

CMX-309 series

(1,000pcs/reel)



■ FEATURES:

- Being of the miniature plastic SMD type and featuring high efficiency in mounting, the CMX-309 is ideal for application to high-density circuit boards.
- As it incorporates a heat-resisting packaged cylinder-type crystal, it features highly stable characteristics-high enough to permit reflow soldering.
- Can be mounted automatically because of the emboss taping used.
- Low power CMOS IC.
- Provided with output enable function.

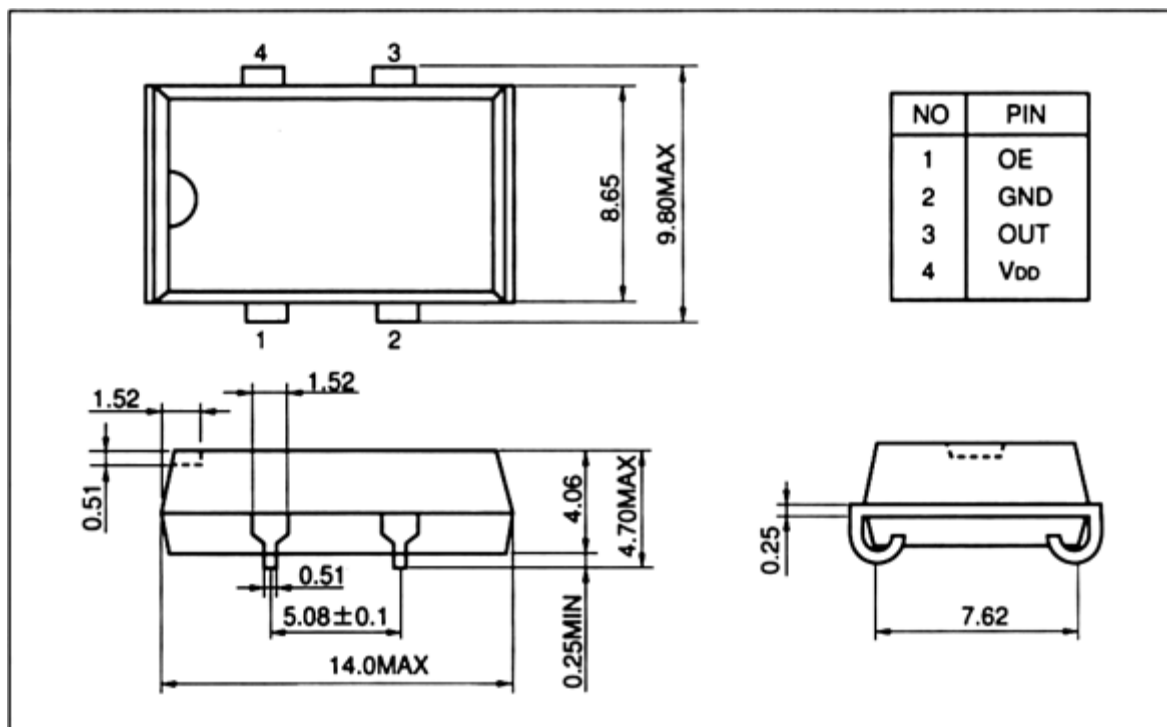
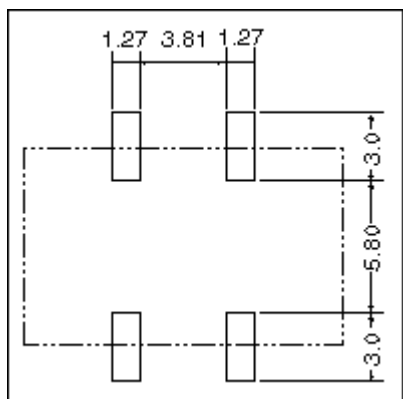
■ APPLICATIONS:

- Can be used for a wide range of applications including use in communication equipment, AV equipment, OA equipment and measuring instruments.

■ STANDARD SPECIFICATIONS

Item		CMX-309FL (FS)	CMX-309HW (HS)	CMX-309FB (FA)	CMX-309HB (HA)
Frequency range		1.000MH to 30.000MHz	30.001MHz to 70.000MHz	1.000MHz to 30.000MHz	30.001MHz to 70.000MHz
Frequency stability		C:± 100ppm B: ± 50ppm(-20°C to +70°C)			
Operating temperature range		-20°C to +70°C (-40°C to +85°C)			
Storage temperature range		-55°C to +125°C			
Supply voltage		VDD: 5.0V ± 0.5V		VDD: 3.3V ± 0.3V	
Supply current		23mA Max.	35mA Max.	9mA Max.	20mA Max.
Duty	TTL level (1.4V) CMOS level (VDD/2)	45% to 55% (FS,HS: 40% to 60%) 40% to 60%(FS,HS: 45% to 55%)		- 40% to 60% (FA,HA:45% to 55%)	
Output voltage	VOH VOL	VDD - 0.4V Min 0.4V Max	VDD - 0.5V Min 0.5V Max	VDD-0.4V Min 0.4V Max	
Output load	TTL CMOS	10TTL Max. 50pF Max.		- 30pF Max.	
Rise & Fall time	TTL CMOS	tr,tf : 8nsec Max. tr,tf : 8nsec Max.	tr,tf : 5nsec Max. tr,tf : 7nsec Max.	- tr,tf : 6nsec Max.	
Start up time		4msec Max.	10msec Max.	4msec Max.	10msec Max.
Input (OE) voltage		VIH : 2.0V Min. VIL : 0.8V Max.			VIH : 2.4V Min. VIL : 0.6V Max.
Disable current		12mA Max.	28mA Max.	5mA Max.	15mA Max.
Aging (first year)		± 5ppm/year Max.			

Shock resistance

 $\pm 20\text{ppm Max.}$ **■ DIMENSIONS: (UNIT=mm)****■ RECOMENDED SOLDERING PATTERN: (UNIT=mm)**

Back