

ASO21K/ASO22K/ASO23K

CMOS Compatible

1.8 Volt, 2.5 Volt and 3.3 Volt 2.5×2.0mm Surface Mount Ceramic Crystal Oscillator

Applications:

- Notebook PC
- Portable PC
- DOA Terminal
- HDD
- Digital Camera
- Wireless LAN
- PCMCIA Card
- CCD

FEATURES

- Seam Seal
- Excellent Solderability
- Tri-State
- RoHS Compliant
- Low Power Consumption

SPECIFICATION

MODEL		ASO21K	ASO22K	ASO23K
Frequency Range	KHz	32.768KHz		
Frequency Stability*	ppm	±20 ~ ±100		
Temperature Range				
Operating Temp	°C	-10 to +70		
Storage Temp	°C	-55 to +125		
Power Supply Voltage	VDC	+1.8±5%	+2.5±5%	+3.3±10%
Output Level		CMOS		
Output Symmetry	%**	40~60 (at 50% VDD)		
Input Current	mA(Max.)	1.5	2.5	3.5
Rise / Fall Time	nS(Max.)	50	50	50
Output Load		15pF		
Aging	ppm/Year	±3		

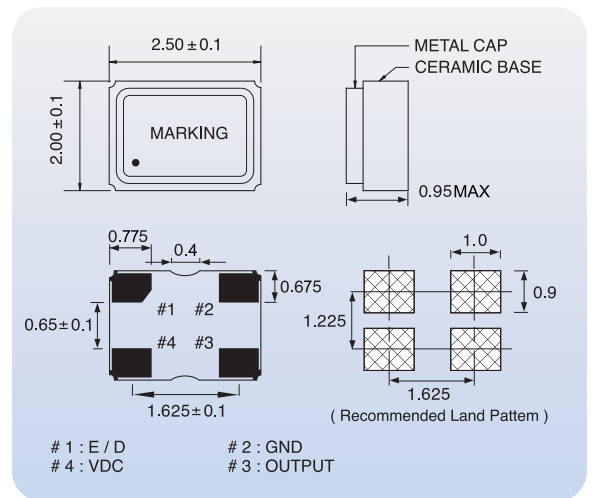
* Inclusive of 25°C±3°C & Operating Temperature Range.

** Symmetry of 45~55% is available.

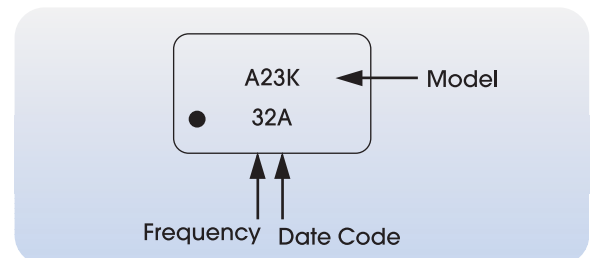
ENABLE / DISABLE FUNCTION

INH (# 1)	OUTPUT (# 3)
HIGH (Open)	Operating
Low	High impedance

DIMENSION (mm)



MARKING RULE



PART NUMBERING GUIDE

Example: ASO23K-32.768K-F2T

MODEL	Frequency	Stability	OP Temp Range	Tristate
ASO21K	In KHZ	C: ±20ppm	1: 0 to +70°C	T: Tristate N: Non-Tristate
ASO22K		D: ±25ppm	2: -10 to +70°C	
ASO23K		E: ±30ppm	3: -20 to +70°C	
		F: ±50ppm	4: -20 to +80°C	
	G: ±100ppm	5: -40 to +85°C		
	O: Others	6: -40 to +105°C		
		0: Others		