

## TUNING FORK CRYSTAL UNIT (SMD · Ceramic Package)

RoHS compliant / Pb free

# CM2012H

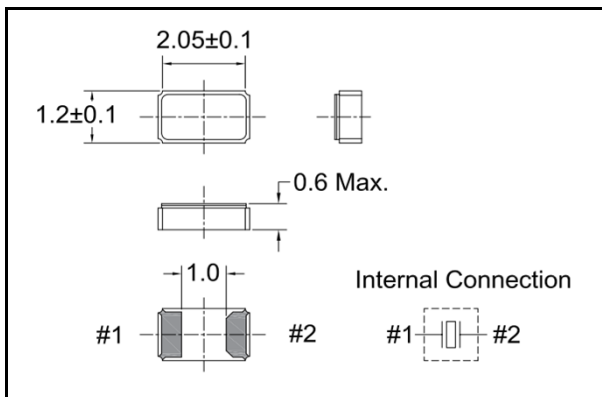
3,000pcs/reel



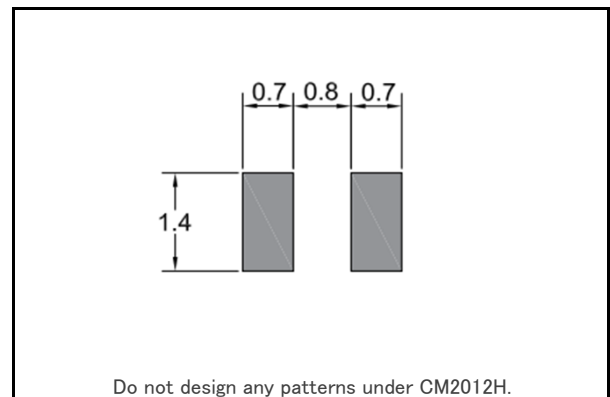
### ■ FEATURES

- Frequency range : 32.768kHz
- External dimensions (mm)  
L : 2.15 x W : 1.3 x H : 0.6
- Applications  
Small communication devices

### ■ DIMENSION [mm]



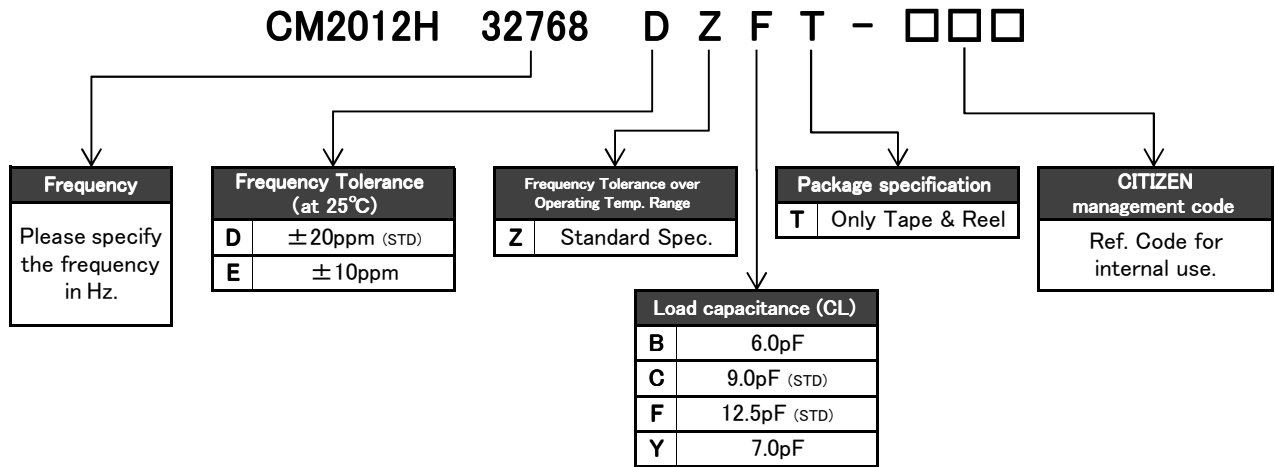
### ■ SOLDER PAD LAYOUT [mm]



### ■ STANDARD SPECIFICATIONS

Item	Model	CM2012H	Conditions
Nominal Frequency	$f_0$	32.768kHz	
Frequency Tolerance	$\Delta f/f_0$	$\pm 10\text{ppm} / \pm 20\text{ppm}$	at 25°C
Load capacitance	$C_L$	6.0pF / 7.0pF / 9.0pF / 12.5pF	Please 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±5°C	
Temperature Coefficient	$\beta$	-0.033±0.003ppm/°C <sup>2</sup>	
Motional (series) resistance	$R_1$	70KΩ Max.	at 25°C
Level of drive	$D_L$	1.0 μW Max.	
Aging (first year)	$\Delta f/f_0$	±3ppm Max.	25°C±3°C
Shunt capacitance	$C_0$	1.3pF Typ.	

## ■ PART NUMBERING SYSTEM



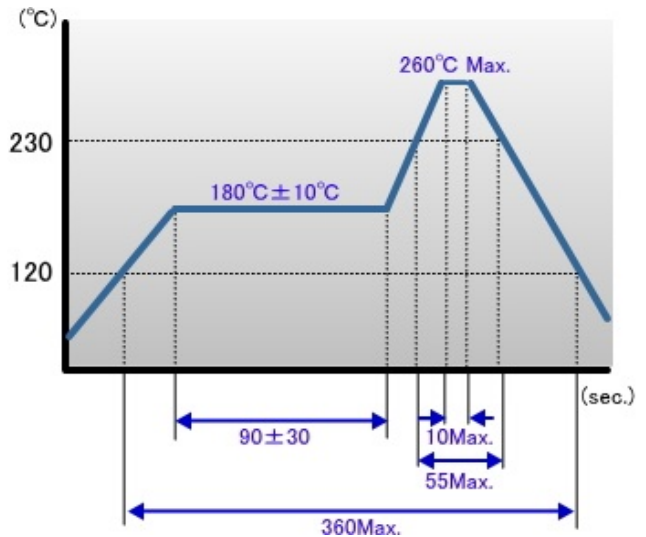
\*Please contact us for specifications available.

## ■ Part Marking [standard]

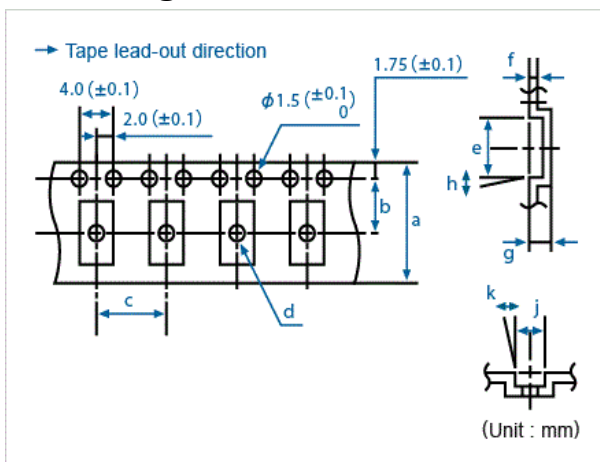


- C : Manufacture's ID Code
- y : The last digit of production year
- w : Production week code
- \* : CL Code
  - B: 6.0pF
  - C: 9.0pF
  - F: 12.5pF
  - Y: 7.0pF

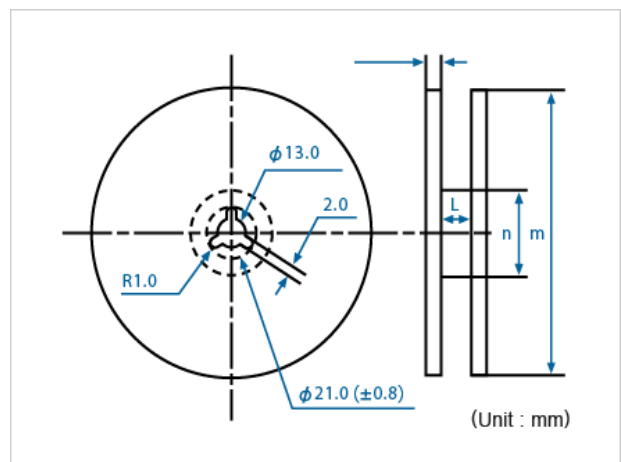
## ■ Reflow profile



## ■ Packing



Conforming to JIS C 0806 TB1208NEIAJ and RC-1009B TE1208N



Conforming to JIS C 0806 R12R and EIAJ RC-1009B R15

Q'ty/reel	a	b	c	d (φ)	e	f	g	h	j	k	l	m (φ)	n (φ)
3,000	8.0	3.5	4.0	1.0	2.25	0.23	0.8	5°	1.4	5°	9.0	180	60

Rev.1