



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



Contact us

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TUNING FORK CRYSTAL UNIT (SMD • Ceramic Package)

RoHS compliant / Pb free

CM415

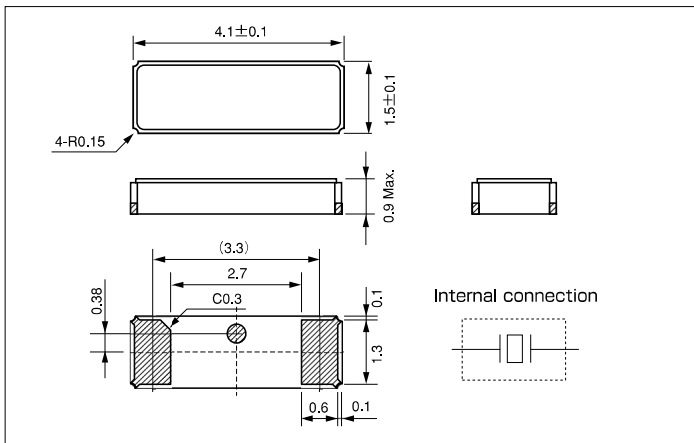
3000pcs/reel



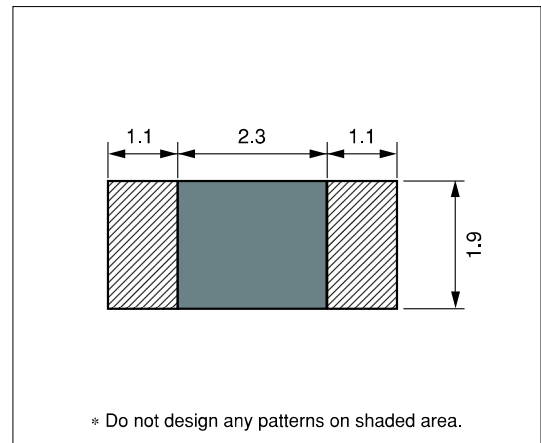
FEATURES

- Tuning fork crystal with ceramic packaged type.
- High-density SMD type
Ultra-light weight with ultra-miniature packaging.
High-stability assured with tight vacuum sealing.
- Most appropriate for portable devices and mobile telecommunications devices.

DIMENSION [mm]



SOLDER PAD LAYOUT [mm]



STANDARD SPECIFICATIONS

Item	Model	CM415	Conditions
Nominal Frequency	f_0	32.768kHz	
Frequency Tolerance	$\Delta f/f_0$	± 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 ± 5 °C	
Temperature Coefficient	β	-0.034 ± 0.006 ppm/°C ²	
Motional (series) resistance	R_1	70KΩ Max.	at 25°C
Level of drive	D_L	1 μW Max.	
Aging (first year)	$\Delta f/f_0$	± 3 ppm Max.	25°C ± 3 °C
Shunt capacitance	C_0	1.10pF Typ.	