



- Chip Type SMD package
  - RoHS Compliant (Note 7 Exemption)
  - Built-in load capacitor
- ► Tape & Reel Packaging

## ECS-CR2-B

## **SMD CERAMIC RESONATOR**

The ECS-CR2-B Chip Type 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-CR2-□□.□□ <b>-</b> B	8.00 ~ 13.00	± 0.5	± 0.3	± 0.3	25	30 pF	100 M Ω Min.
ECS-CR2-□□.□□-B	13.10 ~ 40.00	± 0.5	± 0.3	± 0.3	40	15 pF	100 M Ω Min.

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

## PACKAGE DIMENSIONS (mm)

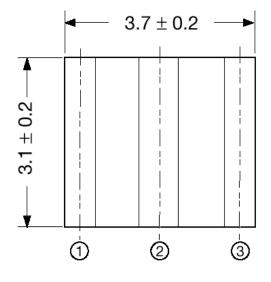
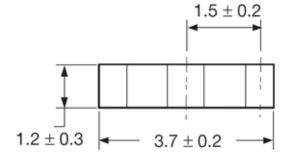


Figure 1) ECS-CR2-B Series - Top and Side Views



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

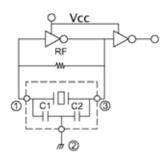


Figure 2) Test Circuit (74HCU04P)

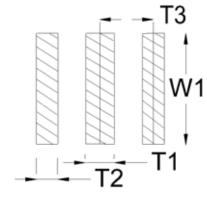


Figure 3) Land Pattern

DIMENSIONS (mm)							
T1	T2	Т3	W1				
0.7 ± 0.2	1.0±0.2	1.5±0.2	4.1±0.2				

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

ECS - Series - Frequency - Version - Packaging

| CR2 = 8 ~ 13 MHz | 20.00 = 20.00 MHz | B = Built In Caps | TR = Tape & Reel