

# ASX5F / ASX5T

## 5x3.2mm Surface Mount Ceramic Crystal Units

### Applications:

- Digital Cellular Telephone
- GPS
- Wireless LAN
- Notebook PC
- TCXO
- Bluetooth
- Portable PC

### FEATURES

- Seam Seal
- Excellent Thermal Hysteresis
- RoHS Compliant
- Excellent Solderability
- High Frequency Stability
- Excellent Vibration Resistance & Shock Resistance

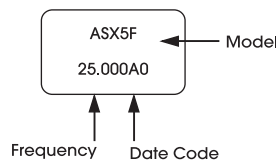
### SPECIFICATION

MODEL	ASX5F/ASX5T/ASX5TA	
Frequency		
Frequency Range (Fundamental)	MHz	8.000 ~ 52.000
Frequency Range (3rd overtone)		40.000 ~ 150.000
Frequency Tolerance (25°C)	ppm	± 10 ~ ± 50
Frequency Stability (Ref to 25°C)	ppm	± 10 ~ ± 50
Environmental Condition		
Operating Temperature Range	°C	-10 to +70
Storage Temperature Range	°C	-55 to +125
Aging	ppm/Year	± 1, ± 2, ± 3
Electrical Specifications		
Test Circuit	S&A 350A with $\pi$ Fixture	
Load Capacitance (CL)	pF	10pF ~ Series (Customer Specified)
Drive Level	uW	15, 30, 50, 100, 200, 500 or special requirement
Equivalent Series Resistance	$\Omega$	see table
Shunt Capacitance (Co)	pF	7.0 (Max.)

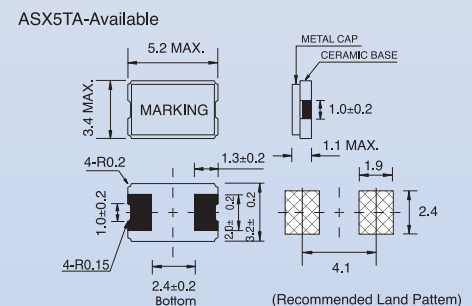
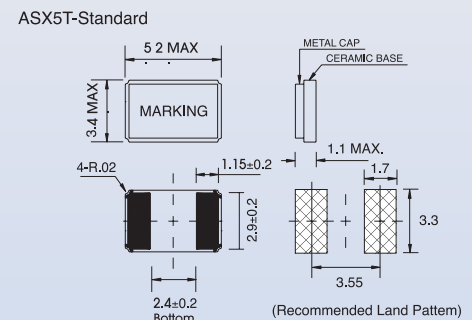
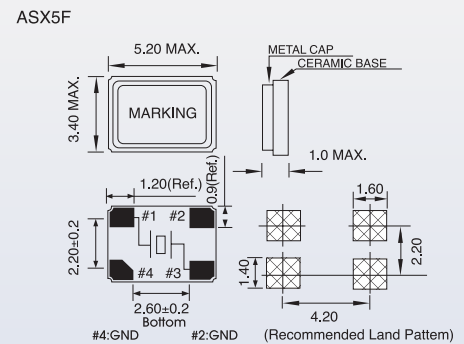
### EQUIVALENT SERIES RESISTANCE ( $\Omega$ )

Frequency (MHz)	Mode	Max ESR ( $\Omega$ )
8.00 ~ 10.00	Fundamental	150
10.01 ~ 12.00	Fundamental	90
12.01 ~ 15.00	Fundamental	70
15.01 ~ 20.00	Fundamental	50
20.01 ~ 30.00	Fundamental	40
30.01 ~ 40.00	Fundamental	30
40.01 ~ 52.00	Fundamental	20
40.00 ~ 52.00	3rd overtone	100
52.01 ~ 80.00	3rd overtone	100
80.01 ~ 150.0	3rd overtone	80

### MARKING RULE



### DIMENSION (mm)



### PART NUMBERING GUIDE

Example: ASX5F-25M-FE160E2

MODEL	Frequency	Mode	Tolerance	CL	Stability	OP Temp Range
ASX5F	In MHZ	F: Fundamental	A: ± 10ppm	080: 8pF	A: ± 10ppm	1: 0 to +70°C
ASX5T		3: 3rd Overtone	B: ± 15ppm	125: 12.5pF	B: ± 15ppm	2: -10 to +70°C
ASX5TA				C: ± 20ppm	160: 16pF	C: ± 20ppm
			D: ± 25ppm	180: 18pF	D: ± 25ppm	4: -20 to +80°C
			E: ± 30ppm	200: 20pF	E: ± 30ppm	5: -40 to +85°C
			F: ± 50ppm	300: 30pF	F: ± 50ppm	6: -40 to +105°C
			G: ± 100ppm	320: 32pF	G: ± 100ppm	0: Others
			O: Others	S: Series	O: Others	