## YSX530GA









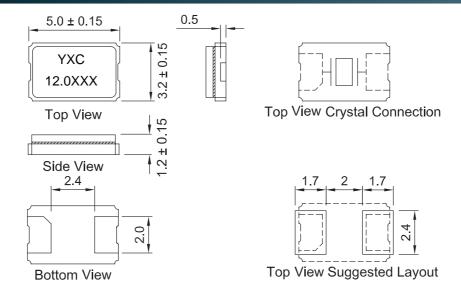
#### **Features**

- · External dimensions: 5.0 x 3.2 x 1.2 mm.
- · Frequency range: 8MHz~54MHz.
- · 2 pads SMD glass sealed crystal units.
- · High reliable environmental performance.
- · Tight tolerance and stability parts are available.
- · Designed for automatic mounting and reflow soldering.
- · Reasonable cost and good delivery performance.
- · Contains Pb in sealing glass exempted by RoHS directive.
- $\cdot$  The best choice of portable PC, PDA, DSC, and USB interface card.

| Electrical Specifications                    |  |
|--|--|
| Item / Type                                  | YSX530GA   |
| Nominal Frequency Range                      | 8 ~ 54 MHz                                       |
| Vibration Mode                               | AT Fundamental                                   |
| Load Capacitance                             | 12pF, 20pF, or specify                           |
| Frequency Tolerance (at 25 °C)               | ± 10 ppm, ± 20 ppm, or specify                   |
| Frequency Versus Temperature Characteristics | ±20 ppm, or specify                              |
| Operating Temperature                        | - 20 ~ + 70 °C , - 40 ~ + 85 °C , or specify     |
| Storage Temperature                          | -40 $\sim$ +85 $^{\circ}\mathrm{C}$ , or specify |
| Shunt Capacitance                            | 7 pF Max.  |
| Level Of Drive                               | 1~100 μW Max. (10 uW typical)                    |
| Frequency Aging (at 25 °C)                   | ± 3 ppm / year Max.                              |
| Insulation Resistance                        | More Than 500MΩ at DC 100V                       |

| Equivalent Series Resistance(ESR) |             |
|-----------------------------------|-------------|
| Fundamental                       |             |
| 8 ~ 12 MHz                        | 60 Ω ~ 80 Ω |
| 12 ~ 25 MHz                       | 40 Ω ~ 60 Ω |
| 25 ~ 54 MHz                       | 30 Ω ~ 40 Ω |

### Dimensions



Units: mm

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### ★ PART NUMBER GUIDE 部件号示例 e.g. X503212MSD2GC

 $YSX530GA = 5.0 \times 3.2 SMD SEAM TYPE$ 

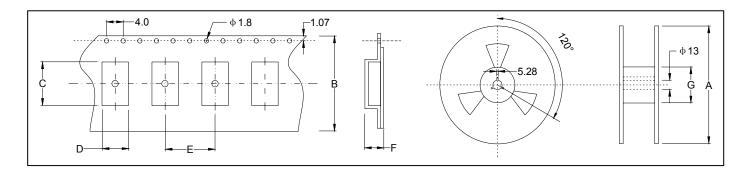
| Quartz Crystal Resonator | Dimensions | Frequency (Hz) | Load Capacitance<br>(Pf) | Frequency<br>Stability<br>Overall<br>(ppm) | Pin | Material | Operating Temp.<br>Range |
|--------------------------|------------|----------------|--------------------------|--|-----|----------|--------------------------|
| X                        | 5032       | 12M            | S                        | D  | 2   | G        | С                        |

| Loa | Load Capacitance (Pf) |  |  |  |  |
|-----|-----------------------|--|--|--|--|
| X   | 7.4pF                 |  |  |  |  |
| G   | 12.5pF                |  |  |  |  |
| L   | 9pF                   |  |  |  |  |
| M   | 10pF                  |  |  |  |  |
| О   | 12pF                  |  |  |  |  |
| P   | 15pF                  |  |  |  |  |

| Frequency tolerance |        |  |  |  |  |
|---------------------|--------|--|--|--|--|
| В                   | ±10PPM |  |  |  |  |
| D                   | ±20PPM |  |  |  |  |

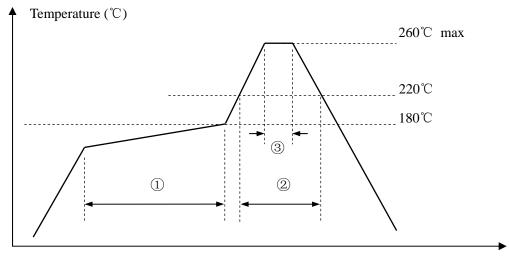
| Operating temperature |             |  |  |  |  |
|-----------------------|-------------|--|--|--|--|
| C                     | -20~+70°C   |  |  |  |  |
| I                     | -40~+85°C   |  |  |  |  |
| Α                     | -40~ +125°C |  |  |  |  |
| F                     | -40~ +105°C |  |  |  |  |

### ★ TAPING SPECIFICATION (Unit: mm) 编带规格



|                   | A       | В        | С         | D               | E              | F               | G         |
|-------------------|---------|----------|-----------|-----------------|----------------|-----------------|-----------|
| SMD5032           | 178±2.0 | 12.0±0.3 | 5.80±0.10 | $4.05 \pm 0.10$ | $7.95 \pm 0.1$ | $1.70 \pm 0.10$ | 57.15±1.0 |
| 1000 pcs per reel |         |          |           |                 |                |                 |           |

### ★ REFLOW SOLDERING PROFILE 回流焊特性



Times (S)

| Pb free reflow | 1   | Preheat      | 160~180℃ | 120sec. max |
|----------------|-----|--------------|----------|-------------|
| Pb free reliow | 2   | Primary heat | 220℃     | 60sec. max  |
| A              | (3) | Peak         | 260℃     | 10sec. max. |