

ASO52E/ASO53E LOW EMI CMOS Compatible

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

Applications:

- Notebook PC
- LCD
- Wireless LAN
- Portable PC
- Digital Camera
- Mobile phone

FEATURES

- CMOS Compatible
- Seam Seal
- Spread Spectrum Clock Oscillators
- Tri-State
- RoHS Compliant
- Excellent Solderability
- Low Power Consumption

SPECIFICATION

MODEL		ASO52E	ASO53E
		ASO52ES	ASO53ES
Frequency Range	MHz	13.000~160.000	
Frequency Stability*	ppm	±20~±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 Level		CMOS	
Output Symmetry	%**	40~60 (at 50% VDD)	
Input Current			
13~49.99MHz	mA (Max.)	20	20
50~79.99MHz		20	25
80~99.99MHz		25	30
100~160MHz		30	40
Rise / Fall Time			
13~49.99MHz	nS (Max.)	5	10
50~79.99MHz		4	8
80~99.99MHz		3	5
100~160MHz		3	4
Output Load		15pF (50pF)	
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

SPREAD SPECTRUM MODULATION

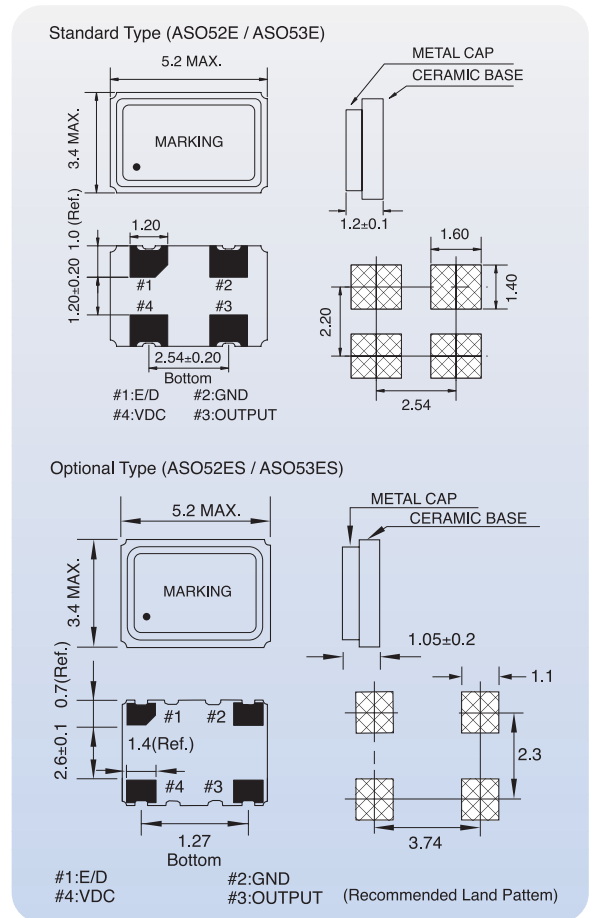
Center Spread :	±0.125% ~ ±2.0%
DOWN Spread :	-0.25% ~ -4.0%

PART NUMBERING GUIDE

Example: ASO52E-20M-F2T

MODEL	Frequency	Stability	OP Temp Range	Tristate
ASO52E	In MHZ	C: ±20ppm	1: 0 to +70°C	T: Tristate
ASO53E		D: ±25ppm	2: -10 to +70°C	N: Non-Tristate
ASO52ES		E: ±30ppm	3: -20 to +70°C	
ASO53ES		F: ±50ppm	4: -20 to +80°C	
		G: ±100ppm	5: -40 to +85°C	
		O: Others	6: -40 to +105°C	
			0: Others	

DIMENSION (mm)



MARKING RULE

