

# Quartz

Surface Mount

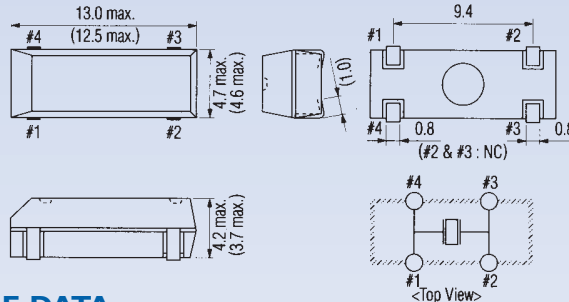
ADXSM-5130AZ Series (5138AZ)



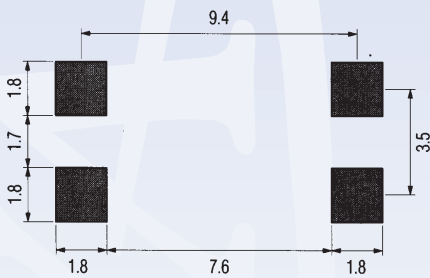
## ADXSM-5138AZ



### UNIT DIMENSION (unit: mm)



### SOLDERING PATTERN



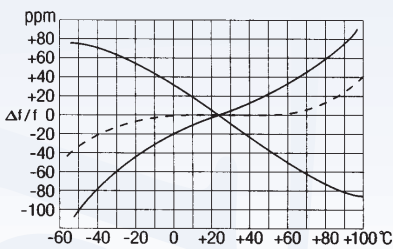
### PACKAGE DATA

| Item / Package   | ADXSM-5138AZ                     |
|------------------|----------------------------------|
| OUTER PACKAGE    | Plastic                          |
| SEALING          | Press-fit<br>(3 x 9 mm built-in) |
| TERMINAL PLATING | Solder                           |

### STANDARD SPECIFICATIONS

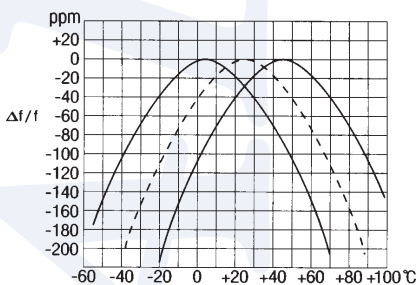
| Package Type                    | ADXSM-5138AZ |   |
|---------------------------------|--------------|---|
| Frequency Range                 | F            | 3.579545 MHz to 70.000 MHz  |
| Calibration Tolerance           |              | ±50 ppm at +25°C ±3°C   |
| Temperature Stability at +25°C) |              | ±50 ppm over -20°C to +70°C (AT-Cut)<br>±100 ppm over -10°C to +60°C (BT-Cut) |
| Load Capacitance                | CL           | 18 pF   |
| Shunt Capacitance               | Co           | 7 pF max.   |
| Drive Level                     | P            | 100 μW max.   |
| Aging                           | # f/F        | ±5 ppm max. at +25°C ±3°C per year  |
| Cut                             |              | AT-Cut or BT-Cut  |
| Reflow Soldering Condition      |              | 10 seconds max. at +235°C ±5°C  |

### AT-CUT



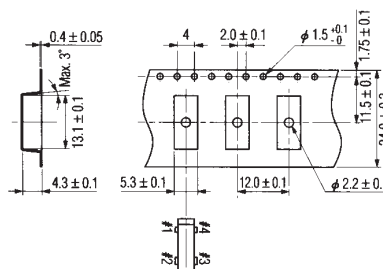
TYPICAL TEMPERATURE CHARACTERISTICS

### BT-CUT



TYPICAL TEMPERATURE CHARACTERISTICS

### TAPE SPECIFICATIONS



| ADXSM-5138AZ | QTY/Reel | Reel DIA |
|--------------|----------|----------|
|              | 1000 pcs | 330 mm   |

# Quartz Part Numbering Guide

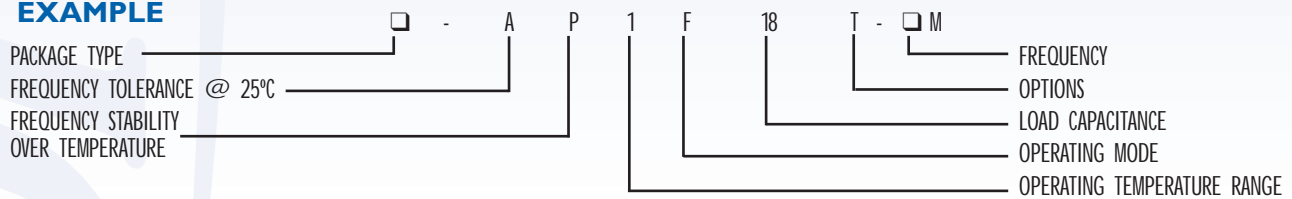
Surface Mount

ADXSM, ADX49SM, ADX49SSM1/SSM2, ADX49SMP/SMP1 Series



|   |  |  |   |  |
|---|--|--|---|--|
| <b>Package Type</b>                         | ADXSM-351 pg10<br>ADXSM-364 pg11<br>ADXSM-365 pg12<br>ADXSM-463 pg16<br>ADXSM-481 pg17<br>ADXSM-491 pg20<br>ADXSM-492 pg20 | ADXSM-571 pg21<br>ADXSM-572 pg22<br>ADXSM-581 pg23<br>ADXSM-5111A pg24<br>ADXSM-6122A pg24<br>ADXSM-6121A pg25<br>ADXSM-5122A pg25 | ADXSM-5134AZ pg26<br>ADXSM-5136AZ pg26<br>ADXSM-5135AZ pg27<br>ADXSM-5137AZ pg27<br>ADXSM-5138AZ pg28<br>ADXSM-5121B pg29<br>ADXSM-5122B pg29 | ADX49SM pg30<br>ADX49SSM pg30<br>ADX49SSM1 pg31<br>ADX49SSM2 pg31<br>ADX49SMP pg32<br>ADX49SMP1 pg32 |
| <b>Frequency Tolerance @ 25°C</b>           | ±100ppm A<br>±50ppm B<br>±45ppm C  | ±40ppm D<br>±35ppm E<br>±30ppm F   | ±25ppm G<br>±20ppm H<br>±15ppm I  | ±10ppm J<br>±5ppm K  |
| <b>Frequency Stability Over Temperature</b> | ±100 ppm P<br>±50 ppm Q<br>±45 ppm R<br>±40 ppm S  | ±35 ppm T<br>±30 ppm U<br>±25 ppm V<br>±20 ppm W   | ±15 ppm X<br>±10 ppm Y<br>±7.5 ppm YY<br>±5 ppm Z   | ±4 ppm ZZ<br>±3 ppm ZY   |
| <b>Operating Temperature Range</b>          | 0°C to +70°C 1<br>-10°C to +60°C 2<br>-20°C to +70°C 3<br>-40°C to +75°C 4   | -40°C to +85°C 5<br>-40°C to +90°C 6<br>0°C to +55°C 7<br>-40°C to +125°C 8  | 0°C to +50°C 9<br>-10°C to +50°C 10<br>-10°C to +70°C 11<br>-30°C to +75°C 12   | -30°C to +80°C 13<br>-350°C to +80°C 14  |
| <b>Operating Mode</b>                       | Fundamental F<br>3rd Overtone 3  | 5th Overtone 5<br>7th Overtone 7   | 9th Overtone 9  |  |
| <b>Load Capacitance</b>                     | 6 pF 6<br>10 pF 10<br>12 pF 12   | 15 pF 15<br>16 pF 16<br>18 pF 18   | 20 pF 20<br>22 pF 22<br>30 pF 30  | 32 pF 32<br>50 pF 50<br>Series S   |
| <b>Options</b>                              | Bulk Blank   | Insulator Tab I  | Tape & Reel T   |  |
| <b>Frequency</b>                            | MHz M  | KHz K  |   |  |

**EXAMPLE**



|                                   |   |   |                                    |
|-----------------------------------|---|---|------------------------------------|
| <b>Package Type</b>               | ADXSM-281 pg9<br>ADXSM-371 pg13<br>ADXSM-391 pg14 | ADXSM-411 pg15<br>ADXSM-412 pg15<br>ADXSM-481A pg18 | ADXSM-481B pg19<br>ADXSM-482B pg19 |
| <b>Frequency Tolerance @ 25°C</b> | ±100ppm A<br>±50ppm B<br>±45ppm C<br>±40ppm D     | ±35ppm E<br>±30ppm F<br>±25ppm G<br>±20ppm H        | ±15ppm I<br>±10ppm J<br>±5ppm K    |
| <b>Load Capacitance</b>           | 6 pF 6  | 7 pF 7  | 12.5 pF 12.5                       |
| <b>Options</b>                    | Bulk Blank  | Insulator Tab I                                     | Tape & Reel T                      |
| <b>Frequency</b>                  | MHz M   | KHz K   |                                    |

**EXAMPLE**

