

# ECS-1618

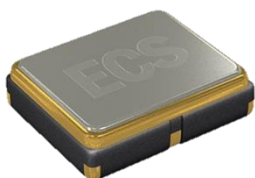
## SMD Clock Oscillator

ECS-1618 (1.8V) subminiature SMD oscillators. Ideal for today's high density applications.

[Request a Sample](#)

### OPERATING CONDITIONS / ELECTRICAL CHARACTERISTICS

ECS-1618



- RoHS Compliant
- MSL 1
- Lead Finish Au

| Parameters            | Conditions           | ECS-1618 (+1.8V) |       |         | Units |
|-----------------------|----------------------|------------------|-------|---------|-------|
|                       |                      | MIN              | TYP   | MAX     |       |
| Frequency Range       |                      | 1.500            |       | 80.000  | MHz   |
| Operating Temperature | Standard             | -10              |       | +70     | °C    |
|                       | Extended (N Option)  | -40              |       | +85     | °C    |
| Storage Temperature   |                      | -55              |       | +100    | °C    |
| Input Voltage         | VDD                  | +1.71            | +1.80 | +1.89   | VDC   |
| Frequency Stability*  | Option A             |                  |       | ±100    | PPM   |
|                       | Option B             |                  |       | ±50     | PPM   |
|                       | Option C             |                  |       | ±25     | PPM   |
| Input Current         | 1.500 ~ 19.90 MHz    |                  |       | 2.5     | mA    |
|                       | 20.0 ~ 39.9 MHz      |                  |       | 3.0     | mA    |
|                       | 40.0 ~ 49.9 MHz      |                  |       | 3.5     | mA    |
|                       | 50.0 ~ 80.0 MHz      |                  |       | 6.5     | mA    |
| Stand-by Current      | Pin 1 = VIL          |                  |       | 10      | μA    |
| Output Symmetry       | @50% VDD Level       |                  |       | 45/55   | %     |
| Rise and Fall Times   | 10% VDD to 90% Level |                  |       | 10      | ns    |
| "0" Level             | VOL                  |                  |       | 10% VDD | VDC   |
| "1" Level             | VOH                  | 90% VDD          |       |         | VDC   |
| Output Load           | CMOS                 |                  |       | 15      | pF    |
| Disable Delay         |                      |                  |       | 150     | ns    |
| Startup Time          |                      |                  |       | 10      | ms    |
| Aging                 |                      |                  |       | ±5      | PPM   |

\* Note: Inclusive of 25°C tolerance, operating temperature, input voltage change, load change, shock and vibration.

### Part Numbering Guide: Example ECS-1618-200-BN-TR

| ECS | - | Series       | - | Frequency Abbreviations | - | Stability Tolerance                        | - | Temperature                                              | - | Packaging        |
|-----|---|--------------|---|-------------------------|---|--------------------------------------------|---|----------------------------------------------------------|---|------------------|
| ECS |   | 1618 = +1.8V |   | 200 = 20 MHz            |   | A = ±100 ppm<br>B = ±50 ppm<br>C = ±25 ppm |   | Blank = -10 ~ 70°C<br>M = -20 ~ +70°C<br>N = -40 ~ +85°C |   | TR = Tape & Reel |

