

# **ECS-HFR-B**SMD Ceramic Resonator

ECS INC

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.

Request a Sample

#### **OPERATING CONDITIONS / ELECTRICAL CHARACTERISTICS**

ECS-HFR-B

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	
ECS-HFR-□□.□□-B	30.10 ~ 50.00	±0.5	±0.3	±0.3	60	8 pF	TC74HCU04x2	

Complete part number to include frequency

#### • Chip Type SMD Package

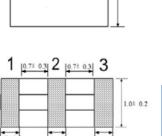
- RoHS Compliant (Note 7 Exemption)
- Built-In Load Capacitor
- Tape & Reel Packaging

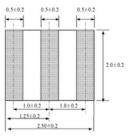
### Part Numbering Guide: ECS-HFR-20.00-B-TR

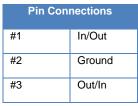
ECS	- Series	- Frequency	- Version -	Packaging
ECS	HFR = Chip Type	20.00 = 20.00 MHz	B = Built In Caps	TR = Tape & Reel 3K/Reel

## **Package Dimensions (mm)**

 $2.0 \pm 0.2$ 







0.5 0.5 0.5 0.5 0.5 0.8 0.4 20±0.2

Figure 2) Land Pattern

Figure 1) Top, Side, and Bottom Views