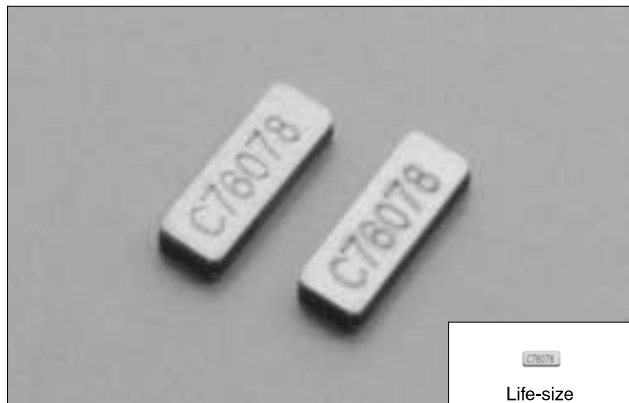


# TUNING FORK CRYSTAL UNIT (SMD • Ceramic Package)

RoHS compliant / Pb free

## CM519

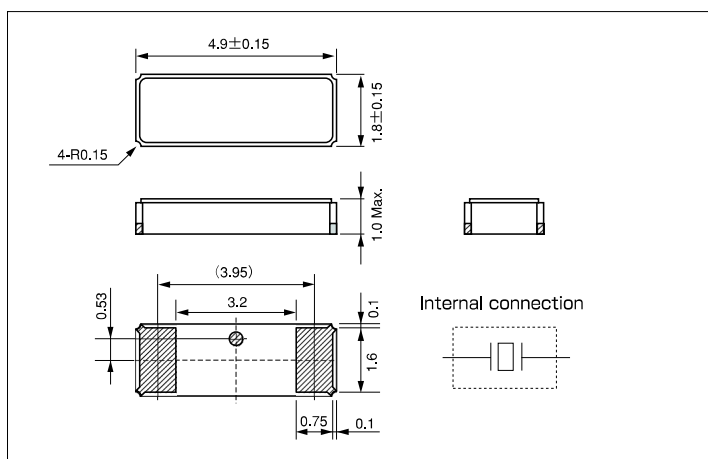
3000pcs/reel



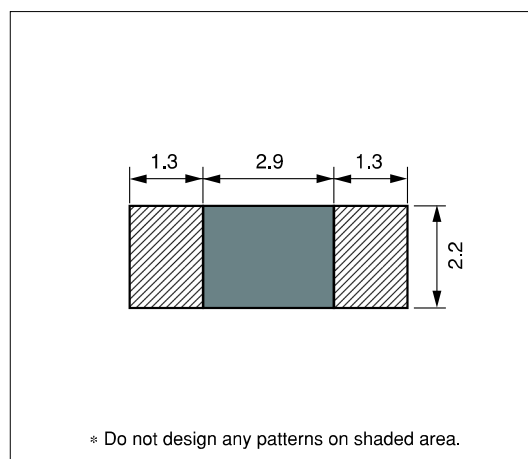
### FEATURES

- Tuning fork crystal with ceramic packaged type.
- Small & thin packaging and light weight.
- Most appropriate for portable devices and mobile telecommunications devices.

### DIMENSION [mm]



### SOLDER PAD LAYOUT [mm]



### STANDARD SPECIFICATIONS

Item	Model	CM519	Conditions
Nominal Frequency	$f_0$	32.768kHz	
Frequency Tolerance	$\Delta f/f_0$	$\pm 20$ ppm	at 25°C
Load capacitance	$C_L$	9.0pF, 12.5pF	Need to specify your requirement
Operating Temperature Range	$T_{OPR}$	-40°C ~ +85°C	
Storage Temperature Range	$T_{STR}$	-55°C ~ +125°C	
Turnover Temperature	$T_M$	25°C $\pm 5$ °C	
Temperature Coefficient	$\beta$	$-0.034 \pm 0.006$ ppm/°C <sup>2</sup>	
Motional (series) resistance	$R_1$	70KΩ Max.	at 25°C
Level of drive	$D_L$	1 μW Max.	
Aging (first year)	$\Delta f/f_0$	$\pm 3$ ppm Max.	25°C $\pm 3$ °C
Shunt capacitance	$C_0$	1.35pF Typ.	