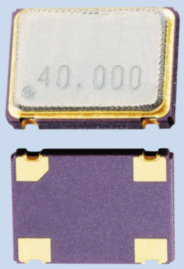
PETERMANN TECHNIK
Excellence in clocking
ISO 9001:2008

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SMD SPXO 3.2x2.5mm 3.3 VDC LP MHz

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

FEATURES

- Low power version / Stand-by current 10 µA max.
- Frequency stability to ±20 ppm available
- Available in 1.8, 2.5, 2.8, 3.0 and 3.3 VDC
- New standard for small high performance low cost crystal oscillators
- Low Jitter for excellent performance

GENERAL DATA

SMD-OSCILLATOR SERIES			SXO3LP-03025	
PACKAGE			Ceramic package 3.2 x 2.5 x 1.2 mm³	
FREQUENCY			0.2 ~ 167.0 MHz	
FREQUENCY STABILITY			-10/+60°C ~ -20/+70°C	±20 ~ ±100 ppm
			-40/+85°C	±25 ~ ±100 ppm
			-40/+105°C	±80 ~ ±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/+105°C	
STORAGE TEMPERATURE RANGE			-55/+125°C	
INPUT	VOLTAGE		+3.3 VDC ±10%	
	CURRENT		0.2 ~ 32.0 MHz = 1.8 mA max. (No Load)	
			32.0 ~ 54.0 MHz = 2.5 mA max. (No Load)	
			54.0 ~ 80.0 MHz = 5.0 mA max. (No Load)	
			80.0 ~ 125.0 MHz = 6.0 mA max. (No Load)	
			125.0 ~ 167.0 MHz = 8.0 mA max. (No Load)	
OUPUT	SYMMETRY	STANDARD	40/60%	
		OPTION	45/55%	
	RISE AND FALL TIME		5 ns max. (Lcmos 15pF=10~90% VDD Level)	
	"0" LEVEL	CMOS	10% VDD max.	
	"1" LEVEL		90% VDD 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" (VIH >80%VDC)	ACTIVE
			LOW "0" (VIL <20%VDC)	HIGH IMPEDANCE
			OUTPUT DISABLE TIME	150 ns max.
			OUTPUT ENABLE TIME	1 ms max.
			Stand-by current 10 µA max. (-40/+85°C)	
DELIVERY FORM			Tape & Reel / 2.000 pcs. per reel, lower QTY possible	
OTHER PARAMETERS ARE AVAILABLE ON REQUEST / CREATE HERE YOUR SPECIFICATION				

CRYSTALS
OSCILLATORS
CERAMIC RESONATORS

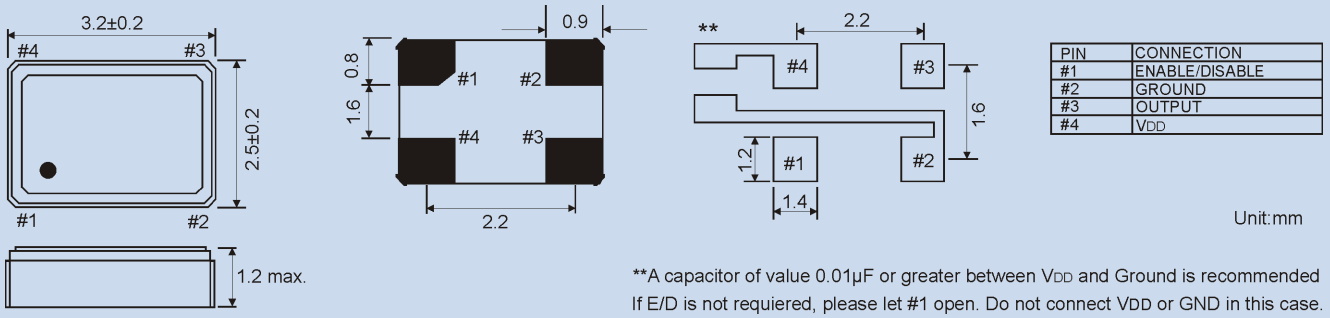
Premium Quality by
PETERMANN-TECHNIK

CERAMIC FILTERS
SAW COMPONENTS

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OUTLINE DRAWING

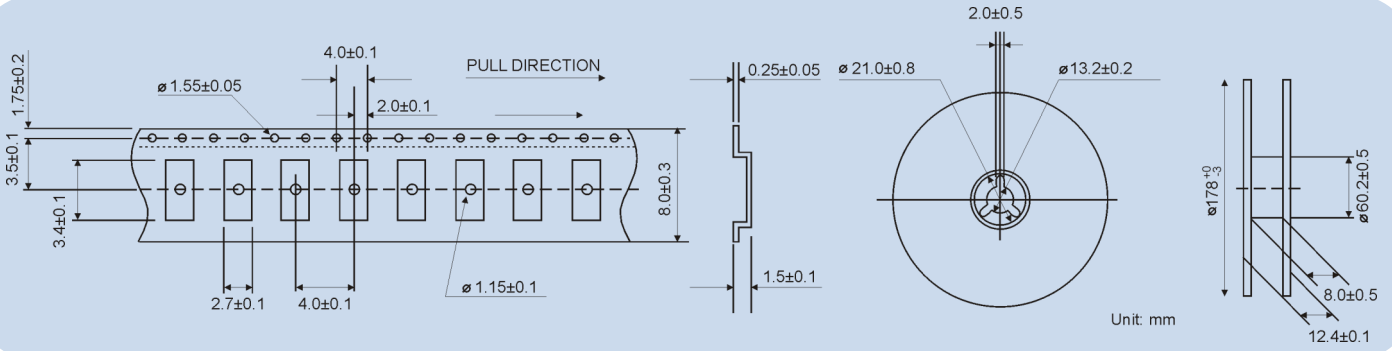


PIN	CONNECTION
#1	ENABLE/DISABLE
#2	GROUND
#3	OUTPUT
#4	VDD

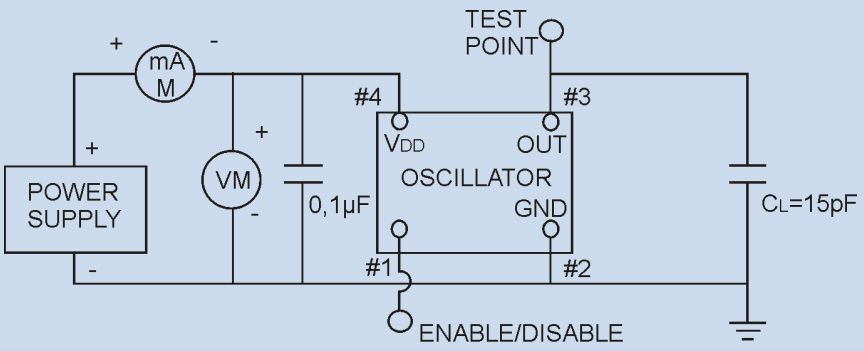
Unit:mm

**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

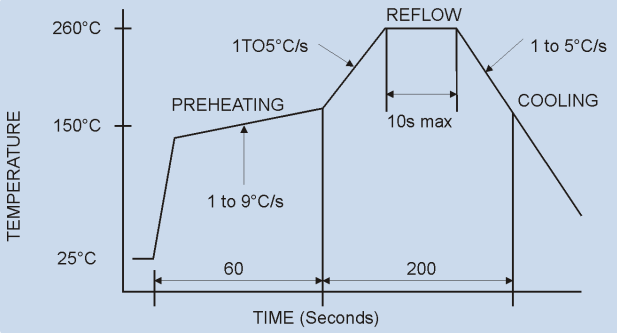


NOTE: CL includes probe and fixture capacitance

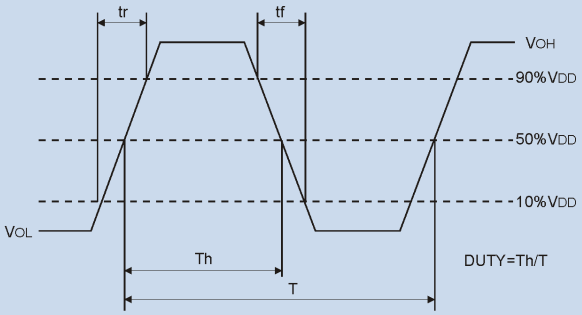
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REFLOW SOLDER PROFILE



OUTPUT WAVE FORM CMOS



ORDERING INFORMATION

Series & Voltage	Symmetry	PIN1	Frequency Stability	Temperature Range Options	Frequency	Delivery Form
SXO3LP-03025	B*=40/60% or S=45/55%	E = E/D	B*= 100ppm or O=20~50ppm	B*= 0+70°C N=-10+60°C M=-20+70°C W=-40+85°C Y=-40+105°C	27.000 MHz	T

Example: SXO3LP-03025-S-E-50-W-27.000MHz-T

PLEASE INDICATE YOUR REQUIRED PARAMETERS

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

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