

FEATURES

- Miniature 7.0 x 5.0mm package
- Frequency Range from 312.5kHz
- Supply current from 2mA
- Supply voltage range: 1.0, 1.2, 1.8, 2.5, 3.3 or 5.0 Volts
- Tristate function for power conservation

DESCRIPTION

SWO oscillators are a general-purpose clock oscillator in the industry-standard, 7.0 x 5.0 x 1.4mm, miniature package. The part is ideal for space-constrained applications. The oscillator is available with 1.0, 1.2, 1.8, 2.5, 3.3 or 5.0 Volts supply voltage.



APPLICATIONS

- CPU, Graphics, Multimedia, A/V clocks
- MPEG / DVD / HDTV clocks
- Laser engine pixel set / set-top clocks
- OC-3, OC-2, OC-48 and OC-192 clocks
- SONET / SDH / ATM clocks
- Fast Ethernet and Gigabit Ethernet clocks
- NTSC / PAL encoder/decoder clocks
- PLL / synthesizer clocks
- Fibre channel and ADSL clocks

SUPPLY VOLTAGE/CURRENT CONSUMPTION/RISE AND FALL TIME

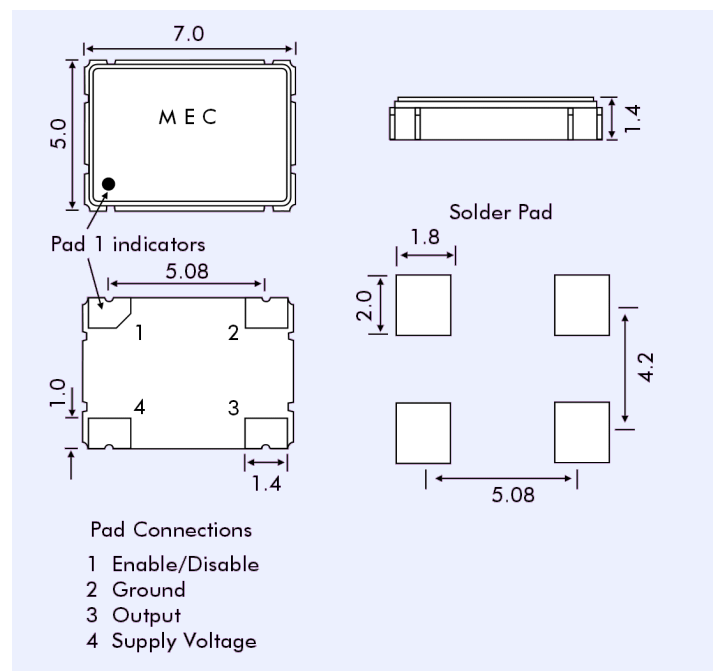
Supply Voltage	+1.0VDC±5% Code = '1'	+1.2VDC±5% Code = '12'	+1.8VDC±5% Code = '18'	+2.5VDC±5% Code = '25'	+3.3VDC±5% Code = '3'	+5.0VDC±10% Code = '5'
Available Frequency Range	0.5~40MHz	0.5~50MHz	1.0~160MHz	0.3~160MHz	0.3~160MHz	0.5~125.0MHz
Logic HIGH '1' (90%V _{dd} min.)	0.9V min.	0.9V min.	1.62V min.	2.25V min.	2.97V min.	4.5V min.
Logic LOW '0' (90% V _{dd} max.)	0.1V max.	0.1V max.	0.18V max.	0.25V max.	0.33V max.	0.5V max.
Current Consumption	[0.5~32MHz] 2.0mA max.	[0.5~32MHz] 2.5mA max.	[1.0~1.5MHz] 5mA max.	[0.3~1.5MHz] 5mA max.	[0.3~1.5MHz] 5mA max.	[0.3~1.5MHz] 5mA max.
			[1.5~20MHz] 8mA max.	[1.5~20MHz] 8mA max.	[1.5~20MHz] 8mA max.	[1.5~20MHz] 10mA max.
	[32.1~40MHz] 3.0mA max.	[32.1~50MHz] 3.5mA max.	[20~50MHz] 15mA max.	[20~50MHz] 15mA max.	[20~50MHz] 15mA max.	[20~50MHz] 15mA max.
			[50.1~125MHz] 22mA max.	[50.1~160MHz] 25mA max.	[50.1~160MHz] 35mA max.	[50.1~160MHz] 40mA max.
Rise Time/Fall Time	6ns max.	6ns max.	7ns max.	7ns max.	10ns max.	10ns max.

Measured between 10% ~ 90% of wave form (CL = 15pF)

GENERAL SPECIFICATION

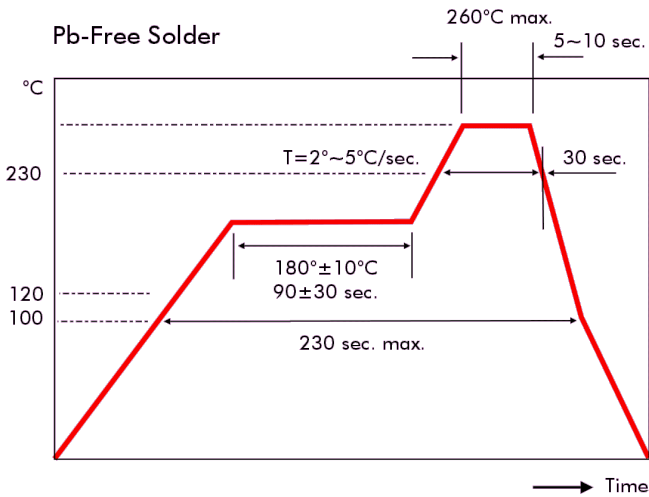
Frequency Range:	0.3125MHz to 125.0MHz
Operating Temperature Range	
Commercial:	-10° to +70°C
Industrial:	-40° to +85°C
Frequency Stability*:	From ±25ppm over -40° to +85°C. See Part Number Format table.
Output Load:	15pF max., 30pF and 50pF available for parts with 3.3V or 5.0V supply
Duty Cycle:	50% ±10% standard, option of 50% ±5% (add 'S' to end of part number for ±5%)
Start-up Time	
1.0~32.0MHz:	5ms max.
32.0~160.0MHz:	10ms max.
Storage Temperature Range:	-50° to +100°C
Ageing:	±5ppm per year max.
Enable/Disable (Tristate):	Output is high impedance when "0" is applied to pad/pin 1. Enable time is 10ms max.
RoHS Status:	RoHS Compliant

OUTLINES & DIMENSIONS



* Temperature Stability from ±10ppm is available. If non-standard temperature stability required add, eg., 'C10' for ±10ppm over commercial temperature range

SOLDER PROFILE



PART NUMBER FORMAT

Example: 3SWODT-32.000-S 3 SWO D T - 32.000 - S

Supply Voltage:

5 = 5.0 Volts
3 = 3.3 Volts
25 = 2.5 Volts
18 = 1.8 Volts
12 = 1.2 Volts
1 = 1.0 Volts

Series Designation:

SWO

Stability and Temperature Range:

A = ±25ppm over -10° to +70°C
B = ±50ppm over -10° to +70°C
C = ±100ppm over -10° to +70°C
D = ±25ppm over -40° to +85°C
E = ±50ppm over -40° to +85°C
F = ±100ppm over -40° to +85°C

Tristate (Enable/Disable) Function

Nominal Frequency:

In MHz

Duty Cycle/Symmetry:

S = 50%±5%
(Optional)

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for [Mercury United](#) manufacturer:

Other Similar products are found below :

[HUS-4.9152-18-30/50/-40+85](#) [H49-3.579545-18-30/50/-40+85](#) [H49-4.000-18-30/50/-40+85](#) [H49-24.576-18-30/50/-40+85](#) [HUS-3.579545-18-30/50/-40+85](#) [X32-25.000-12-30/30/-40+85](#) [M49-25.000-18-30/50/-40+85](#) [H49-11.0592-18-30/50/-40+85](#) [H49-27.000-18-30/50/-40+85](#) [X22-16.000-12-30/30/-40+85](#) [H49-16.384-18-30/50/-40+85](#) [3H53ET-20.000](#) [3H32ET-10.000](#) [HUS-4.194304-18-30/50/-40+85](#) [H49-14.31818-18-30/50/-40+85](#) [3H53ET-40.000](#) [HUS-10.000-18-30/50/-40+85](#) [H49-9.8304-18-30/50/-40+85](#) [3SWOET-10.000](#) [3H32ET-20.000](#) [H49-7.3728-18-30/50/-40+85](#) [MJ-24.000-12-30/30/-40+85](#) [H49-16.000-18-30/50/-40+85](#) [HUS-12.000-18-30/50/-40+85](#) [HUS-14.31818-18-30/50/-40+85](#) [H49-25.000-18-30/50/-40+85](#) [M49-24.576-18-30/50/-40+85](#) [X21-26.000-12-30/30/-40+85](#) [MJ-25.000-12-30/30/-40+85](#) [H49-24.000-18-30/50/-40+85](#) [MQ-8.000-12-30/30/-40+85](#) [MQ-24.576-12-30/30/-40+85](#) [MQ-12.000-12-30/30/-40+85](#) [HUS-7.3728-18-30/50/-40+85](#) [X21-20.000-12-30/30/-40+85](#) [3SWOET-25.000](#) [MQ-6.000-12-30/30/-40+85](#) [3H53ET-24.000](#) [MP24G-12.000-18P-30/50/X/80R](#)