

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







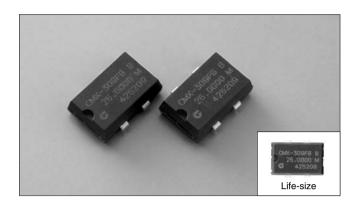
### **CLOCK OSCILLATORS** (SMD · Plastic Package)



**RoHS Compliant Optional** 

# CMX-309 SERIES

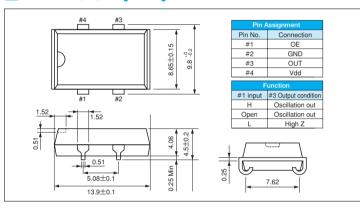
1000pcs/reel



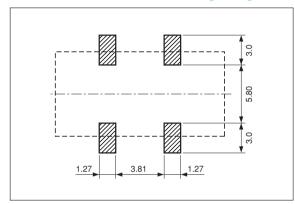
#### **FEATURES**

- Embedded with heat resistant cylinder type crystal bring highly stable characteristics.
- Automatic mounting and reflowable Type.
- Low power consumption with output enable function (OE).
- Suitable for various applications such as communication devices, AV devices, automotive devices and measuring instruments.

#### **DIMENSION** [mm]



#### **SOLDER PAD LAYOUT [mm]**



#### **ISTANDARD SPECIFICATIONS** \*Model is determined by the selection for the frequency, the supply voltage, the duty and the frequency stability.

Model		CMX-309			
Item		FL(*)/ FS(*)	HW(*)/ HS(*)	FB(*)/ FA(*)	HB(*)/ HA(*)
Frequency Range		1.000MHz~30.000MHz	30.001MHz~70.000MHz	1.000MHz~30.000MHz	30.001MHz~70.000MHz
Supply Voltage		Vdd : 5.0V±0.5V		Vdd: 3.3V±0.3V	
Duty	TTL level (1.4V)	FL:45~55%,FS:40~60%	HW:45~55%,HS:40~60%	_	
	S level (1/2 Vdd)	FL:40~60%,FS:45~55%	HW:40~60%,HS:45~55%	FB:40~60%,FA:45~55%	HB:40~60%,HA:45~55%
Frequency Stability (*)		C : $\pm 100$ ppm $(-10^{\circ}\text{C} \sim +70^{\circ}\text{C})$ , B : $\pm 50$ ppm $(-10^{\circ}\text{C} \sim +70^{\circ}\text{C})$			
Operating Temperature Range		-40°C∼+85°C			
Storage Temperature Range		−55°C∼+125°C			
Current consumption		23mA Max.	35mA Max.	9mA Max.	20mA Max.
Output Voltage	Vон	0.9Vdd Min.			
Output Voltage	Vol	0.4V Max.		0.1Vdd Max.	
Output Load		10 TTL Max.		_	
Carput Loud	CMOS	50pF Max.		30pF Max.	
Rise and Fall Time	TTL	8 nsec Max.	5 nsec Max.	_	
	CMOS	8 nsec Max.	7 nsec Max.	6 nsec Max.	
Start-up time		4 msec Max.	10 msec Max.	4 msec Max.	10 msec Max.
Input Voltage		V <sub>IH</sub> : 2.0V Min , V <sub>I</sub> ∟ : 0.8V N		1ax V <sub>IH</sub> : 2.4V Min , V <sub>IL</sub> : 0.6V Max	
Disable current		12 mA Max.	28 mA Max.	5 mA Max.	15 mA Max.
Aging (first year)		±5ppm / year Max.			