

SG-8002CA/CE Recommended Alternative (3.0/3.3V)

September 10th, 2025

SEIKO EPSON CORPORATION

MICRODEVICES Operations Division.

MD Production Control & Procurement Dept.

The information contained herein is subject to change without notice.

Schedule (3.0/3.3V)

	CY25	CY26	CY27
SG-8002CA/CE (3.3V/5V)	● September / EOL notice ● 15th of December / Submit required information	● End of March / Last time buy ● End of September / Last shipment	
Recommended Alternative SG-8018CA/CE (3.3V)	MP status 		

Comparison of specifications

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	Epson SG-8002CA/CE	Epson SG-8018CA/CE
PKG size	7050 / 3225	7050 / 3225
Fixed or PLL	PLL	PLL
IC supplier	Third party sourcing	Internal
Output frequency	1 to 125 MHz	0.67 to 170 MHz
Frequency tolerance	$\pm 50, \pm 100 \times 10^{-6} / -20 \text{ to } +70 \text{ }^{\circ}\text{C}$ $\pm 100 \times 10^{-6} / -40 \text{ to } +85 \text{ }^{\circ}\text{C}$	$\pm 50 \times 10^{-6} / -40 \text{ to } +105 \text{ }^{\circ}\text{C}$
Power supply voltage	5/3.3 V	3.3/2.5/1.8 V
Current consumption(Max.) 5V, No load	40 mA Max. (CE, 125 MHz) 45 mA Max. (CA, 125 MHz)	3.5 mA Max. (f0 = 20 MHz) 8.1 mA Max. (f0 = 170 MHz) *3.3V
Output waveform	CMOS / TTL	CMOS
Phase jitter 12kHz-20MHz	175 ps Typ. (5V, 125 MHz)	68.7 ps Max. (3.3V, 125MHz)

SG-8018CA/CE Specifications

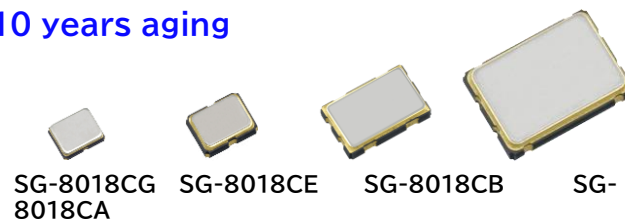
EPSON

[SG-8018CA/CE
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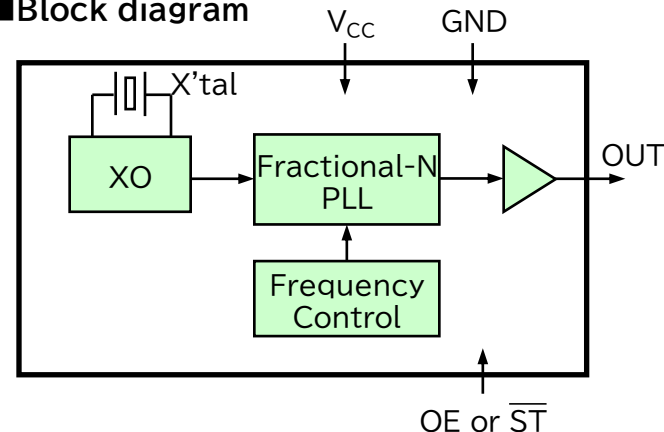
■Feature

- **Fractional PLL technology supports any frequency** between 0.67 MHz and 170 MHz **with quick turn-around time**
- **SG-Writer II Programmer is available**
- Frequency tolerance: $\pm 50 \times 10^{-6}$ over -40°C to $+105^{\circ}\text{C}$, **includes 10 years aging**

Item	Specifications
Frequency (fo)	0.67 MHz to 170 MHz
Supply voltage	1.62 V to 3.63 V
Frequency tolerance / Operating temperature	$\pm 50 \times 10^{-6}$ / -40°C to $+105^{\circ}\text{C}$ * Including includes Initial frequency tolerance, Frequency / temperature characteristics, Frequency / voltage coefficient, Frequency / load coefficient, and Aging (+25 °C, 10 years)
Current consumption	3.5 mA Max. (fo = 20 MHz) 8.1 mA Max. (fo = 170 MHz)
Function	Output enable (OE) or Stand-by ($\overline{\text{ST}}$)
Package size lineup [mm]	CG: 2.5 x 2.0, CE: 3.2 x 2.5 CB: 5.0 x 3.2, CA: 7.0 x 5.0



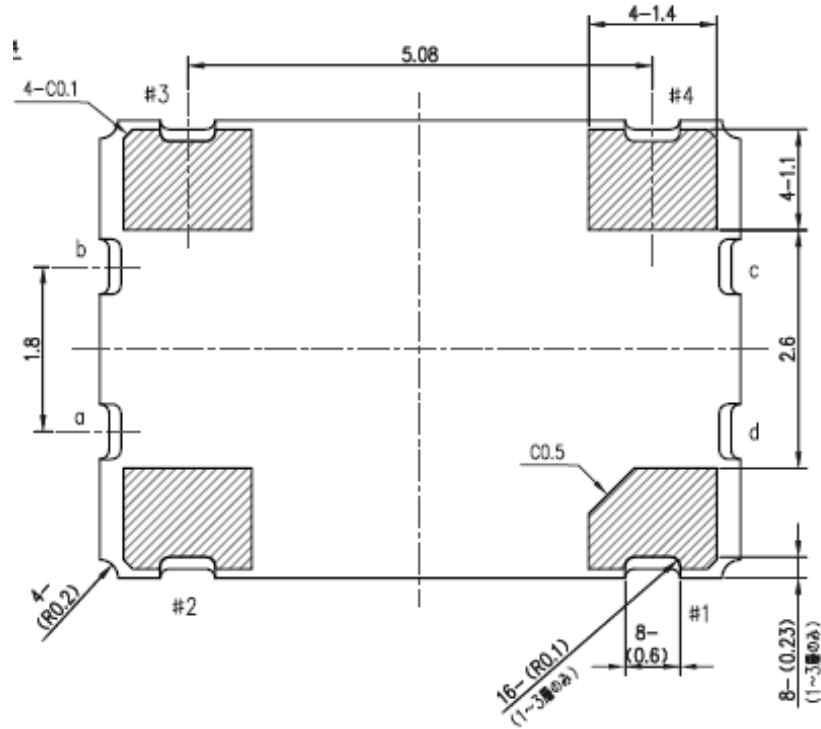
■Block diagram



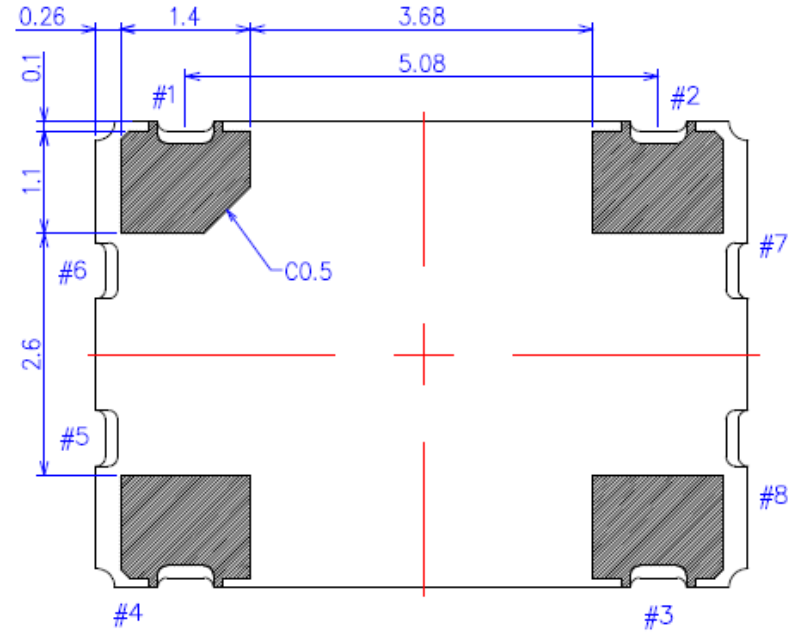
External dimensions (7050 size)

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■ SG-8002CA



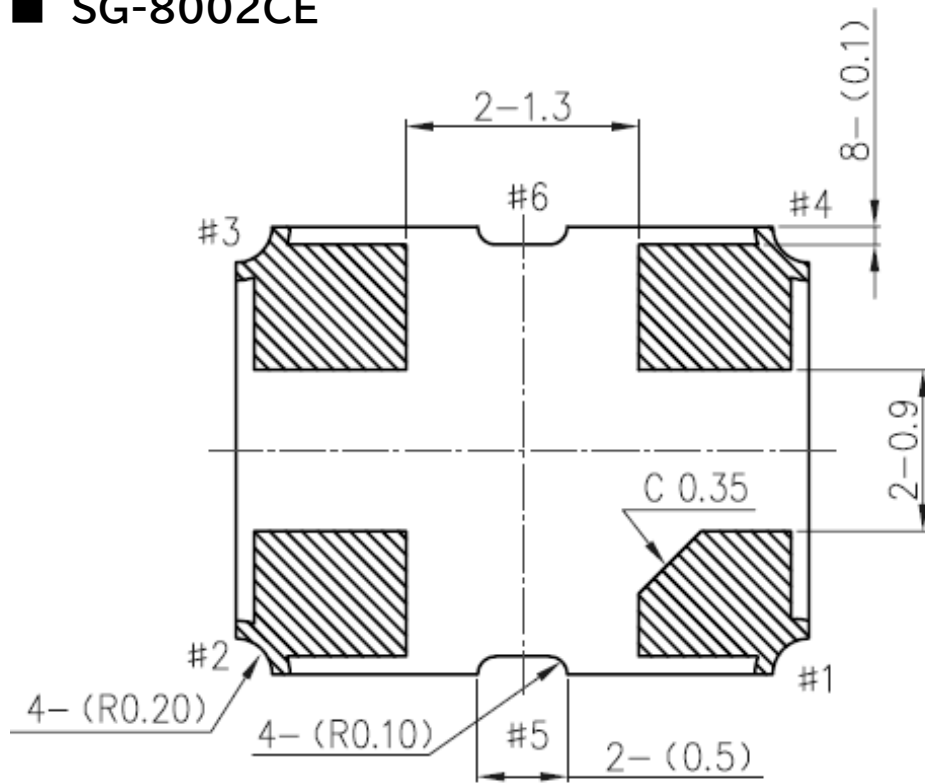
■ SG-8018CA



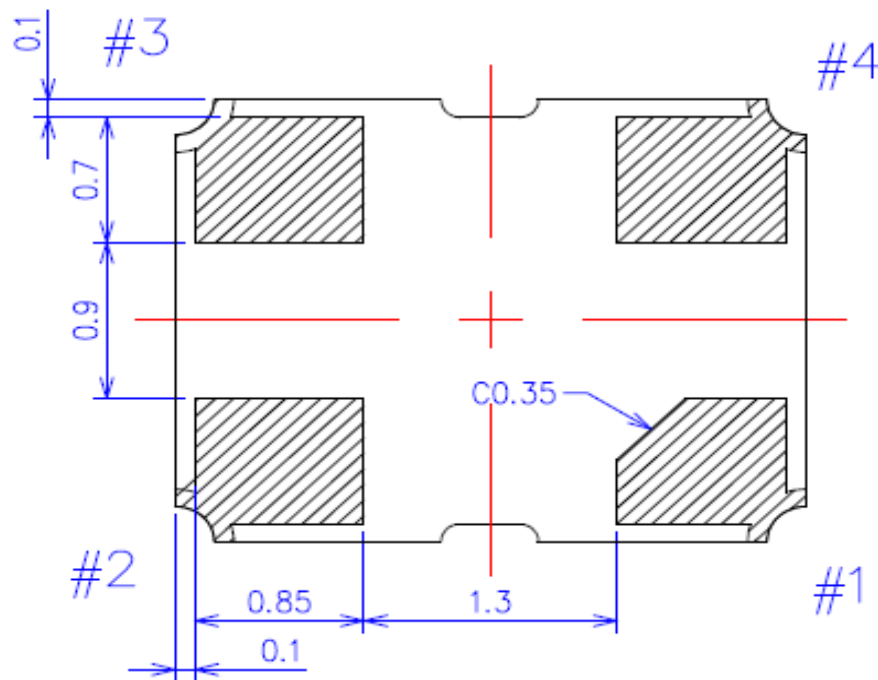
External dimensions (3225 size)

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■ SG-8002CE



■ SG-8018CE



Function		#1 pin	SG-8002CA/CE	SG-8018CA/CE
Active High	OE	High	Specified frequency output from OUT pin	Specified frequency output from OUT pin
		Low	Out pin is low (weak pull down), only output driver is disabled.	Out pin is low (weak pull down), only output driver is disabled.
	$\overline{ST}$	High	Specified frequency output from OUT pin	Specified frequency output from OUT pin
		Low	Out pin is low (weak pull down), Device goes to standby mode. Supply current reduces to the least as I_std	Out pin is low (weak pull down), Device goes to standby mode. Supply current reduces to the least as I_std

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