



actual size

SMD Quartz Crystal · JXG53P4

4 Pad Version · 5.0 x 3.2 mm

- glass sealed ceramic package
- extended temperature ranges available
- high mechanical reliability type available
- for automotive type, see automotive datasheet



General Data

| type | JXG53P4 | |
|----------------------------------|----------------------------|----------------------------------|
| frequency range | 8.0 ~ 50.0 MHz | (fund. AT-cut) |
| | 45.0 ~ 60.0 MHz | (3rd OT AT-cut) |
| frequency stability at 25 °C | ± 30 ppm, ± 50 ppm | |
| load capacitance C _L | 12 pF standard | (option: 10 pF ~ 30 pF / series) |
| shunt capacitance C ₀ | < 7 pF max. | |
| storage temperature | -40 °C ~ +125 °C | |
| drive level max. | 100 µW (10 µW recommended) | |
| aging | < ± 3 ppm first year | |

ESR (series resistance Rs)

| frequency in MHz | vibration mode | ESR max. in Ω | ESR typ. in Ω |
|------------------|----------------|---------------|---------------|
| 8.0 ~ 8.999 | fund.-AT | 300 | 200 |
| 9.0 ~ 9.999 | fund.-AT | 250 | 180 |
| 10.0 ~ 11.999 | fund.-AT | 60 | 35 |
| 12.0 ~ 15.999 | fund.-AT | 60 | 25 |
| 16.0 ~ 21.999 | fund.-AT | 50 | 20 |
| 22.0 ~ 24.999 | fund.-AT | 40 | 15 |
| 25.0 ~ 50.000 | fund.-AT | 30 | 15 |
| 45.0 ~ 60.000 | 3rd OT-AT | 90 | 65 |

Frequency Stability vs. Temperature

| | | ± 30 ppm | ± 50 ppm | ± 100 ppm | | |
|------------------|------|----------|----------|-----------|--|--|
| -20 °C ~ +70 °C | STD. | ● | ○ | ○ | | |
| -40 °C ~ +85 °C | T1 | ○ | ● | ○ | | |
| -40 °C ~ +105 °C | T2 | | ○ | ○ | | |
| -40 °C ~ +125 °C | T3 | | | ○ | | |

● standard
 ○ available

Marking

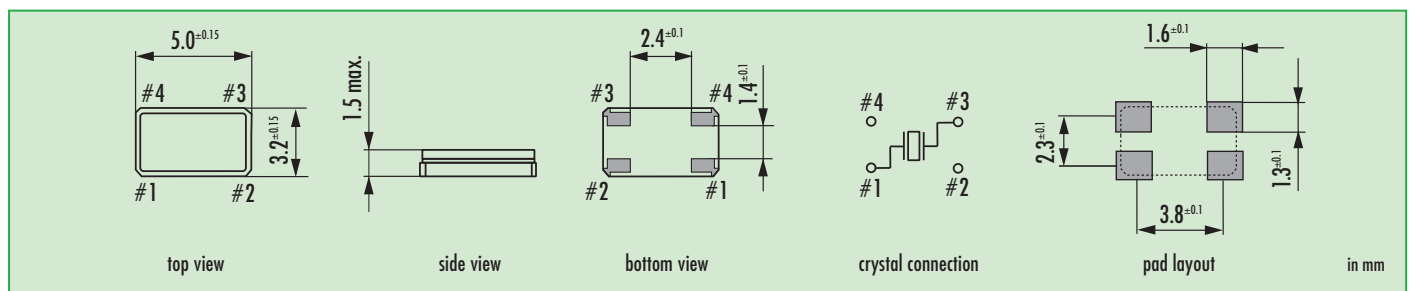
frequency with load capacitance code
company code / date code / internal code

date code: year/month
example: 2A = 2012 January

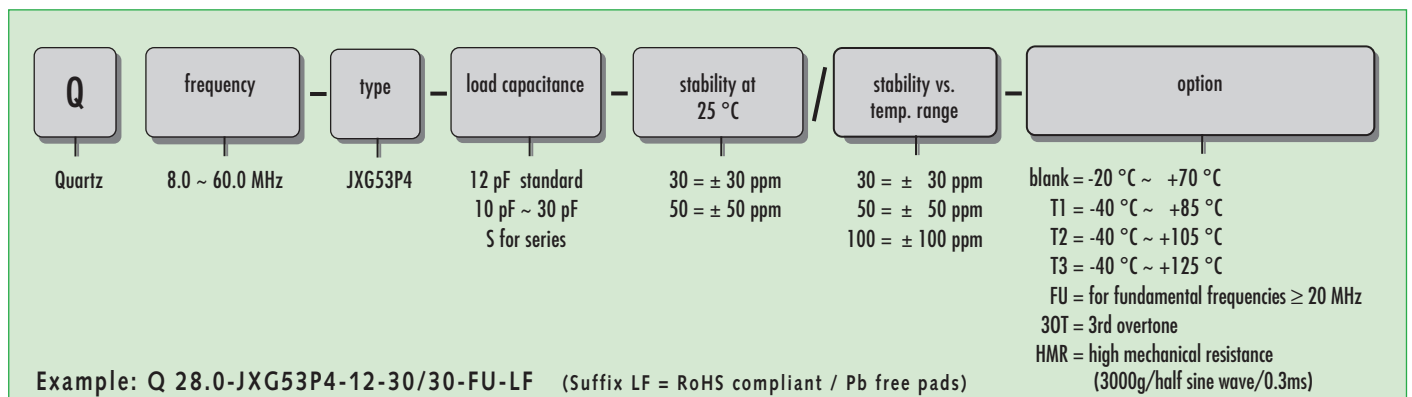
| | | | | | |
|------|-------|------|------|-----|------|
| Jan. | Febr. | Mar. | Apr. | May | June |
| A | B | C | D | E | F |

| | | | | | |
|------|------|-------|------|------|------|
| July | Aug. | Sept. | Oct. | Nov. | Dec. |
| G | H | J | K | L | M |

Dimensions

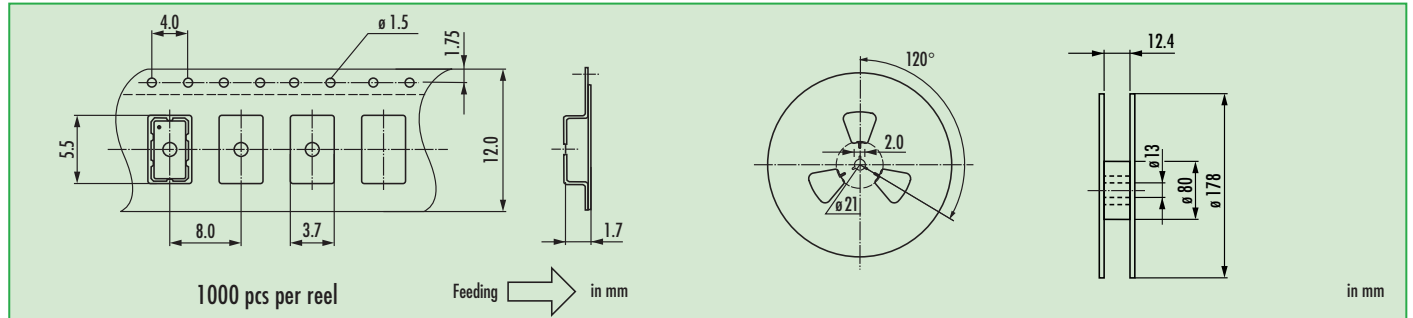


Order Information

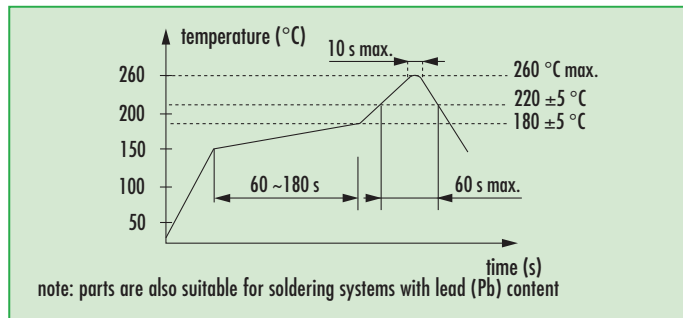


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Taping Specification



Reflow Soldering Profile



Load Capacitance Codes

| | | | |
|----------|----------|----------|-----------|
| 8 pF: k | 14 pF: x | 22 pF: g | series: s |
| 9 pF: n | 15 pF: j | 24 pF: d | T: 3rd OT |
| 10 pF: h | 16 pF: b | 25 pF: r | |
| 11 pF: l | 17 pF: t | 27 pF: w | |
| 12 pF: a | 18 pF: f | 30 pF: . | |
| 13 pF: v | 20 pF: c | | |

example 12.0 MHz / 12 pF: 12a00