

Quartz Part Numbering Guide

Surface Mount

ADXSM Series

| | | | | | | | | |
|---|--|---------------------|---|----------------------|--|----------------------|----------------------------------|--------------|
| Package Type | ADXSM-351 ADXSM-364 ADXSM-365 | pg9 pg10 pg11 | ADXSM-463 ADXSM-481 ADXSM-571 | pg12 pg13 pg14 | ADXSM-572 ADX49SM ADX49SSM | pg15 pg16 pg16 | ADX49SMP ADX49SMPI | pg17 pg17 |
| Frequency Tolerance @ 25°C | ±100ppm ±50ppm ±45ppm | A B C | ±40ppm ±35ppm ±30ppm | D E F | ±25ppm ±20ppm ±15ppm | G H I | ±10ppm ±5ppm | J K |
| Frequency Stability Over Temperature | ±100 ppm ±50 ppm ±45 ppm ±40 ppm | P Q R S | ±35 ppm ±30 ppm ±25 ppm ±20 ppm | T U V W | ±15 ppm ±10 ppm ±7.5 ppm ±5 ppm | X Y YY Z | ±4 ppm ±3 ppm | ZZ ZY |
| Operating Temperature Range | 0°C to +70°C -10°C to +60°C -20°C to +70°C -40°C to +75°C | 1 2 3 4 | -40°C to +85°C -40°C to +90°C 0°C to +55°C -40°C to +125°C | 5 6 7 8 | 0°C to +50°C -10°C to +50°C -10°C to +70°C -30°C to +75°C | 9 10 11 12 | -30°C to +80°C -35°C to +80°C | 13 14 |
| Operating Mode | Fundamental 3rd Overtone | F 3 | 5th Overtone 7th Overtone | 5 7 | 9th Overtone | 9 | | |
| Load Capacitance | 6 pF 6 10 pF 10 12 pF 12 | | 15 pF 15 16 pF 16 18 pF 18 | | 20 pF 20 22 pF 22 30 pF 30 | | 32 pF 32 50 pF 50 Series S | |
| Options | Bulk Blank | | Insulator Tab | I | Tape & Reel | T | | |
| Frequency | MHz | M | KHz | K | | | | |

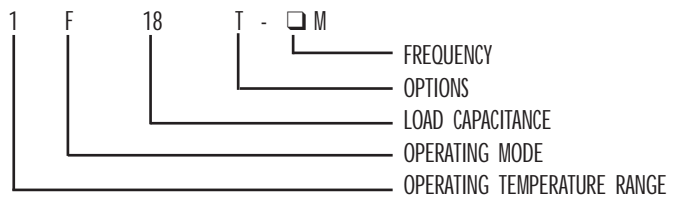
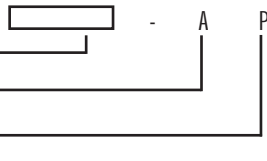
EXAMPLE

PACKAGE TYPE

FREQUENCY TOLERANCE @ 25°C

FREQUENCY STABILITY

OVER TEMPERATURE



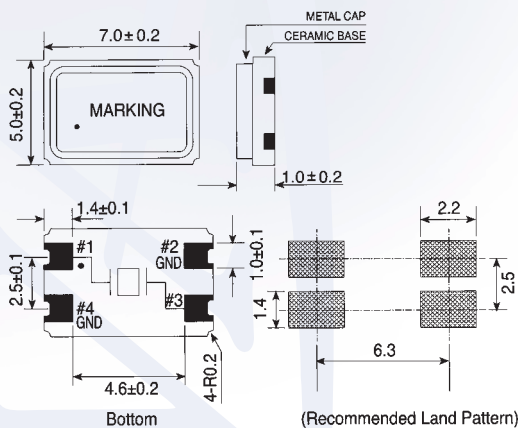
ADXSM-571



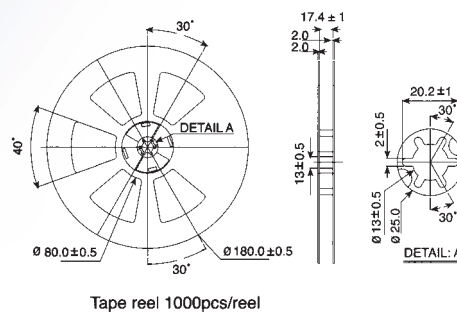
FEATURES

- Seam welding
- High frequency stability over temperature range.
- Excellent frequency aging stability.
- Excellent frequency-temperature characteristics with smooth continuity.
- Excellent solderability.
- Excellent thermal hysteresis (Special for high frequency stability requirement).
- Application: Telecom, Digital Cameras, VTR, Audio, Consumer Product, etc.
- Example: GSM, ADSL, Cable Modem, PCMCIA card.

UNIT DIMENSION (unit: mm)

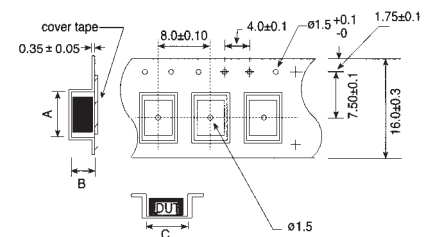


REEL PACKING

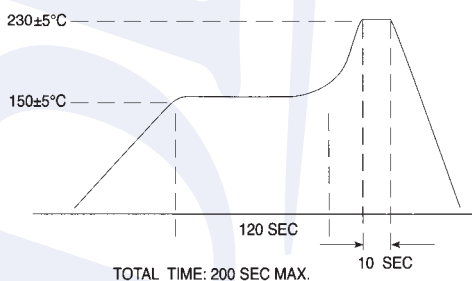


TAPE SPECIFICATION

(UNIT: mm) ADXSM-571 (A) 7.7 ±0.1
(B) 2.0 ±0.1 (C) 5.5 ±0.1



SOLDERING REFLOW PROFILE



STANDARD SPECIFICATIONS

| Package Type | ADXSM-571 | |
|--------------------------------|--|---|
| Frequency Range (Fundamental) | 8.000 ~ 40.000MHz | |
| Frequency Range (3rd Overtone) | 45.000 ~ 135.000MHz | |
| Frequency Tolerance | ±10ppm, ±15ppm, ±20ppm, ±30ppm at 25°C | |
| Load Capacitance | C | Series, 6pF, 12pF, 16pF, 18pF, 20pF, 30pF (Special request available) |
| Shunt Capacitance | Co | 7.0pF max. (Special request available) |
| Drive Level | P | 15μW, 30μW, 100μW, 500μW (Special request available) |
| Aging | Δ f/F | ±1ppm, ±2ppm, ±3ppm, ±5ppm/year |

EQUIVALENT SERIES RESISTANCE (E.S.R.)

| Frequency (MHz) | Vibration Code | E.S.R. |
|-----------------|----------------|--------|
| 8.0 ~ 9.9 | Fundamental | 60 Ω |
| 10.0 ~ 11.9 | Fundamental | 50 Ω |
| 12.0 ~ 14.9 | Fundamental | 40 Ω |
| 15.0 ~ 40.0 | Fundamental | 40 Ω |
| 40.1 ~ 80.0 | 3rd Overtone | 80 Ω |
| 80.1 ~ 120.0 | 3rd Overtone | 60 Ω |
| 120.1 ~ 135.0 | 3rd Overtone | 50 Ω |

FREQUENCY STABILITY v OPERATING TEMP.

| OPERATING TEMPERATURE | FREQUENCY STABILITY (± ppm) | | | | | | | |
|-----------------------|---|-----|----|----|----|----|----|-----|
| | *Denotes Availability (Reference to 25°C) | | | | | | | |
| Range | 5 | 7.5 | 10 | 15 | 20 | 30 | 50 | 100 |
| 0 ~ 50°C | * | * | * | * | * | * | * | * |
| -10 ~ 60°C | | | * | * | * | * | * | * |
| -20 ~ 70°C | | | * | * | * | * | * | * |
| -40 ~ 85°C | | | | | * | * | * | * |