



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

ECS-HFR-B

SMD CERAMIC RESONATOR

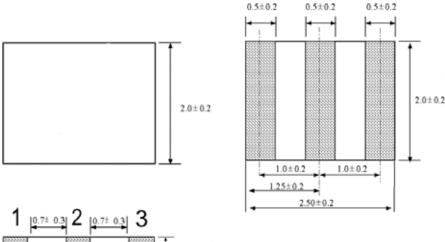
The ECS-HFR-B Series SMD ceramic resonator includes built in capacitors for reduced component count. The SMD Ceramic resonator is an excellent low cost frequency control solution when absolute frequency accuracy is not important.

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 |
| ECS-HFR-□□.□□-B | 30.10 ~ 50.00 | ± 0.5 | ± 0.3 | ± 0.3 | 60 | 8 pF | x2 |

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

PACKAGE DIMENSIONS (mm)





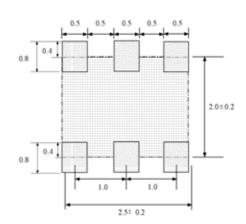


Figure 2) Land Pattern

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

0.5±0.2

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

1.0± 0.2

ECS - Series
HFR = Chip Type

Frequency | |20.00 = 20.00 MHz

Version

|
B = Built In Caps

Packaging

TR = Tape & Reel