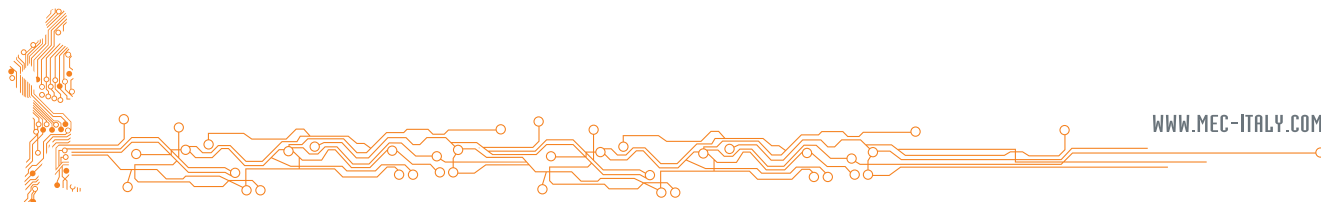


# Specification Comparison Table

Item	Model	CMR200T	CM315DL
Nominal Frequency	$f_0$	32.768kHz	32.768kHz
Frequency Tolerance	$\Delta f/f_0$	$\pm 10\text{ppm} / \pm 20\text{ppm}$	$\pm 5\text{ppm} / \pm 10\text{ppm} / \pm 20\text{ppm}$
Load capacitance	$C_L$	6.0pF / 7.0pF / 12.5pF	6.0pF / 7.0pF / 9.0pF / 12.5pF
Operating Temperature Range	$T_{OPR}$	-40°C ~ +85°C	-40°C ~ +85°C (~105°C)
Storage Temperature Range	$T_{STR}$	-55°C ~ +125°C	-55°C ~ +125°C
Turnover Temperature	$T_M$	25°C ± 5°C	25°C ± 5°C
Temperature Coefficient	$\beta$	$-0.034 \pm 0.006\text{ppm}/^\circ\text{C}^2$	$-0.034 \pm 0.006\text{ppm}/^\circ\text{C}^2$
Motional (series) resistance	$R_1$	50K $\Omega$ Max.	50K $\Omega$ Max. (~85°C) 60K $\Omega$ Max. (~105°C)
Level of drive	$D_L$	1 $\mu$ W Max.	0.5 $\mu$ W Max.
Aging (first year)	$\Delta f/f_0$	$\pm 3\text{ppm}$ Max.	$\pm 3\text{ppm}$ Max.
Shunt capacitance	$C_0$	1.35pF Typ.	1.05pF Typ.
Part Marking [standard]		32Cym	ymL###
Quantity per Reel		2,000pcs	3,000pcs



# The Comparison of Solder Pad Layouts

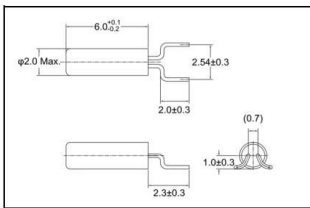
RoHS compliant / Pb free **CMR200T** 2,000pcs/reel



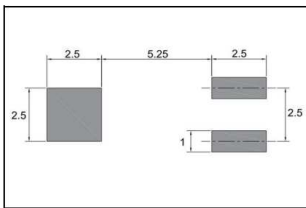
## ■ FEATURES

- Reflowable cylinder type
- Frequency range : 32.768kHz
- External dimensions (mm)  
Φ : 2.0 x L : 6.1
- Applications  
Smart Meters / Consumer products

## ■ DIMENSION [mm]



## ■ SOLDER PAD LAYOUT [mm]



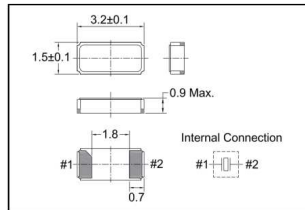
RoHS compliant / Pb free **CM315DL** 3,000pcs/reel



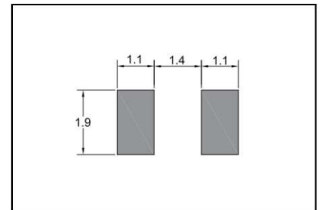
## ■ FEATURES

- Low ESR type 50KΩ MAX
- Frequency range : 32.768kHz
- External dimensions (mm)  
L : 3.2 x W : 1.5 x H : 0.9
- Applications  
Smart Meters / IoT Modules /  
Small mobile devices / Consumer products /  
Products designed for low power consumption

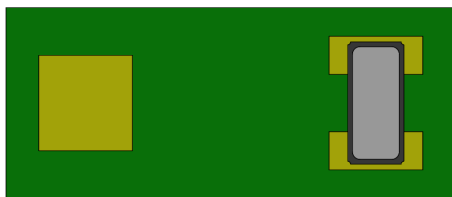
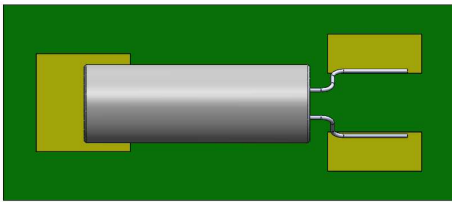
## ■ DIMENSION [mm]



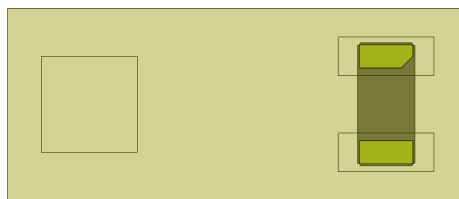
## ■ SOLDER PAD LAYOUT [mm]



## Diagram of the Changes



- Although a 90-degree rotation is necessary, the switch can be made without any changes to the PCB layout.
- The smaller size contributes to space-saving.
- It also allows for easier pick-up and facilitates the implementation of solder paste.



\*Diagram viewed from the backside

If you would like to request samples for testing the implementation or if you need a compatibility study, please feel free to contact our sales representative. Additionally, if you have any other questions, please do not hesitate to reach out to us.

