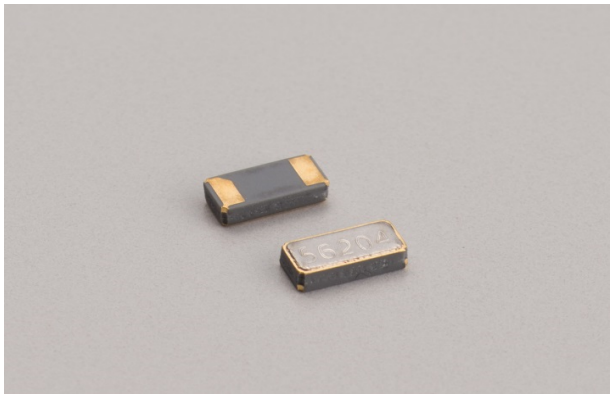
CITIZEN

TUNING FORK CRYSTAL UNIT (SMD · Ceramic Package)

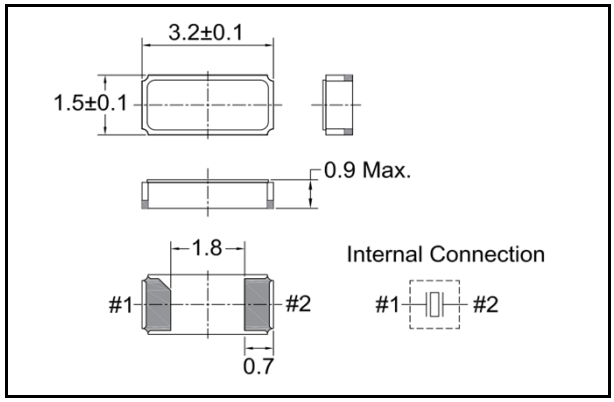
RoHS compliant / Pb free | **CM315D** | **3,000pcs/reel**



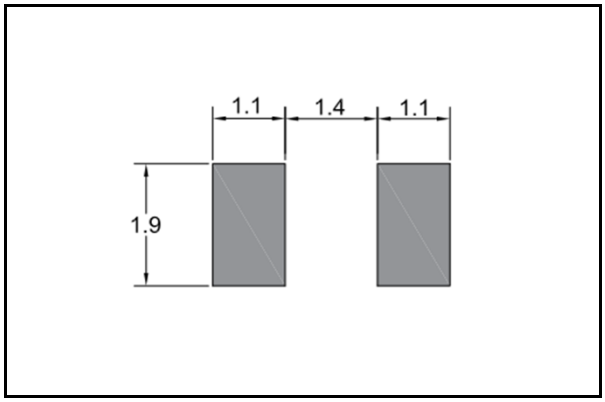
■ FEATURES

- Frequency range : 32.768kHz
- External dimensions (mm)
  L : 3.3 x W : 1.6 x H : 0.9
- Applications
  Smart Meters / Small mobile devices / Consumer products

■ DIMENSION [mm]



■ SOLDER PAD LAYOUT [mm]



■ STANDARD SPECIFICATIONS

Item / Model		CM315D	Conditions
Nominal Frequency	f_0	32.768kHz	
Frequency Tolerance	$\Delta f/f_0$	±5ppm / ±10ppm / ±20ppm	at 25℃
Load capacitance	C_L	6.0pF / 7.0pF / 9.0pF / 12.5pF	Please specify your requirement
Operating Temperature Range	T_{OPR}	−40℃ ～ +85℃	
Storage Temperature Range	T_{STR}	−55℃ ～ +125℃	
Turnover Temperature	T_M	25℃±5℃	
Temperature Coefficient	β	−0.034±0.006ppm/℃^{2}	
Motional (series) resistance	R_1	70KΩ Max.	at 25℃
Level of drive	D_L	1μW Max.	
Aging (first year)	$\Delta f/f_0$	±3ppm Max.	25℃±3℃
Shunt capacitance	C_0	0.95pF Typ.	

深圳市满度科技有限公司
Web:www.manduic.com
Tel:150-1290-5940
Email:sales@manduic.com
微信扫码咨询客服

CITIZEN

■ PART NUMBERING SYSTEM

CM315D 32768 D Z F T - □□□

Frequency
Please specify the frequency in Hz.

Frequency Tolerance (at 25℃)

D	±20ppm (STD)
E	±10ppm
H	±5ppm

Frequency Tolerance over Operating Temp. Range

Z	Standard Spec.

Load capacitance (CL)

B	6.0pF
C	9.0pF (STD)
F	12.5pF (STD)
Y	7.0pF

Package specification

T	Only Tape & Reel

CITIZEN management code
Ref. Code for internal use.

*Please contact us for specifications available.

■ Part Marking [standard]



y : The last digit of production year

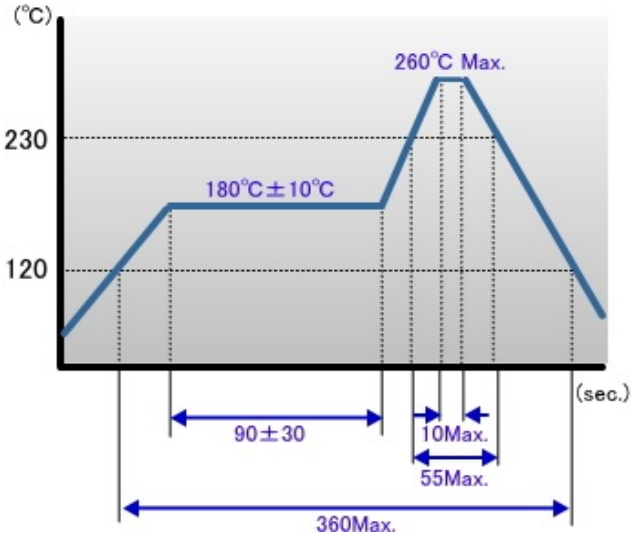
m : Production month (See Table.1)

: Production Lot No.

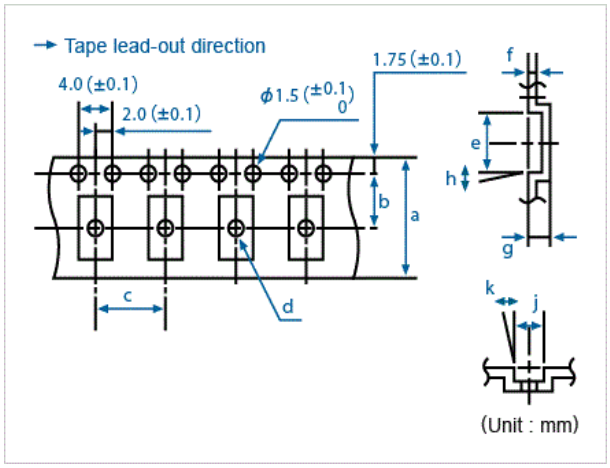
Table.1

Month	Jan	Feb	⋯	Sep	Oct	Nov	Dec
Code	1	2	⋯	9	X	Y	Z

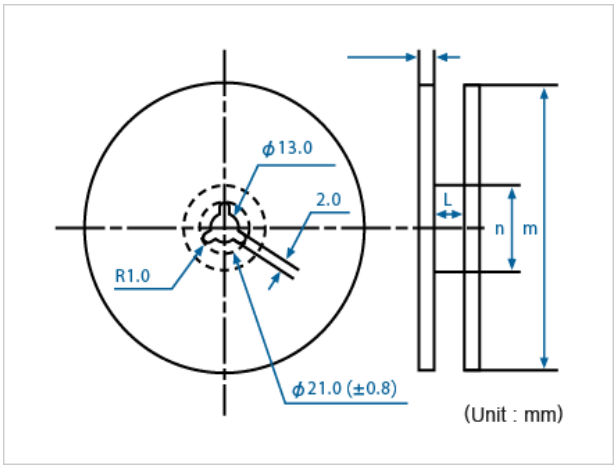
■ Reflow profile



■ 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	12.0	5.5	4.0	1.0	3.6	0.3	1.0	5°	1.9	5°	13.0	180	60

Rev.1

深圳市满度科技有限公司
Web:www.manduic.com

TEL:0755-2951-5940
Email:sales@manduic.com