QUARTZ CRYSTAL UNITS

## - Features

> 5032 size miniature and lightweight SMD crystal resonator with a low profile of 0.9 mm .
> Excellent heat resistance, high precision. and high reliability.
> Offers a wide frequency range from a comparatively low 8 MHz up to 100 MHz

## - Electrical Specifications

| Item / Type | SMD 5032 |
| :---: | :---: |
| Frequency Range | $8 \sim 100 \mathrm{MHz}$ |
| Frequency Tolerance (at $25^{\circ} \mathrm{C}$ ) | $\pm 10 \mathrm{ppm}$, or specify |
| Frequency Stability Over Operating Temperature Range | $\pm 20 \mathrm{ppm}$, or specify |
| Operating Temperature Range | $-20 \sim+70^{\circ} \mathrm{C},-40 \sim+85^{\circ} \mathrm{C}$ or specify |
| Shunt Capacitance (C0) | 5 pF Max. |
| Drive Level | $1 \sim 200 \mu \mathrm{~W}(100 \mu \mathrm{~W}$ typical) |
| Load Capacitance | Series, $6 \mathrm{pF}, 10 \mathrm{pF}, 16 \mathrm{pF}, 20 \mathrm{pF}$, or specify |
| Aging (at $25^{\circ} \mathrm{C}$ ) | $\pm 1 \mathrm{ppm} / \mathrm{year}$ Max $\pm 2 \mathrm{ppm} /$ year Max $\pm 3 \mathrm{ppm} /$ year Max |
| Storage Temperature Range | $-55 \sim+150^{\circ} \mathrm{C}$ |

- Equivalent Series Resistance (ESR)

| Fundamental |  | 3rd Overtone |  |
| ---: | :---: | ---: | ---: |
| $8 \sim 12 \mathrm{MHz}$ | $40 \Omega$ Max. | $40 \sim 60 \mathrm{MHz}$ | $120 \Omega$ Max. |
| $12 \sim 40 \mathrm{MHz}$ | $50 \Omega$ Max. | $60 \sim 100 \mathrm{MHz}$ | $80 \Omega$ Max. |


$8 \sim 100 \mathrm{MHz}$
$\pm 10 \mathrm{ppm}$, or specify
0 ppm , or specify
$-20 \sim+70^{\circ} \mathrm{C},-40 \sim+85^{\circ} \mathrm{C}$ or specify 5 pF Max.

Series, $6 \mathrm{pF}, 10 \mathrm{pF}$, $16 \mathrm{pF}, 20 \mathrm{pF}$, or specify $\pm 1 \mathrm{ppm} /$ year Max $\mid \pm 2 \mathrm{ppm} /$ year Max $\mid \pm 3 \mathrm{ppm} /$ year Max $-55 \sim+150^{\circ} \mathrm{C}$

■ Reflow Condition


Dimensions


