



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



REVISIONS			
REV	DESCRIPTION	DATE	APPROVED

PACKAGE DIMENSIONS (mm)

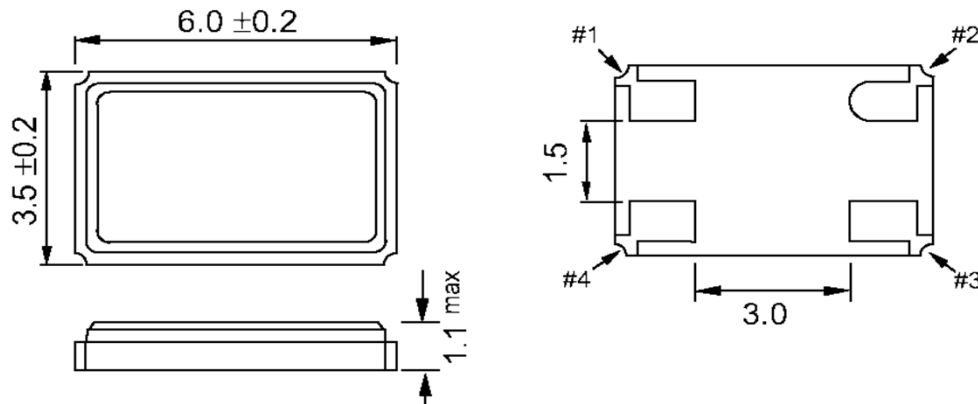


Figure 1) Top, Side and Bottom View

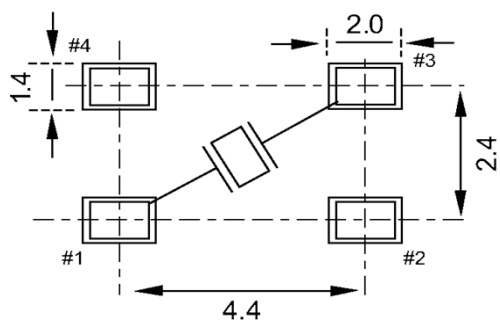


Figure 2) Land Pattern



ELECTRICAL SPECIFICATIONS

Frequency: 12.000000 MHz
 * Frequency Stability: ± 20 ppm Max.
 Crystal Cut: AT Strip
 Load Capacitance (CL): 9 pF
 Recommended Drive Level: 100 µW Max.
 Effective Series Resistance: 40 Ω Max.
 Shunt Capacitance: 3 pF Max.
 Mode of Operation: Fundamental
 Storage Temperature: -40 to +85 °C
 Operating Temperature: -20 to +70 °C
 Package Type: ECX-64

ECS Part Number: ECS-120-CD-0330

* Inclusive of Frequency tolerance @ +25 °C, Frequency stability over the operating temperature of -20 to +70 °C, and aging for 3 years.

ECS INC. INTERNATIONAL 1105 S. Ridgeview Olathe, KS 66062 (913) 782-7787		
TITLE 12.0 MHz Crystal, SMD, Tight Tolerance		
SIZE A	DWG NO. ECS-120-CD-0330	REV
CAGE CODE: 1G8B7		SHEET 1 OF 1

SIGNATURES	DATE
DRN BL	1/10/2002
CHK DK	1/10/2002
APP BS	1/10/2002
Dimensions in mm	