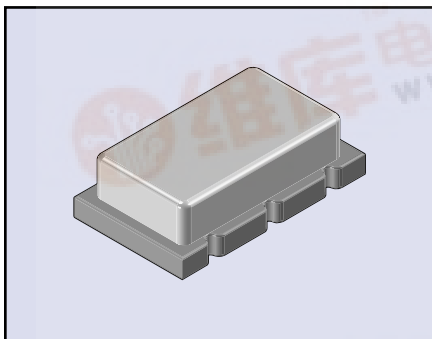




The ECS-SR-B Series SMD ceramic resonator includes built in capacitors for simplification of oscillator circuits and reduces component count. The SMD ceramic resonator is an excellent low cost frequency control solution when absolute frequency accuracy is not important.

## FEATURES

- Low profile SMD package
- Wide frequency range
- Built-in load capacitor
- Tape & Reel packaging

## PART NUMBERING GUIDE "EXAMPLE"

| MANUFACTURER | PACKAGE TYPE | FREQUENCY | VERSION | TAPE AND REEL PACKAGING |
|--------------|--------------|-----------|---------|-------------------------|
| ECS          | - SR1        | - 4.00    | - B     | - TR                    |

Sample Part Number: ECS-SR1-4.00-B-TR, Tape & Reel Packaging

## OPERATING CONDITIONS/ELECTRICAL CHARACTERISTICS

| PART NUMBER*   | FREQUENCY RANGE (MHz) | FREQUENCY ACCURACY @ 25°C (%) | FREQUENCY STABILITY -20°C ~ 80°C (%) | AGING FOR TEN YEARS (%) | RESONANT RESISTANCE (Ω) MAX. | INTERNAL CAPACITANCE C1 & C2 | INSULATION RESISTANCE @ 10 VDC |
|----------------|-----------------------|-------------------------------|--------------------------------------|-------------------------|------------------------------|------------------------------|--------------------------------|
| ECS-SR1-□-□□-B | 2.00 ~ 8.0            | ±0.5                          | ±0.3                                 | ±0.3                    | 40                           | 30 pF                        | 100 M W Min.                   |
| ECS-SR2-□-□□-B | 8.01 ~ 13.00          | ±0.5                          | ±0.3                                 | ±0.3                    | 40                           | 30 pF                        | 100 M W Min.                   |
| ECS-SR3-□-□□-B | 13.1 ~ 20.00          | ±0.5                          | ±0.3                                 | ±0.3                    | 30                           | 30 pF                        | 100 M W Min.                   |
| ECS-SR4-□-□□-B | 20.1 ~ 30.00          | ±0.5                          | ±0.3                                 | ±0.3                    | 55                           | 30 pF                        | 100 M W Min.                   |

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

## PACKAGE DIMENSIONS (mm)

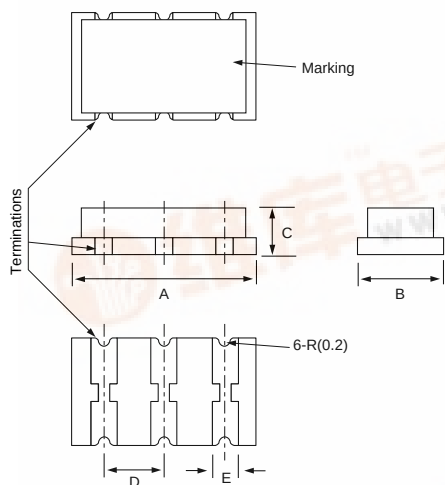


Figure 1) ECS-SR-B Series - Top, Side, Bottom & End views

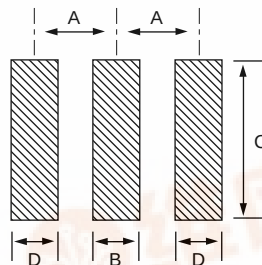


Figure 2) Land Pattern

| 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   | D   |
| 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 |