

# ***TECHNICAL INFORMATION***

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## **CITIZEN QUARTZ**

**Cal. No. A234**

**Cal. No. A239**

## Contents

<b>§1. OUTLINE .....</b>	<b>1</b>
<b>§2. SPECIFICATIONS .....</b>	<b>1</b>
<b>§3. HANDRING OF WATCH .....</b>	<b>2</b>
<b>§4. PRECAUTION FOR DISASSMBLY AND ASSEMBLY OF MOVEMENT .....</b>	<b>2</b>

## §1. OUTLINE

This watch is a ladies' solar power watch. It has a solar cell on its dial that converts the light energy into electrical energy to drive its mechanism.

## §2. SPECIFICATIONS

Caliber NO.		A234	A239
Type		Analog solar power watch (Three hands)	
Movement size (mm)		ø23.3 × 2.8t	
Accuracy (at normal temperature)		±20 sec/month (+5°C~+35°C/41°F~95°F)	
IC		1 unit of C/MOS-LSI	
Operating temperature		-10°C~+60°C (14°F~140°F)	
Converter		Bipolar step motor	
Time adjustment		No adjustment terminal for use in market	
Time Measurement gate		10 sec.	
Additional functions		Quick start	
		Insufficient charge warning	
		Hands setting warning	
		Overcharging prevention	
Secondary battery	Part NO.	295-37	
	Code	MT621	
	Remarks	Secondary battery block (With welded lead plate)	
Case structure		Case back fitting type (Snap type, screw type, etc.)	One-piece type

### 3. HANDRING OF WATCH

Handling and precautions for use of the watch, except "Time required for charge", are the same as those of CAL. A13\* which have been issued. See the Technical Information "Cal. A134/A139".

#### Time required for charge

Time required for recharging may vary according to the design (color of the dial, etc.) and operating environment.

The following table is as a rough reference.

\* The recharging time is the time when the watch is continuously exposed to radiation.

Illuminance (lux)	Environment	Time required		
		From the stop state to the one second movement	One day usage	Empty to full
500	Inside an ordinary office	7 hours 30 minutes	1 hour	70 hours
1000	60-70 cm under a fluorescent light (30W)	4 hours	30 minutes	35 hours
3000	20 cm under a fluorescent light (30W)	1 hour 20 minutes	10 minutes	12 hours
10000	Exterior, cloudy	30 minutes	5 minutes	5 hours
100000	Exteriour, summer sunny	5 minutes	2 minutes	3 hours 30 minutes

Full recharging time .....The time for fully recharging from stopped.  
(Empty to full)

Oneday usage.....The time required for the watch to run for one day with one second  
interval movement.

### §4. PRECAUTION FOR DISASSMBLY AND ASSEMBLY OF MOVEMENT

The basic structure of the movement is the same as that of CAL. A13\* which have been in the market.

Precautions for disassembly, assembly, and handling of the movement, see Technical Information "Cal. A134/A139".

#### < Correction >

Please correct the following error in Technical Information "Cal. A134/A139".

Place of error .....§2. SPECIFICATIONS – Secondary battery, page 1

Error.....Part No.: 295-72

Correct.....Part No.: 295-37