



- ▶ Chip Type SMD package
- ▶ RoHS Compliant (Note 7 Exemption)
- ▶ Tape & Reel Packaging

ECS-CR2-A

SMD CERAMIC RESONATOR

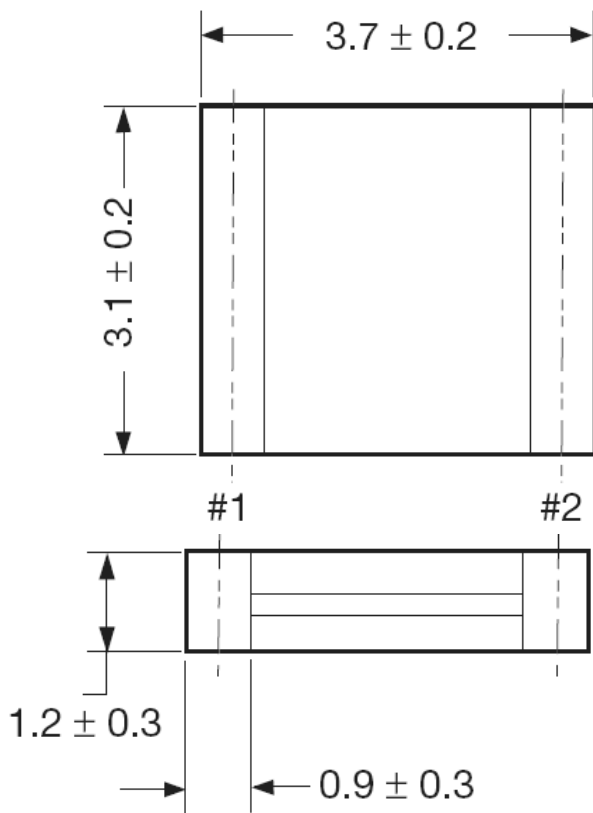
The ECS-CR2-A Chip Type SMD ceramic resonator is an excellent low cost frequency control solution when absolute frequency accuracy is not important.

OPERATING CONDITIONS / ELECTRICAL CHARACTERISTICS

| PART NUMBER * | FREQUENCY RANGE (MHz) | FREQUENCY ACCURACY @ 25°C (%) | FREQUENCY STABILITY -20 ~ +80°C (%) | AGING FOR TEN YEARS (%) | ESR (Ω) MAX. | INSULATION RESISTANCE @ 10VDC |
|-----------------|-----------------------|-------------------------------|-------------------------------------|-------------------------|--------------|-------------------------------|
| ECS-CR2-□□.□□-A | 8.00 ~ 13.00 | ± 0.5 | ± 0.3 | ± 0.3 | 40 | 100 M Ω Min. |
| ECS-CR2-□□.□□-A | 13.10 ~ 40.00 | ± 0.5 | ± 0.3 | ± 0.3 | 40 | 100 M Ω Min. |

Complete part number to include frequency i.e. ECS-CR2-20.00-A-TR

PACKAGE DIMENSIONS (mm)



| PIN CONNECTIONS | |
|-----------------|--------|
| #1 | In/Out |
| #2 | Out/In |

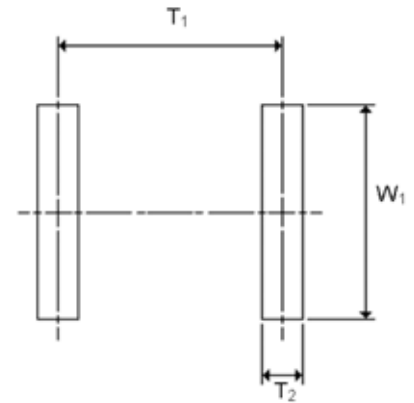
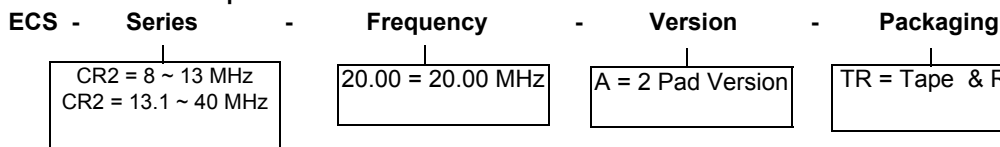


Figure 2) Land Pattern

| DIMENSIONS (mm) | | |
|-----------------|-----------|-----------|
| T1 | T2 | W1 |
| 3.0 ± 0.2 | 0.7 ± 0.2 | 4.1 ± 0.2 |

Figure 1) ECS-CR2-A Series - Top and Side Views

PART NUMBERING GUIDE: "Example" ECS-CR2-20.00-A-TR





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C E R A M I C R E S O N A T O R / F I L T E R

Application Information Request

Attention: All Customers

From: Mike Huennekens, Director of Marketing and OEM Sales

Subject: Ceramic Resonator Application Information Request

ECS is requesting that you complete the section below that will allow us to determine if the specific application is suitable for the ceramic resonator/filters that you have requested.

Ceramic Resonators/Filters, both surface mount and through-hole type, are a much different frequency control solution than that of a crystal based device. Not only are there "matching" issues to specific integrated circuits and processors with ceramic based piezoelectric components but for multiple reasons ceramics are not the most advantageous nor robust frequency control solution for certain applications.

In addition, ECS does not approve the use of its ceramic products in Automotive, Military, Avionics, Life Sustaining or Life Support systems or any other related medical application.

If the customer chooses to use this product in one or more of the noted applications without the written consent of ECS, Inc., ECS, Inc. shall be held harmless, and given release of liability and indemnification from claims of any nature.

Please complete the following and submit this form as soon as possible.

| | |
|----------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------|
| ECS Part Number | |
| Estimated Annual Usage | |
| Has this part already been approved for this application? | Yes <input type="checkbox"/> No <input type="checkbox"/> |
| Has this part been ordered previously for this application? | Yes <input type="checkbox"/> No <input type="checkbox"/> |
| End Customer | |
| <p style="text-align: center;">Application Details <u>You Must Be Specific</u> or this may be returned for more information.</p> | |

I certify that the above information is true and correct to the best of my knowledge and acknowledge that ECS will be held harmless if this item is used in the restricted applications noted above.

 Company Name

 Print Your Name

 Title

 Signature

 Date

** If this item will be used by a 3rd party ECS may require a form be completed and signed by all parties.

| | | | |
|---------------------------------------------------|--------------------------------------|-------------|--------------------|
| To be completed by ECS Inc., International | | | |
| Approved: <input type="checkbox"/> | Disallowed: <input type="checkbox"/> | Date: _____ | Approved By: _____ |

Please direct any further inquires to Brad Slatten at brads@ecsxtal.com or Carla Williams at carlaw@ecsxtal.com . We thank you for your understanding and patience in this process.

Данный компонент на территории Российской Федерации

Вы можете приобрести в компании MosChip.

Для оперативного оформления запроса Вам необходимо перейти по данной ссылке:

<http://moschip.ru/get-element>

Вы можете разместить у нас заказ для любого Вашего проекта, будь то серийное производство или разработка единичного прибора.

В нашем ассортименте представлены ведущие мировые производители активных и пассивных электронных компонентов.

Нашей специализацией является поставка электронной компонентной базы двойного назначения, продукции таких производителей как XILINX, Intel (ex.ALTERA), Vicor, Microchip, Texas Instruments, Analog Devices, Mini-Circuits, Amphenol, Glenair.

Сотрудничество с глобальными дистрибьюторами электронных компонентов, предоставляет возможность заказывать и получать с международных складов практически любой перечень компонентов в оптимальные для Вас сроки.

На всех этапах разработки и производства наши партнеры могут получить квалифицированную поддержку опытных инженеров.

Система менеджмента качества компании отвечает требованиям в соответствии с ГОСТ Р ИСО 9001, ГОСТ РВ 0015-002 и ЭС РД 009

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