

# SHOULDER

## SMD1612 Crystal



### ELECTRICAL SPECIFICATION

|                                    |   |
|------------------------------------|---|
| Frequency Range                    | 24.000 to 50.000 MHz                        |
| Load Capacitance                   | 8 pF to 32pF or series                      |
| Frequency Tolerance (at 25°C)      | +/-10,+/-15,+/-20,+/-30,+/-50ppm or specify |
| Oscillation Mode                   | Fundamental                                 |
| Frequency Stability in Temperature | +/-10,+/-15,+/-20,+/-30,+/-50ppm or specify |
| Operating Temperature Range        | -20°C to +70°C Standard (or Optional)       |
| Storage Temperature Range          | -40°C to +85°C                              |
| Equivalent Series Resistance (ESR) | See ESR Table                               |
| Drive Level                        | 10µW Typical, 100µW Max.                    |
| Shunt Capacitance                  | 3pF Maximum                                 |
| Aging (at 25°C)                    | ±3ppm per year                              |
| Insulation Resistance              | 500 MOhm Minimum                            |

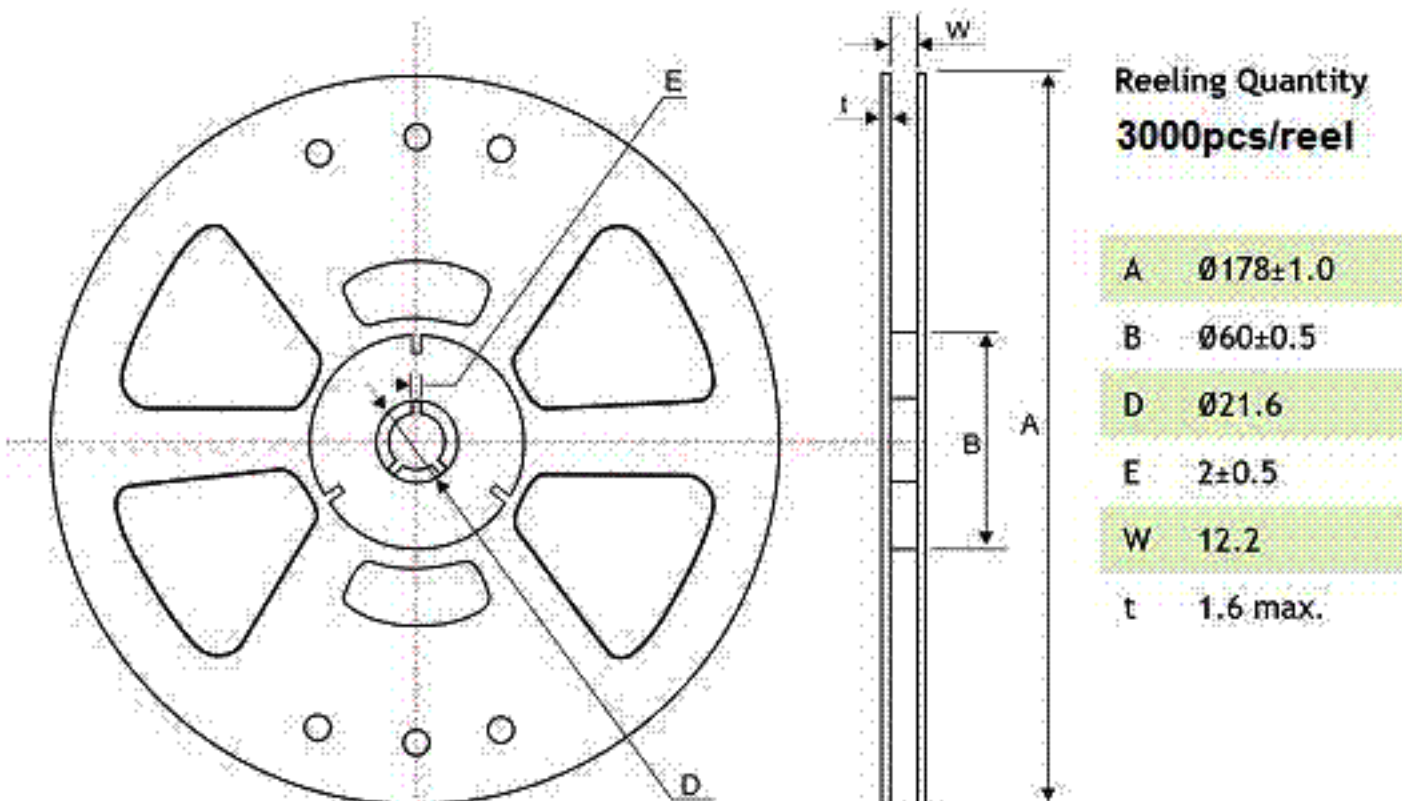
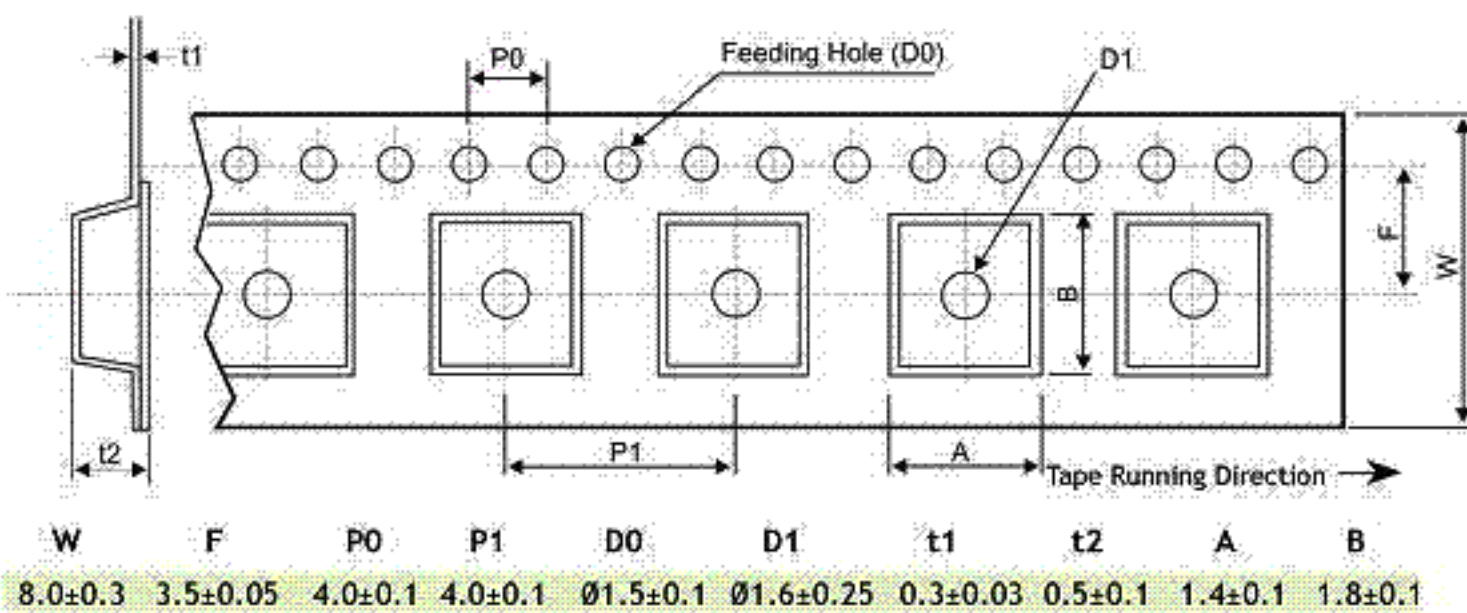
### FREQUENCY RANGE AND OSCILLATION MODE

|                 |                      |
|-----------------|----------------------|
| Fundamental (F) | 24.000 to 50.000 MHz |
|-----------------|----------------------|

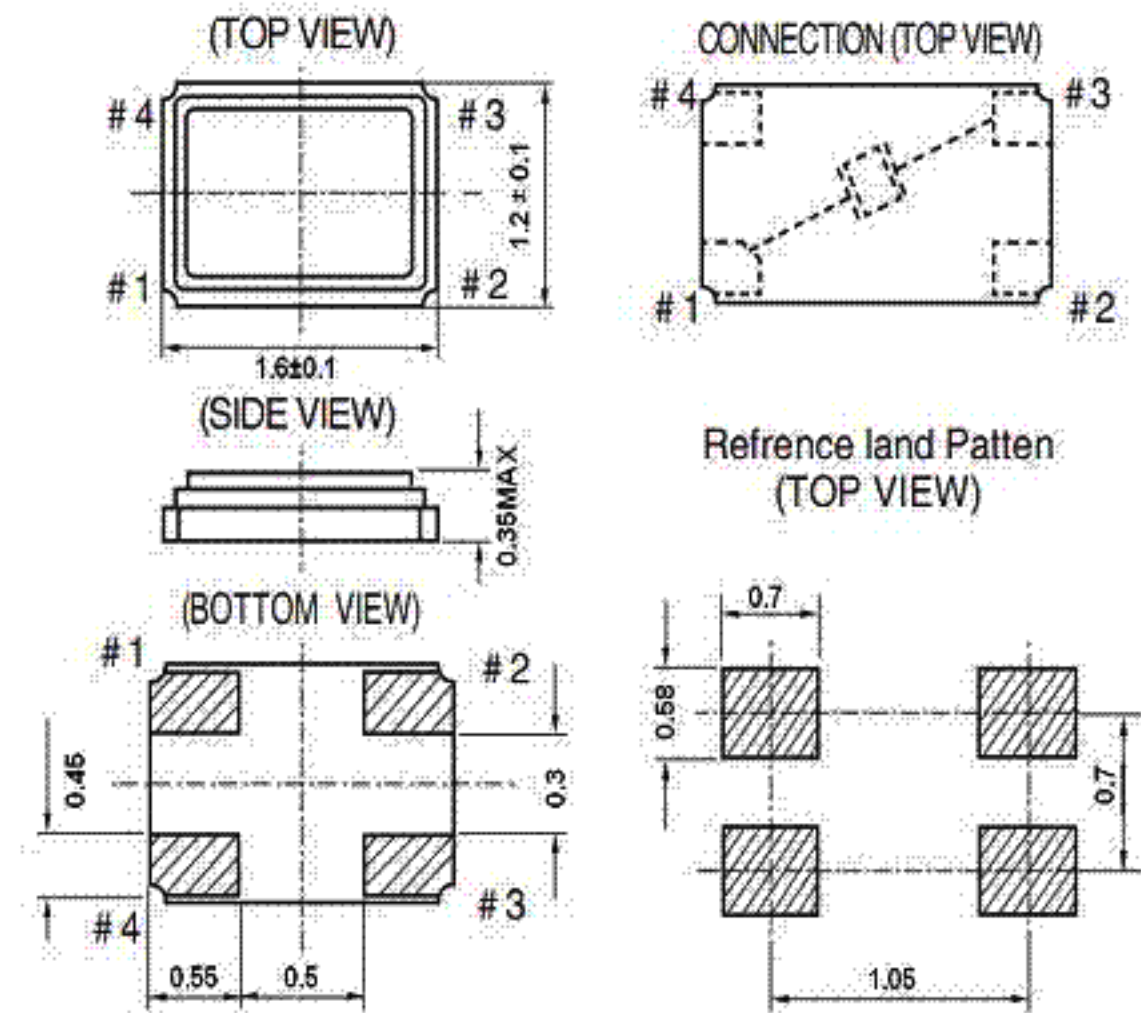
### ESR TABLE (Ohms)

|                     |        |
|---------------------|--------|
| 24.000 to 25.000MHz | 180Max |
| 26.000 to 32.000MHz | 150Max |
| 32.000 to 38.000MHz | 100Max |
| 38.000 to 50.000MHz | 80Max  |

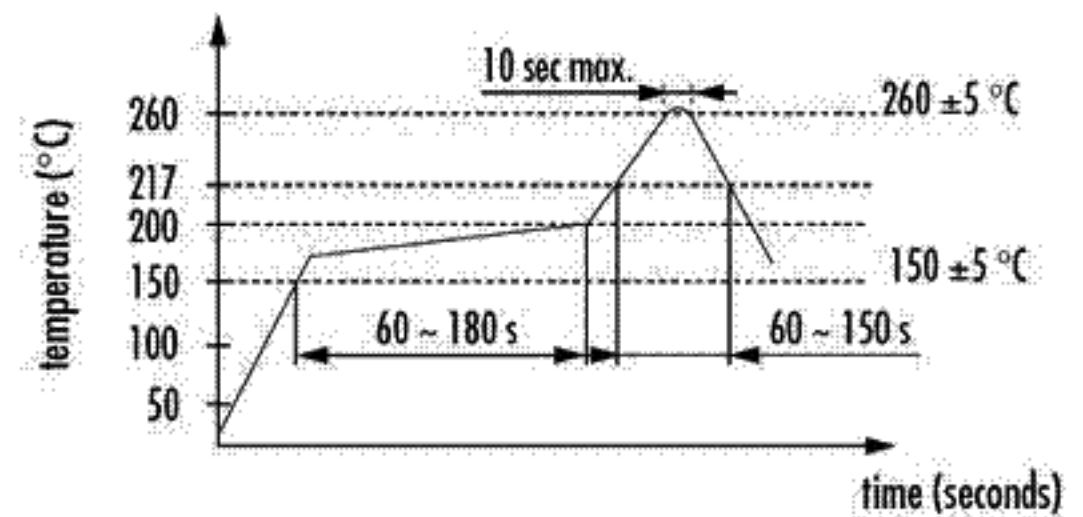
### TAPE SPECIFICATIONS (all in mm) - Carrier Tape Dimensions



### MECHANICAL DIMENSIONS (all in mm)



### SOLDERING



| Temperature Range | Frequency Stability (ppm) |        |        |        |        |
|-------------------|---------------------------|--------|--------|--------|--------|
|                   | ±10ppm                    | ±15ppm | ±20ppm | ±30ppm | ±50ppm |
| 0~+50°C           | ✓                         | ✓      | ✓      | ✓      | ✓      |
| -10~+60°C         | ✓                         | ✓      | ✓      | ✓      | ✓      |
| -20~+70°C         | ✓                         | ✓      | ✓      | ✓      | ✓      |
| -30~+80°C         |                           |        |        | ✓      | ✓      |
| -40~+85°C         |                           |        |        | ✓      | ✓      |

### PART NUMBERING SYSTEM (Example)

SMD1612-30.0000-F-20-30-30-A-T

