

SMD SPXO 3.2x2.5mm 1.8 VDC MHz

FEATURES

- High reliability for low cost
- Frequency stability to ± 20 ppm available
- Available in 1.8, 2.5 and 3.3 VDC
- New standard for small high performance low cost crystal oscillators
- Extended temperature range -40°C to $+105^{\circ}\text{C}$

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

GENERAL DATA

SMD-OSCILLATOR SERIES		SXO18-03025	
PACKAGE		Ceramic package 3.2 x 2.5 x 1.2 mm ³	
FREQUENCY		0.2 ~ 80.0 MHz	
FREQUENCY STABILITY		$-10/+60^{\circ}\text{C} \sim -20/+70^{\circ}\text{C}$	$\pm 20 \sim \pm 100$ ppm
		$-40/+85^{\circ}\text{C}$	$\pm 25 \sim \pm 100$ ppm
		$-40/+105^{\circ}\text{C}$	$\pm 50 \sim \pm 100$ ppm
		The frequency stability contains the frequency tolerance at 25°C, the temperature stability, supply voltage change and load change. The aging is ± 3 ppm max. per year.	
OPERATING TEMPERATURE RANGE		$-10/+60^{\circ}\text{C} \sim -40/+105^{\circ}\text{C}$	
STORAGE TEMPERATURE RANGE		$-55/+125^{\circ}\text{C}$	
INPUT	VOLTAGE	$+1.8 \text{ VDC} \pm 0.2 \text{ VDC}$	
	CURRENT	$0.2 \sim 4.0 \text{ MHz} = 10 \text{ mA max.}$	
		$4.0 \sim 32.0 \text{ MHz} = 20 \text{ mA max.}$	
		$32.0 \sim 80.0 \text{ MHz} = 30 \text{ mA max.}$	
OUPUT	SYMMETRY	STANDARD	40/60%
		OPTION	45/55%
	RISE AND FALL TIME		5 ns typical / 10 ns max.
	"0" LEVEL	CMOS	10% VDD max.
"1" LEVEL	90% VDD min.		
LOAD		CMOS	15 pF max.
PIN1	STANDARD		WITHOUT ENABLE / DISABLE FUNCTION
	OPTION		WITH ENABLE / DISABLE FUNCTION
ENABLE / DISABLE FUNCTION		PIN #1 (E/D CONTROL)	
		OPEN	
		HIGH "1" ($V_{IH} > 70\% \text{VDC}$)	
		LOW "0" ($V_{IL} < 30\% \text{VDC}$)	
		OUTPUT DISABLE TIME	
		OUTPUT ENABLE TIME	
DELIVERY FORM		Tape & Reel / 1.000 pcs. per reel, lower QTY possible	
OTHER PARAMETERS ARE AVAILABLE ON REQUEST / CREATE HERE YOUR SPECIFICATION			

CRYSTALS
 OSCILLATORS
 CERAMIC RESONATORS

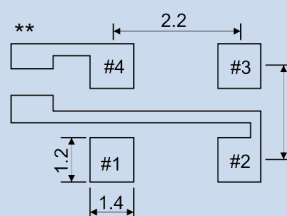
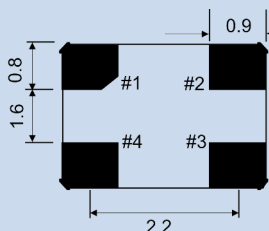
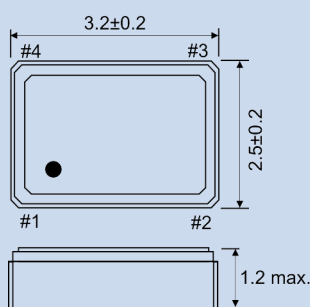


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 PETERMANN-TECHNIK

CERAMIC FILTERS
 SAW COMPONENTS

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OUTLINE DRAWING

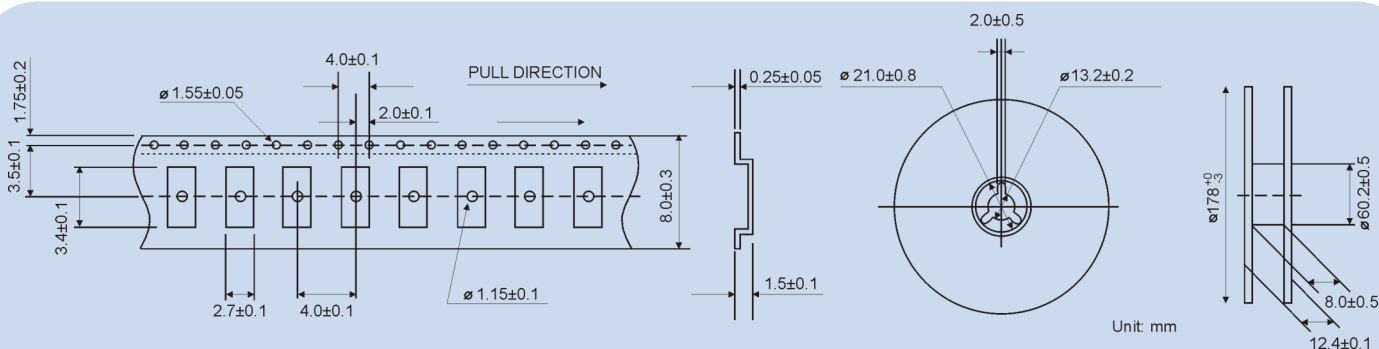


PIN	CONNECTION
#1	N.C. or ENABLE/DISABLE
#2	GROUND
#3	OUTPUT
#4	V _{DD}

Unit:mm

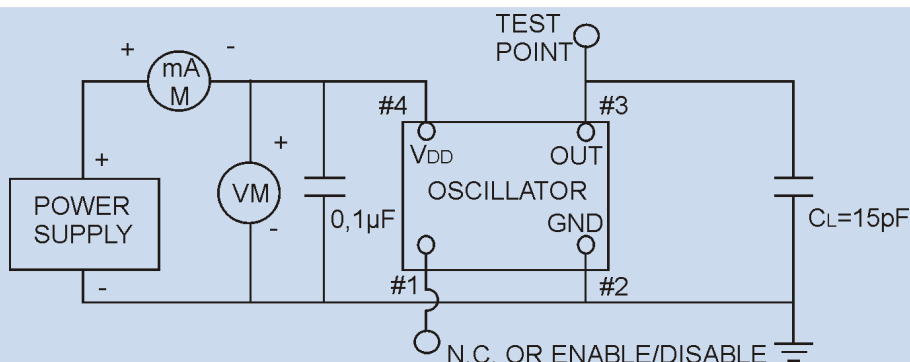
**A capacitor of value 0.01µF or greater between V_{DD} and Ground is recommended

REEL SPECIFICATION



Unit mm

TEST CIRCUIT CMOS



NOTE: CL includes probe and fixture capacitance

CRYSTALS
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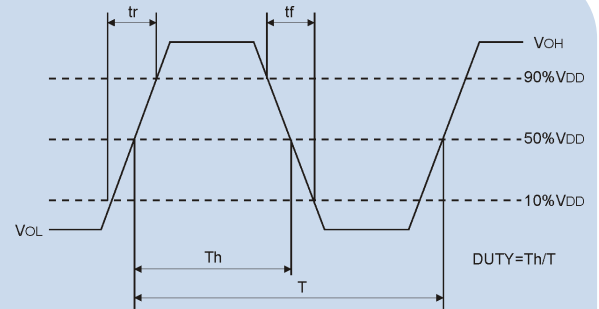
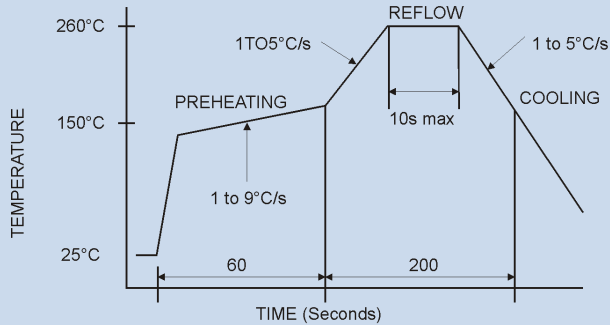
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REFLOW SOLDER PROFILE

OUTPUT WAVE FORM CMOS



ORDERING INFORMATION

Series & Voltage	Symmetry	PIN1	Frequency Stability	Temperature Range Options	Frequency	Delivery Form
SXO18-03025	B*=40/60% or S=45/55%	B*= NO E/D or 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: SXO18-03025-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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