °C	10 years
	Q		0 °C to +70 °C	D	$\pm 25 \times 10^{-6}$	-10 °C to +70 °C	20 years

External dimensions

(Unit:mm)



Footprint (Recommended)

(Unit:mm)

