



**Distributor of ECS Inc. International: Excellent Integrated System Limited**  
Datasheet of ECS-120-CD-0330-TR - Crystal 12.0000MHz 9pF 40 Ohm -20°C - 70°C Surface  
Mount 4-SMD, No Lead (DFN, LCC)

Contact us: [sales@integrated-circuit.com](mailto:sales@integrated-circuit.com) Website: [www.integrated-circuit.com](http://www.integrated-circuit.com)

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## Excellent Integrated System Limited

Stocking Distributor

Click to view price, real time Inventory, Delivery & Lifecycle Information:

[ECS Inc. International](#)  
[ECS-120-CD-0330-TR](#)

For any questions, you can email us directly:

[sales@integrated-circuit.com](mailto:sales@integrated-circuit.com)

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REVISIONS			
REV	DESCRIPTION	DATE	APPROVED

**PACKAGE DIMENSIONS (mm)**

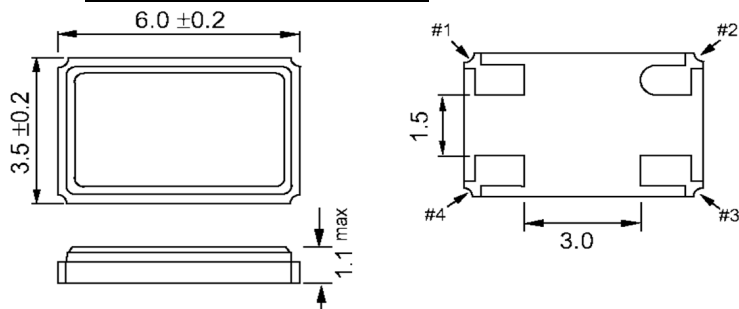


Figure 1) Top, Side and Bottom View

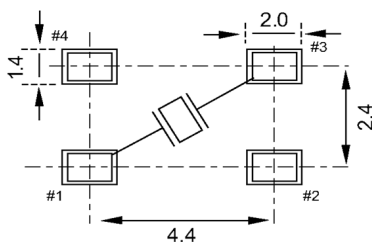


Figure 2) Land Pattern



**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		
<b>TITLE</b> <b>12.0 MHz Crystal, SMD, Tight Tolerance</b>		
SIZE A	DWG NO. ECS-120-CD-0330	REV
CAGE CODE: 1G8B7		SHEET 1 OF 1

SIGNATURES	DATE	TITLE
DRN <b>BL</b>	1/10/2002	<b>12.0 MHz Crystal, SMD, Tight Tolerance</b>
CHK <b>DK</b>	1/10/2002	
APP <b>BS</b>	1/10/2002	
<b>Dimensions in mm</b>		