- Low Profile SMD Package
- RoHS Compliant (Note 7 Exemption)
- Built-in load capacitor
- Tape & Reel Packaging

ECS-SR-B

SMD CERAMIC RESONATOR

The ECS-SR-B Series SMD ceramic resonator includes built in capacitors for reduced component count. The 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.	BUILT-IN CAPACITANCE (C1 & C2)	INSULATION RESISTANCE @ 10VDC
ECS-SR1-□.□ □-B	2.00 ~ 8.00	± 0.5	± 0.3	± 0.3	40	30 pF	100 M Ω Min.
ECS-SR2-□.□ □-B	8.10 ~ 13.00	± 0.5	± 0.3	± 0.3	40	30 pF	100 M Ω Min.
ECS-SR3-□.□ □-B	13.10 ~ 20.00	± 0.5	± 0.3	± 0.3	30	30 pF	100 M Ω Min.
ECS-SR4-□.□ □-B	20.10 ~ 30.00	± 0.5	± 0.3	± 0.3	55	30 pF	100 M Ω Min.

Complete part number to include frequency i.e. ECS-SR1-4.00-B-TR

PACKAGE DIMENSIONS (mm)

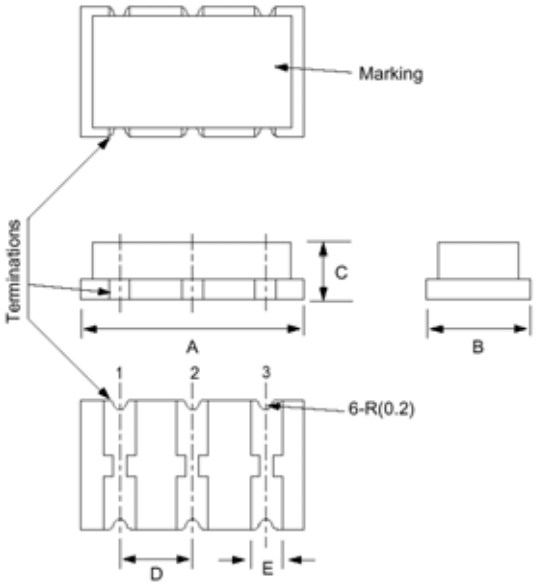

Figure 1) ECS-SR-B Series - Top, Side, Bottom &d Views

PIN CONNECTIONS	
#1	In/Out
#2	Ground
#3	Out/In

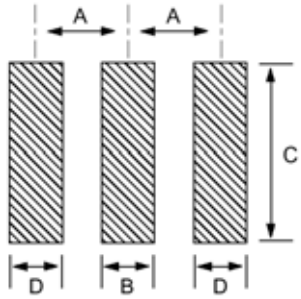

Figure 2) Land Pattern

PACKAGE TYPE	DIMENSIONS (mm)				
	A	B	C	D	E
ECS-SR1	7.5	3.3	2.2	2.5	1.5
ECS-SR2	8.3	3.5	1.8	2.5	1.0
ECS-SR3	6.0	3.5	1.8	1.9	1.2
ECS-SR4	6.0	5.0	1.8	1.9	1.2

PACKAGE TYPE	DIMENSIONS (mm)			
	A	B	C	C
ECS-SR1	2.5	1.5	4.0	1.7
ECS-SR2	2.5	1.2	4.7	1.2
ECS-SR3	1.9	1.2	4.2	1.2
ECS-SR4	1.9	1.2	5.5	1.2

PART NUMBERING GUIDE: "Example" ECS-SR1-4.00-B-TR

ECS - Series - Frequency - Version - Packaging

Series	Frequency	Version	Packaging
SR1 = 2 ~ 8 MHz SR2 = 8.1 ~ 13 MHz SR3 = 13.1 ~ 20 MHz SR4 = 20.1 ~ 30 MHz	4.00 = 4.00 MHz	B = SR-B Series	TR = Tape & Reel

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May 16, 2007

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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 ☐ No ☐
Has this part been ordered previously for this application?	Yes ☐ No ☐
End Customer	
Application Details You Must Be Specific or this may be returned for more information.	

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: ☐ Disallowed: ☐ 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.