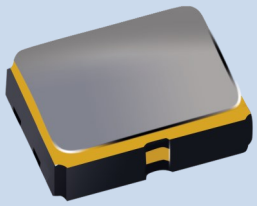
PETERMANN TECHNIK
Excellence in clocking
ISO 9001:2008

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SMD SPXO 3.2x2.5mm 2.5 VDC 32.768 kHz LP

FEATURES

- Low power version / Stand-by current 1.5 µA max.
- Frequency stability to ±25 ppm available
- Available in 1.8, 2.5, 2.8, 3.3 and 5.0 VDC
- New standard for small high performance low cost crystal oscillators
- Low Jitter for excellent performance

Pb-free
RoHS-2 2011/65/EU
compliant

GENERAL DATA

SMD-OSCILLATOR SERIES			SXO25LP-03025	
PACKAGE			Ceramic package 3.2 x 2.5 x 1.2 mm³	
FREQUENCY			32.768 kHz	
FREQUENCY STABILITY			-10/+60°C ~ -10/+70°C	±25 ~ ±100 ppm
			-20/+70°C	±30 ~ ±100 ppm
			-40/+85°C	±35 ~ ±100 ppm
			The frequency stability containts the frequency tolerance at 25°C, the temperature stabilty, supply voltage change and load change. The aging is ±3ppm max. per year.	
OPERATING TEMPERATURE RANGE			-10/+60°C ~ -40/+85°C	
STORAGE TEMPERATURE RANGE			-55/+125°C	
INPUT	VOLTAGE		+2.5 VDC ±10%	
	CURRENT		50 µA max. (No Load)	
OUPUT	SYMMETRY		45/55% at 50% V_{DD}	
	RISE AND FALL TIME		20 ns max. (10~90% V_{DD} Level)	
	"0" LEVEL	CMOS	10% V_{DD} max.	
	"1" LEVEL		90% V_{DD} min.	
	LOAD	CMOS	15 pF max.	
PIN1		STANDARD	WITH ENABLE/DISABLE FUNCTION	
ENABLE / DISABLE FUNCTION			PIN #1 (E/D CONTROL)	PIN #3 (OUPUT)
			OPEN	ACTIVE
			HIGH "1" (V_{IH} >80%V_{DD})	ACTIVE
			LOW "0" (V_{IL} <20%V_{DD})	HIGH IMPEDANCE
			OUTPUT DISABLE TIME	150 ns max.
			OUTPUT ENABLE TIME	2 ms max.
			Stand-by current 1.5 µA max. (up to –40/+85°C)	
PERIOD JITTER RMS			15 ps typ.	
DELIVERY FORM			Tape and Reel / 2.000 pcs. per reel, lower QTY possible	
OTHER PARAMETERS ARE AVAILABLE ON REQUEST / CREATE HERE YOUR SPECIFICATION				

CRYSTALS
OSCILLATORS
CERAMIC RESONATORS

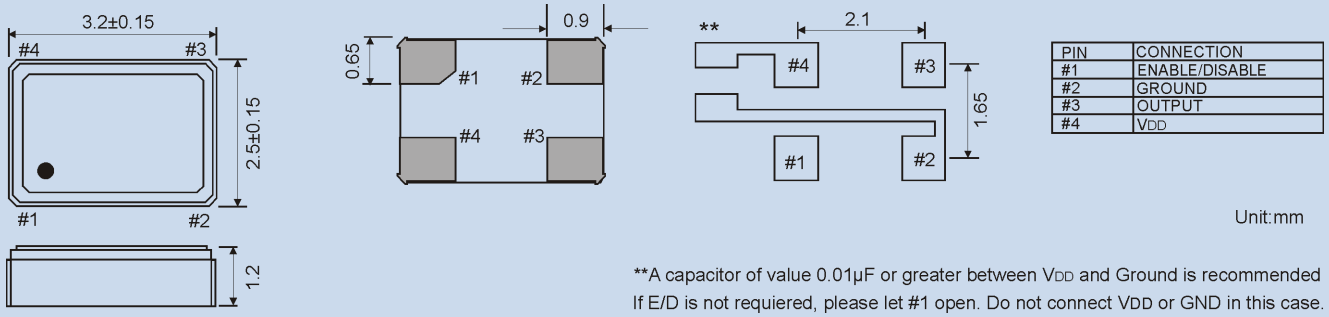
Premium Quality by
PETERMANN-TECHNIK

CERAMIC FILTERS
SAW COMPONENTS

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OUTLINE DRAWING

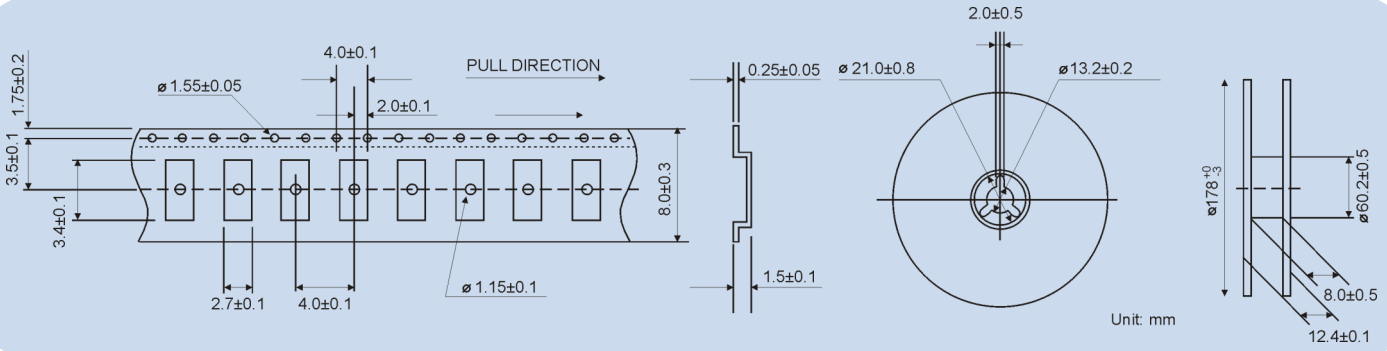


PIN	CONNECTION
#1	ENABLE/DISABLE
#2	GROUND
#3	OUTPUT
#4	VDD

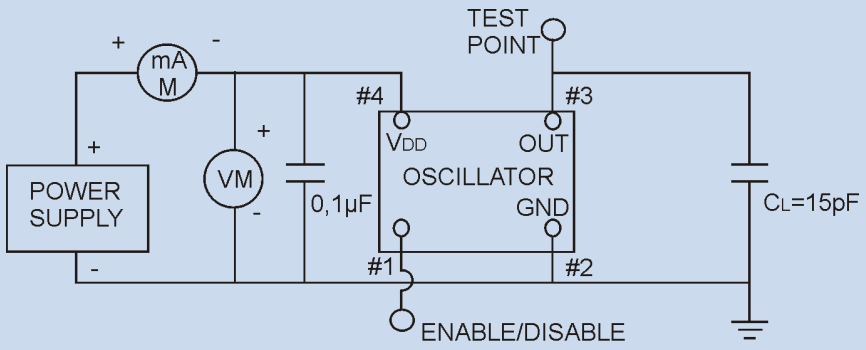
Unit:mm

**A capacitor of value 0.01µF or greater between VDD and Ground is recommended
If E/D is not requiered, please let #1 open. Do not connect VDD or GND in this case.

REEL SPECIFICATION



TEST CIRCUIT CMOS

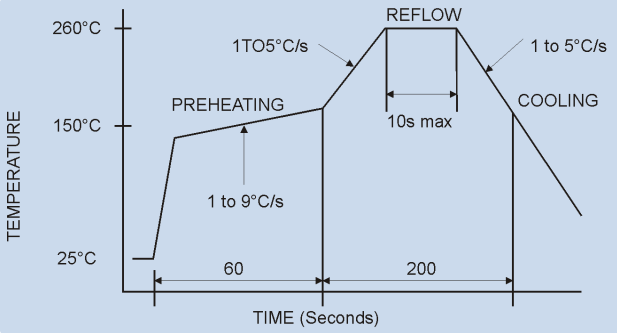


NOTE: CL includes probe and fixture capacitance

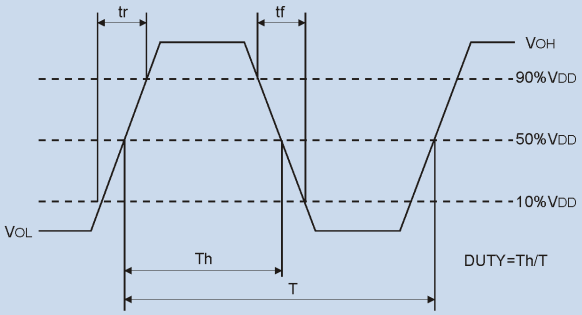
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REFLOW SOLDER PROFILE



OUTPUT WAVE FORM CMOS



ORDERING INFORMATION

Series & Voltage	Symmetry	PIN1	Frequency Stability	Temperature Range Options	Frequency	Delivery Form
SXO25LP-03025	S=45/55%	E = E/D	B*= 100ppm or O=25~50ppm	B*= 0+70°C N=-10+60°C M=-20+70°C W=-40+85°C	32.768 kHz	T

Example: SXO25LP-03025-S-E-50-W-32.768kHz-T

PLEASE INDICATE YOUR REQUIRED PARAMETERS

*B=BLANK, S=SPECIAL, E=ENABLE/DISABLE, O=OPTION, T=TAPE AND REEL

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