



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

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China

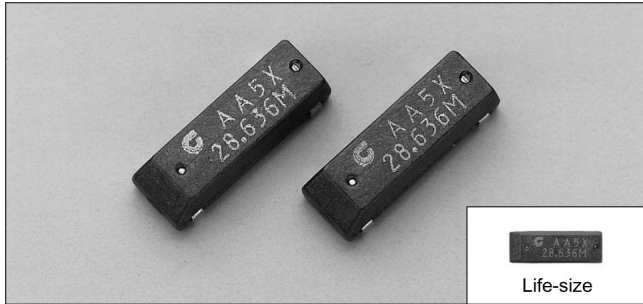


AT-CUT CRYSTAL UNIT (SMD • Plastic Package)

RoHS Compliant Optional

CM309S

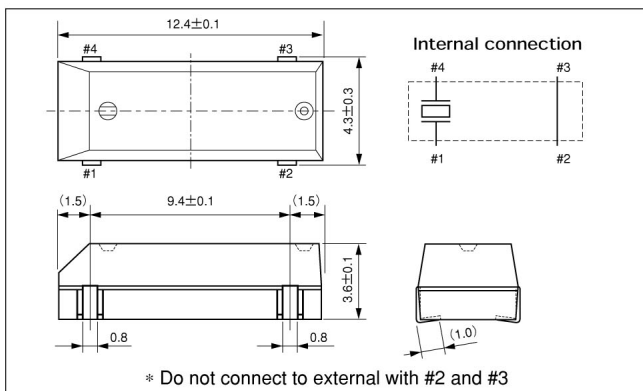
1000pcs/reel



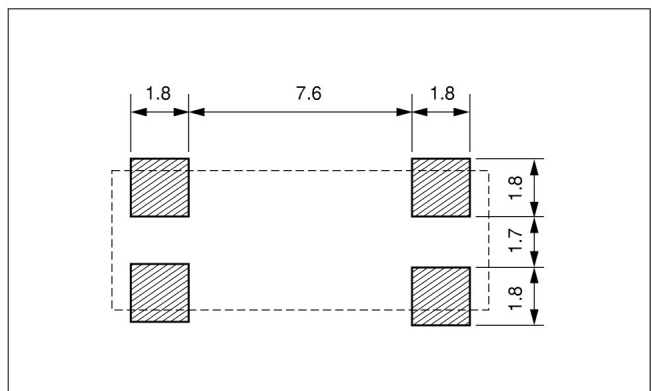
FEATURES

- Embedded with heat resistant cylinder type crystal bring highly stable characteristics.
- Automatic mounting and reflowable Type.
- Suitable for various applications such as communication devices, AV devices, automotive devices and measuring instruments.

DIMENSION [mm]



SOLDER PAD LAYOUT [mm]



STANDARD SPECIFICATIONS

Item	Model	CM309S	Conditions
Nominal Frequency	f ₀	3.5MHz~30.0MHz (Fundamental)	Need to contact us for the available frequency
		30.001MHz~70.0MHz (3rd Overtone)	
Frequency Tolerance	Δf/f ₀	±30ppm	at 25°C
Frequency Tolerance over Operating Temperature Range	Δf/f ₀	±50ppm	-10°C~+60°C
Operating Temperature Range	T _{OPR}	-40°C~+85°C	
Storage Temperature Range	T _{STR}	-55°C~+125°C	
Motional (series) resistance	R ₁	Refer to the following table	at 25°C
Load capacitance	C _L	18.0pF	Need to specify your requirement
Shunt capacitance	C ₀	7.0pF Max.	
Level of drive	DL	100 μW Max.	
Insulation Resistance	I _R	500MΩ Min.	DC100V±15V
Aging (first year)	Δf/f ₀	±5ppm Max.	25°C±3°C

MOTIONAL (SERIES) RESISTANCE (R₁)

Frequency Range	3.5MHz ≤ f ₀ < 4.0MHz	4.0MHz ≤ f ₀ < 6.0MHz	6.0MHz ≤ f ₀ < 10MHz	10MHz ≤ f ₀ < 27MHz	27MHz ≤ f ₀ < 36MHz	36MHz ≤ f ₀ ≤ 70MHz
Mode	Fundamental	Fundamental	Fundamental	Fundamental	Fundamental 3rd Overtone	3rd Overtone
R ₁	200 Ω Max.	150 Ω Max.	100 Ω Max.	50 Ω Max.	50 Ω Max. 100 Ω Max.	80 Ω Max.