

ASO52S / ASO53S LVDS Compatible

2.5 Volt and 3.3 Volt 5x3.2mm Surface Mount Ceramic Crystal Oscillator

Applications:

- SONET/SDH
- 1G/10G Ethernet
- Wideband WLAN AP
- Fiber Channel
- XDSL

FEATURES

- LVDS Complementary output
- Low phase jitter (12KHz to 20MHz) under 1 ps (RMS)
- Special side-pad design for jitter improvement option
- Low profile package design (1.3mm height max.)
- RoHS Compliant

SPECIFICATION

MODEL		ASO52S	ASO53S
Frequency Range	MHz	40.000~160.000	
Frequency Stability*	ppm	±25~±100	
Temperature Range			
Operating Temp	°C	-10 to +70	-10 to +70
Storage Temp	°C	-55 to +125	-55 to +125
Power Supply Voltage	VDC	+2.5±5%	+3.3±10%
Output Voltage High (V OH)	V (Max)	1.6	1.6
Output Voltage Low (V OL)	V (Min)	0.9	0.9
Differential Output Voltage (VOD)	mV	247 ~ 454	247 ~ 454
Offset Voltage (VOS)	V	1.125~1.375	1.125~1.375
Output Load (Between Q and QN)	Ω	100	100
Output Symmetry	%	45~55%	
Input Current			
40~100MHz	mA	60	60
101~160MHz	(Max.)	65	65
Input Voltage			
Enable High Input Voltage	V (Min)	1.75	2.31
Enable Low Input Voltage	V (Max)	0.75	0.99
Rise / Fall Time (20% / 80%)			
40~100MHz	nS	1.0	1.0
101~160MHz	(Max.)	0.5	0.5
Aging	ppm/Year	±3	

* Inclusive of 25°C ± 3°C & Operating Temperature Range.

ENABLE / DISABLE FUNCTION

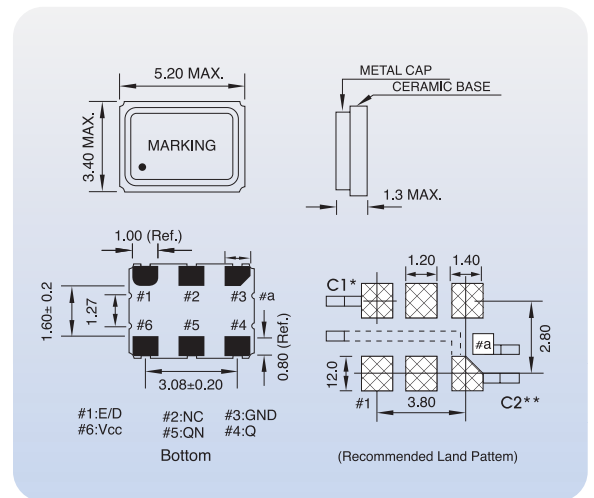
INH (# 1)	Q (# 4) & QN (#5)
HIGH (Open)	Operating
Low	High impedance

PART NUMBERING GUIDE

Example: ASO52S-106.25M-F2T

MODEL	Frequency	Stability	OP Temp Range	Tristate
ASO52S	In MHZ	D: ±25ppm	1: 0 to +70°C	T: Tristate
ASO53S		E: ±30ppm	2: -10 to +70°C	N: Non-Tristate
		F: ±50ppm	3: -20 to +70°C	
		G: ±100ppm	4: -20 to +80°C	
		O: Others	5: -40 to +85°C	
			6: -40 to +105°C	
			0: Others	

DIMENSION (mm)



C1*: A 0.01uF or 0.1uF decoupling capacitor is recommended.

C2**: By-pass capacitor for the noise suppression. (please contact our engineer dept. for the recommended capacitor value)

MARKING RULE

