

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

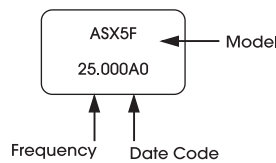
SPECIFICATION

| 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 π Fixture | |
| Load Capacitance (CL) | pF | 10pF ~ Series (Customer Specified) |
| Drive Level | uW | 15, 30, 50, 100, 200, 500 or special requirement |
| Equivalent Series Resistance | Ω | see table |
| Shunt Capacitance (Co) | pF | 7.0 (Max.) |

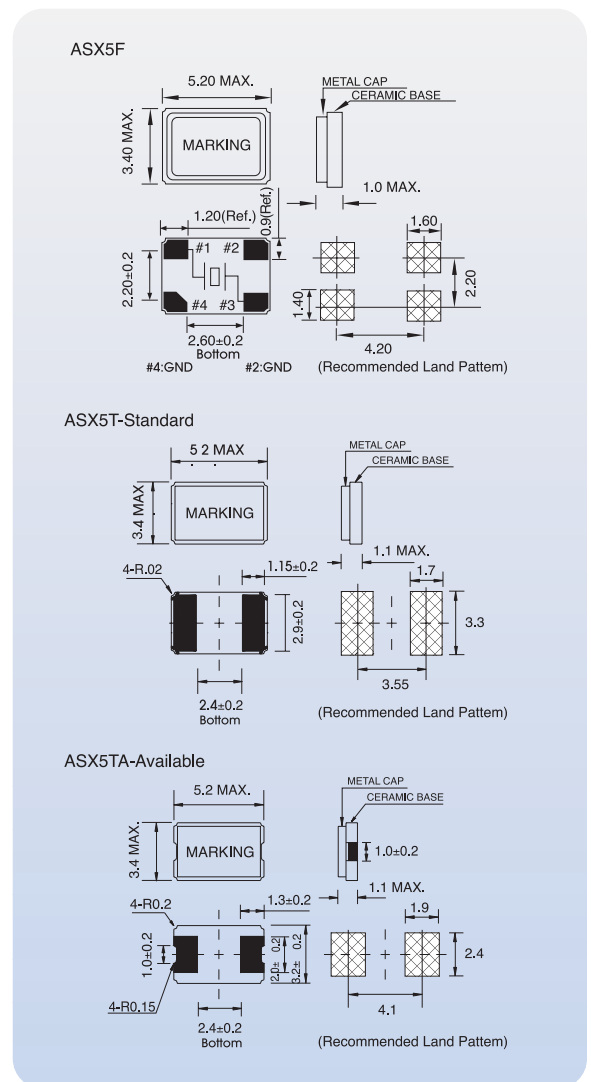
EQUIVALENT SERIES RESISTANCE (Ω)

| Frequency (MHz) | Mode | Max ESR (Ω) |
|-----------------|--------------|----------------------|
| 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 | |