

Crystal Oscillator (SPXO)

- Package size (7.0 mm × 5.0 mm × 1.3 mm)
- Fundamental mode SPXO
- Output: CMOS
- Reference weight Typ.147 mg

[1] Product Number / Product Name / Marking

(1-1) Product Number / Ordering Code

X1G0044810006xx

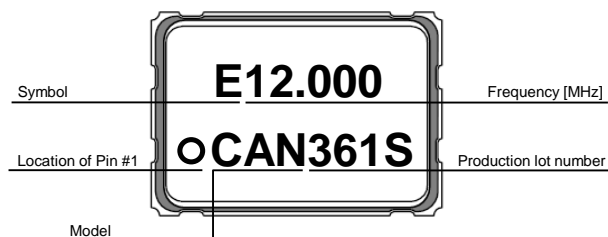
Last 2 digits code(xx) define Quantity.

The standard is "00", 1 000 pcs/Reel.

(1-2) Product Name / Model Name

SG7050CAN 12.000000 MHz TJGA

(1-3) Marking



[2] Absolute Maximum Ratings

Parameter	Symbol	Specifications			Unit	Conditions
		Min.	Typ.	Max.		
Maximum supply voltage	V _{CC}	-0.3	-	+4.0	V	-
Input voltage	V _{IN}	-0.3	-	V _{CC} + 0.3	°C	ST terminal
Storage temperature range	T _{stg}	-40	-	+125	°C	Storage as single product

[3] Operating Range

Parameter	Symbol	Specifications			Unit	Conditions
		Min.	Typ.	Max.		
Supply voltage	V _{CC}	1.60	-	3.63	V	-
	GND	0	-	0	V	-
Operating temperature range	T _{use}	-40	-	+85	°C	-
CMOS load condition	L _{CMOS}	-	-	15	pF	-

[4] Frequency Characteristics

(Unless stated otherwise [3] Operating Range)

Parameter	Symbol	Specifications			Unit	Conditions
		Min.	Typ.	Max.		
Output frequency	f _o	-	12.000000	-	MHz	-
Frequency tolerance *1	f _{tol}	-50	-	+50	×10 ⁻⁶	T _{use}
Frequency aging	f _{age}	-3	-	+3	×10 ⁻⁶	+25 °C, First year

*1 Frequency tolerance includes initial frequency tolerance, temperature variation, supply voltage change and load drift.

[5] Electrical Characteristics

(Unless stated otherwise [3] Operating Range)

Parameter	Symbol	Specifications			Unit	Conditions
		Min.	Typ.	Max.		
Start-up time	t _{str}	-	-	3.0	ms	t = 0 at 90 % V _{CC}
Current consumption	I _{CC}	-	-	1.8	mA	No load condition, V _{CC} = 3.3 V
Stand-by current	I _{std}	-	-	2.7	μA	ST = GND, V _{CC} = 3.3 V
Output voltage	V _{OH}	90 % V _{CC}	-	-	V	I _{OH} = -1.5 mA @V _{CC} = 1.8 V
	V _{OL}	-	-	10 % V _{CC}	V	I _{OL} = 1.5 mA @V _{CC} = 1.8 V
Rise time	t _r	-	-	3.5	ns	20 % V _{CC} to 80 % V _{CC} Level, L _{CMOS} = 15 pF, V _{CC} = 1.8 V ± 10 %
Fall time	t _f	-	-	3.5	ns	80 % V _{CC} to 20 % V _{CC} Level, L _{CMOS} = 15 pF, V _{CC} = 1.8 V ± 10 %
Symmetry	SYM	45	-	55	%	50 % V _{CC} Level, L _{CMOS} ≤ 15 pF
Input voltage	V _{IH}	80 % V _{CC}	-	-	V	ST terminal
	V _{IL}	-	-	20 % V _{CC}	V	ST terminal

[Please visit our website for detail specification]

https://support.epson.biz/td/api/doc_check.php?dl=app_SG7050CAN&lang=en

Detail specification includes Outline, Reflow profile, Packing information and others.

[Contact us]

<http://www5.epsondevice.com/en/contact/>

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