



Distributor of ECS Inc. International: Excellent Integrated System Limited

Datasheet of ECS-HFR-20.00-B-TR - CER RESONATOR 20.00MHZ SMD

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## Excellent Integrated System Limited

Stocking Distributor

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[ECS Inc. International](#)  
[ECS-HFR-20.00-B-TR](#)

For any questions, you can email us directly:

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



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

# ECS-HFR-B

## SMD CERAMIC RESONATOR

The ECS-HFR-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) | IC               |
|-----------------|-----------------------|-------------------------------|-------------------------------------|-------------------------|--------------|--------------------------------|------------------|
| ECS-HFR-□□.□□-B | 20.00 ~ 30.00         | ± 0.5                         | ± 0.4                               | ± 0.3                   | 70           | 8 pF                           | 1/6 TC74HCU04 x2 |
| ECS-HFR-□□.□□-B | 30.10 ~ 50.00         | ± 0.5                         | ± 0.3                               | ± 0.3                   | 60           | 8 pF                           |                  |

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

### PACKAGE DIMENSIONS (mm)

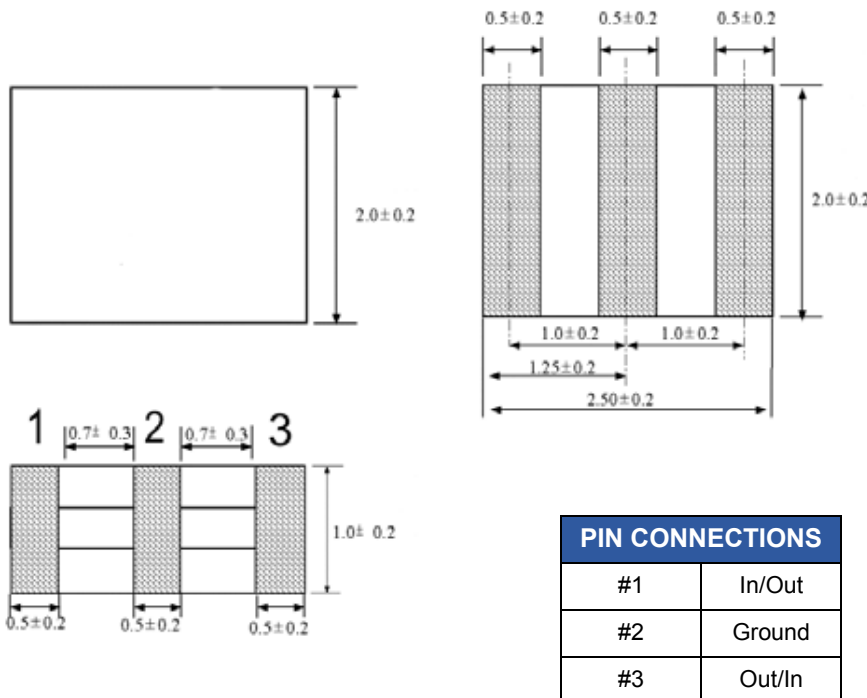


Figure 1) ECS-HFR-B Series - Top, Side and Bottom Views

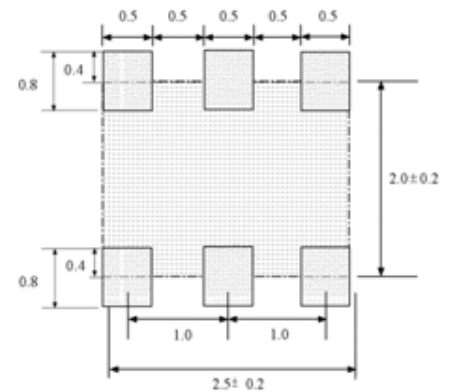


Figure 2) Land Pattern

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

### PART NUMBERING GUIDE: "Example" ECS-HFR-20.00-B-TR

